THE TAXONOMY OF THE GENERA OF NEOTROPICAL HYSTRICOID RODENTS

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Article V.—THE TAXONOMY OF THE GENERA OF NEOTROPICAL HYSTRICOID RODENTS

By G. H. H. TATE

In preparing the present paper¹ I have tried to bring together all facts bearing upon the past (both pre-Linnaean and post-Linnaean) and present taxonomy of the generic groups considered, together with a summary of the named forms within each; and also from the standpoint of the Rules and Opinions of the International Commission on Zoological Nomenclature I have examined the status of each genus in regard to its correct name and its genotype with the manner of its fixation and type locality. Although the paper is in the nature of a summary, I have not hesitated to insert comments or annotations when it seemed advisable to do so. As a rule, references to fossil species have been excluded.

The following synopsis shows the arrangement followed for the tropical American Hystricoidea. It is based primarily upon the arrangement of Weber (1928, II, p. 269), but I have modified his "Octodontidae" in accordance with the views of Thomas, Miller, Pocock, and others. The differences between Hydrochoerus and Dolichotis seem to warrant separation of subfamily rank. Also, in the case of Weber's "Capromyidae," I have introduced the term Capromyinae to embrace the Capromys-group of genera, and Myocastorinae to contain Myocastor. However, it is not my intention to enter into questions of supergeneric taxonomy.

I wish to acknowledge the kindness of Count Nils Gyldenstolpe in sending me information concerning the existence of certain Linnaean types.

SYNOPSIS OF FAMILIES AND SUBFAMILIES

Erethizontidae	Capromyidae
Coendinae	Capromyinae
Caviidae	Myocastorinae
Dynomyinae	Octodontidae
Dasyproctinae	Abrocomidae
Caviinae	Ctenomyidae
Hydrochoerinae	Echimyidae
Dolichotinae ,	Echimyinae
Chinchillidae	Dactylomyinae

¹Completed for publication July, 1933.

Each genus, when circumstances warrant it, is treated under the headings (1) taxonomic history, (2) remarks, (3) genotype, and (4) list of named forms with type localities.

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¹Square brackets indicate that the name is placed in synonymy.

ERETHIZONTIDAE

COENDOU Lacépède

TAXONOMIC HISTORY

- Marcgrave described (p. 233), under the name cuandu, a prehensile-tailed porcupine of Brazil. He added that it was quite similar to the "Tlaquatzin spinosi" described by "Fr. Ximenes." Marcgrave's cuandu was the basis of prehensilis Linnaeus, 1758 (restricted by Kerr, 1792).
- 1651. Hernandez described (p. 322) the prehensile-tailed porcupine of Mexico under the names "Hoitztlacuatzin, seu Tlacuatzin spinoso Histrice Novae Hispaniae."

 Upon the description of Hernandez is based mexicana Kerr, 1792. Brisson's name novae hispaniae, 1762, is not available (see under Brisson, 1762).
- 1658. Piso, following the ideas of Marcgrave, wrote of the CUANDU from "nova Hispania" (Book III, pp. 99-100).
- 1693. Ray based (p. 208) his "Hystrix americanus" (a pre-Linnaean name) jointly upon the CUANDU of Marcgrave and the Tlaquatzin of Hernandez.
- 1756. Brisson applied (p. 127) "Le Porc-Épic of la Nouvelle Espagne . . . Hystrix Novae Hispaniae" to the porcupine of Hernandez (a pre-Linnaean work).
- 1758. Linnaeus (10th Ed., p. 56) erected the genus *Hystrix*, the only South American porcupine included being *prehensilis*. Based upon the descriptions of Marcgrave, Piso, Ray, and Hernandez, *prehensilis* was a composite species. It was restricted by Kerr, 1792, to the Brazilian porcupine of Marcgrave.
- Brisson employed (pp. 86-89) the names Hystrix Novae Hispaniae for the Mexican animal, Hystrix americanus (after Ray) and "Hystrix americanus major." To quote Allen, 1910, Bull. Amer. Mus. Nat. Hist., XXVIII, p. 322, Brisson's nomenclature is "binary although not binomial, his generic names . . . are available; his specific names are not available, since they are binomial only exceptionally and by chance." Thus, novae hispaniae Brisson, 1762, does not preoccupy mexicana Kerr, 1792.

Buffon described (XII, pp. 418-425) "Le Coendou" 1762. (=Coendou prehensilis Lacépède, 1802). He adopted Coendou from the name of the Guiana porcupine, called Cuandu in Brazil. His references to authorities appear in the following order: COENDOU. Mission du P. d'Abbeville au Maragnon. Paris, 1614, feuillet 249, verso (not seen by me) HOITZLAQUATZIN. Nieremberg (1635), p. 154 HOITZTLACUATZIN. . . . Hernandez . . . (1651) Cuandu Brasiliensibus. Marcgrave (1648) CUANDU. Piso (1658). There are a few subsequent references, including Therefore "LE COENDOU" is clearly a composite species. Molina remarked (p. 292) upon the "porcupine" of Chile 1782. (see 1808). 1789. Buffon described (Suppl., VII, p. 305) his Coendou A LONGUE QUEUE from Cayenne, considering it a new species. (It became Coendou longicaudatus Lacépède, "Didot" edition of Buffon, 1802.) Kerr restricted (p. 213) the name prehensilis Linnaeus to 1792. the Brazilian porcupine of Marcgrave and named the Mexican animal of Hernandez mexicana. Pennant treated (3rd Ed., pp. 123-126) the coendous as 1793. "long-tailed," "Brazilian," and "Mexican" porcupines. 1799.1Lacépède proposed (p. 11) Coendou, new generic name to contain "Coendou américain—Coendou prehensilis." 1801. Azara described (II, p. 105) the Courry, upon which the names paragayensis Oken; cuiy Desmarest; spinosa Cuvier, 1822; insidiosa Schinz, Wied, etc. (not insidiosa Kuhl, 1820) were founded.

Shaw used (II, pp. 1-8) prehensilis to include prehensilis

Linnaeus and Coendou a longue queue Buffon (= longicaudatus Lacépède). His Hustrix mexicana

¹For dates of publication of Lacépède's "Tableaux" see Charles W. Richmond, The Auk, 1899, XVI, pp. 325-329; 1900, XVII, pp. 166-167. See also C. D. Sherborn, 1899, Natural Science, XV, pp. 406-409.

was based upon novae hispaniae Brisson, Coendou Buffon, and the Mexican porcupine of Pennant.

Buffon ("Didot" edition). In this edition the two porcu-1802. pines of Buffon, 1762 and 1789, were respectively redescribed in Vol. VI, p. 14 and Vol. XI, p. 219. Additional remarks on the porcupines of 1762 were

printed in Vol. XI, p. 218.

Lacépède's "Tableaux . . ." of 1799, altered and amplified, were republished in Vol. XIV, of the above edition. In them technical names, followed by Roman and Arabic numerals signifying volume and page of the "Didot" edition, were applied to the common names of Buffon, as follows:

prehensilis, VI, 14; XI, 218 (=LE COENDOU). longicaudatus, XI, 219 (= LE COENDOU A LONGUE OUEUE).

Molina (edition in English published for I. Riley). The 1808. name Histrix chilensis (p. 205) is here supplied for Molina's Chilean "porcupine" (see 1782).1

> Oken, under "Coendu, Hustrix prehensilis," wrote (pp. 870-873) of Hystrix paragayensis, new name based upon Azara's Cuiy); Hystrix brasiliensis; Hystrix mexicana; and "4. Art. Coendu."

Kuhl described (p. 71) Hystrix insidiosa, Hystrix nycthe-1820. mera, and Hystrix subspinosa (a Chaetomys), attributing credit for the names to Lichtenstein.

> Desmarest described (p. 345) Hystrix couiy (antedated by H. paragayensis Oken), based upon the Court of Azara; and (p. 346) Hystrix cuandu (antedated by H. prehensilis Linnaeus), founded upon Marcgrave's CUANDU.

> G. F. Cuvier discussed (pp. 413-437) "Acanthion, Eréthizon, Sinéthère et Sphiggure." The generic term "Sinéthère" was applied to the species "prehensilis," which, however, was based not upon Marcgrave's CUANDU but on the "COENDOU A LONGUE QUEUE" of Buffon (by Lacépède, "Didot" edition of Buffon, 1802, named longicaudatus). Whether longicaudatus and prehensilis Linnaeus are synonymous is open to question.

1816.

1822a.

1822.

¹It seems improbable that any porcupine exists in the wild state in Chile.

1825.

1826.

1827.

1829.

1830.

1841.

A second term, "Sphiggure," complementary to "Sinétherè," was proposed by Cuvier to include spinosa, new name, which he suggested might be identical to Azara's "Coui" (antedated in that case by paragayensis Oken, 1816, and couiy Desmarest, 1820); and villosa, supposed new species (the hairy orico, collected in Brazil by Auguste de Saint Hilaire). Schinz indicated (p. 238) that insidiosus was based upon Azara's couiy. In such case, insidiosus Schinz was probably quite distinct from insidiosus Kuhl, 1820. G. F. Cuvier wrote (p. 256) the names Sphiggurus and Sinoetherus. This apparently represents the earliest technical spelling of the words. Sherborn gives the date as 1824. Wied, like Schinz, believed (p. 434) H. insidiosa to be "der Cuiy des Azara." Lesson, using Coendou Lacépède, remarked (p. 291) that it had priority over Synethere [sic] Cuvier. He followed Cuvier, 1824, in the spelling of Sphiggurus. Fischer (pp. 368-370) spelled Cuvier's two names "Sinèthéres" and "Sphiggurus." He made novae hispaniae (p. 369), named after Brisson's animal (=mexicanus), a subspecies of prehensilis Linnaeus. Rengger discussed (p. 241) the genus Sphiggurus. wrote copiously on a Paraguayan porcupine (=the Cuiy of Azara?) under the name "Sphiggurus spinosa F. Cuv," placing "insidiosa Licht." (= Kuhl) in its synonymy. Trouessart (1898, pp. 622–623 and 1905, pp. 514– 515), however, thought the spinosus of Rengger equal not to spinosus but to villosus Cuvier. Brandt merged (pp. 399-424) Cuvier's two divisions,

1835. Brandt merged (pp. 399–424) Cuvier's two divisions, "Sinéthère" and "Sphiggure" under a new generic name Cercolabes, retaining for them only subgeneric value. However, Coendou is valid, and Cercolabes falls into synonymy, the subgenera being now Coen-

of Sinoetherus see "Remarks."

Lund wrote (pp. 99-100) of "Synoetheres" prehensilis and insidiosa.

dou (Coendou) and Coendou (Sphiggurus). For status

1848.

1842. Wagner, accepting (I, p. 360) Cercolabes Brandt, described C. melanurus.

1842. Gray described (p. 262) Sphiggurus melanurus (pre-occupied ? Wagner, 1842).

1843a. Gray removed (p. 21) subspinosus from Coendou under the new generic name Chaetomys.

1843b. Pictet described (pp. 225-227) Plectrochoerus moricandi, since considered to be a synonym of Chaetomys subspinosus.

Wagner, considering that Brandt had correctly united Sinoetherus and Sphiggurus under Cercolabes, employed (IV, pp. 29–36) the last generically, with subgeneric groups "Synéthères" and Sphiggurus. Following Brandt, he placed prehensilis and platycentrotus in the former. Sphiggurus included insidiosus couiy, villosa, spinosus, and affinis shown as synonyms), nigricans (nycthemera a synonym), melanurus, and subspinosus.

1844. Reinhardt described (pp. 240-243) Cercolabes liebmani [sic]. Whether the collector's name was Liebmann (p. 240) or Liebman (p. 241) is open to question, but no doubt can be raised as to the original spelling of liebmani. (Considered a synonym of mexicana.)

Tschudi, after modifying Cuvier's Sphiggurus to Sphingurus [sic], described (p. 186) bicolor.

Waterhouse discussed (pp. 404-436) Cercolabes. He pointed out (p. 410) additional characters between Sphingurus [sic] and Synoetherus and that "novae-hispaniae" (= mexicana) presented intermediate conditions.

He recognized prehensilis with several varieties (see Gray, 1850); platycentrotus, nycthemera (with bicolor a synonym and with comments upon spinosus Cuvier). Following Fischer, he used novae-hispaniae, based upon Brisson's name of 1762 as a technical specific name, with mexicana and liebmani in its synonymy (mexicana Kerr, however, is to be considered the earliest available name for the Mexican coendou). Melanurus and villosus (insidiosus, spinosus of Rengger, and couiy given as synonyms) were

1869.

1872b.

1879a.

1880.

1884.

1881 (1880).

allowed specific rank. *Insidiosa*, nigricans, and affinis were commented upon, and pallidus was described as new.

1850. Gray wrote (pp. 380–381) of prehensilis, boliviensis, and tricolor. Boliviensis was based upon a young animal which Waterhouse (1848, p. 414) had considered to be prehensilis. Tricolor was applied to another specimen, also previously examined by Waterhouse (op. cit., p. 415) and pronounced by him only a variety of prehensilis.

Gray described (pp. 321–322) Erethizon (Echinoprocta) rufescens from "Columbia."

J. A. Allen considered (p. 237) rufescens Gray a young Erethizon dorsatus.

Hensel wrote (p. 56) upon *Sphiggurus villosus*, listing insidiosa Kuhl as a synonym.

Jentink, after reaching the conclusion that prehensilis Cuvier, 1822, and prehensilis Brandt, 1835, were unlike species, described (pp. 93–96) Hystrix brandtii, founded upon prehensilis Brandt. (See also Thomas, 1903.)

1879. Thomas, commenting upon the names in Kerr's 'Animal Kingdom,' stated (pp. 396-397) that *Hystrix mexicana* Kerr = Sphingurus mexicanus Shaw.

Alston, rejecting Coendou Lacépède, employed (p. 170) "Synetheres" for mexicana Kerr.

Trouessart treated (pp. 182–183) "Synetheres" under subgeneric headings Synetheres and Sphiggurus. In the former he grouped boliviensis, prehensilis Linnaeus, brandtii, "? spinosus Cuv." and nycthemera. Under the latter he placed novae-hispaniae, pallidus, melanurus, and villosus. Platycentrotus was a subspecies of brandtii; tricolor of spinosus; bicolor of nycthemera; and nigricans, affinis, and insidiosa of villosus. All other names were placed in synonymy. He dated "Sphingurus" from Alston, 1876 (Proc.

been used already in this form by Tschudi, 1845. Sclater figured (p. 389) "Sphingurus spinosus" and commented upon spinosus and villosus. (See Thomas, 1902.)

Zool. Soc. London, p. 94), although the name had

1898.

Winge wrote of (pp. 61-64) Sphingurus insidiosus, S. 1888. magnus Lund (fossil), and S. prehensilis.

Cope wrote of prehensilis and described (p. 136) "Sphin-1889. gurus" sericeus from São João, Brazil.

> J. A. Allen, writing upon Kerr's 'Animal Kingdom,' stated (p. 189) that Hystrix mexicana = mexicana Shaw (1801) = Sunetheres mexicana (Kerr) Alston.

Troughart (pp. 621-623) wrongly attributed Cercolabes of Brandt to F. Cuvier, 1822.

> Rufescens Gray, 1865, Allen, 1869 (an Echinoprocta), was questioningly placed in the synonymy of prehensilis.

> In the synonymy of brandtii (1879) were placed prehensilis of Brandt, Waterhouse, Burmeister, Lund, and Winge, and also platycentrotus Brandt (1835). Nucthemera Kuhl included bicolor Tschudi. Novaehispaniae Brisson was considered valid with mexicana Kerr and *liebmani* included as synonyms. Its date was attributed to the 1756 edition of Brisson instead of to that of 1762 or to Waterhouse, 1848. Nigricans Brandt was made a subspecies of villosus Cuvier. Other species recognized besides prehensilis Linnaeus. were spinosus, tricolor, boliviensis, pallidus, melanurus, sericeus, affinis, and insidiosus.

Thomas described (pp. 283-285) Coendou quichua and Coendou vestitus. He questioned (p. 283) the identification by Waterhouse of bicolor with nycthemera.

Cabrera discussed at length (pp. 158–162) the identity of rufescens Gray. He raised Echinoprocta Gray to full generic rank.

J. A. Allen, writing upon the names in Oken's 'Lehrbuch der Zoologie,' stated (p. 378) "Hystrix paraguayensis [sic] (sub Coendu), p. 870. Based on 'Le Couiv' of Azara, for which it is the earliest name, antedating . . . Sphiagurus spinosus F. Cuvier, 1822. species should therefore stand as Coendou paraguayensis [sic] (Oken.)" Oken wrote paragayensis [sic].

Thomas described (p. 63) Coendou roberti, "allied to spinosus, F. Cuvier." He commented upon the spinosus of Sclater (1884).

1899b.

1901a.

1902b.

1902b.

- 1902c. Thomas described (p. 141) Coendou simonsi, "allied to C. bicolor" ". . . These two species, with . . . C. quichua of Ecuador, form a natural group intermediate between the 'Synetheres' and 'Sphiggurus' sections."
- 1902f. Thomas described (p. 169) Coendou rothschildi, "related to the C. quichua . . . represents the bicolor-quichua group."
- 1902g. Thomas described (p. 249) Coendou mexicanus yucataniae.

 He mentioned the variability of the skulls of the mexicanus group.
- 1903a. Thomas amplified (p. 41) his first description of rothschildi.
 1903b. Thomas described (p. 381) Coendou laenatus, "allied to mexicanus."
- 1903e. Thomas described (p. 240) Coendou centralis, "a member of the group for which Dr. Jentink has used the name prehensilis . . . " "That C. centralis is not the true C. prehensilis is shown by its differences from a specimen obtained in São Paulo, this latter locality being far closer to the region whence Marcgrave described his 'Cuandu,' the original prototype of Linnaeus's C. prehensilis."

Writing of brandti Jentink, he remarked that Matto Grosso might be the locality for Brandt's specimens, which were part of the Langsdorff collection, and mentioned the close relationships of brandti to boliviensis.

- 1904. J. A. Allen described (p. 441) Coendou sanctaemartae, "a small member of the C. prehensilis . . . group."

 He mentioned (p. 442) the variability of degree of inflation of the frontal region.
- 1904. Palmer designated (p. 633) the type of *Coendou* and also of "Sinetheres" as Hystrix prehensilis Linnaeus and that of Sphiggurus as Sphiggurus spinosus Cuvier.
- 1905b. Thomas described (p. 310) Coendou pruinosus, comparing it with vestitus.
- 1905. Trouessart adhered (pp. 514-515) quite closely to his list of 1898. He did not subscribe to the use of mexicana Kerr for novae-hispaniae. Additional species listed were roberti, quichua, rothschildi, simonsi, novae-hispaniae, yucataniae, vestitus, and laenatus.

1910. Carrucio wrote (pp. 49–55) of a new *Coendou* but gave it no specific name.

1913. J. A. Allen described (p. 478) Coendou quichua richardsoni.

"This seems to be a coast form of C. quichua of the high Andes . . . "

1922. Pocock discussed the relationships (pp. 422–423) of the genera of the Erethizontidae.

1923–1924. Winge chose (pp. 60–61, 76) to use the generic term "Sphingurus" for Coendou.

1927a. Thomas, choosing lectotypes in the British Museum (pp. 545–554), listed for *Coendou pallidus*: "young 46.1.9.14. lectoparatype: 42.10.7.15."

REMARKS

The type of Synoetherus Cuvier, 1824 (based upon "Sinéthère" Cuvier, 1822), which is commonly held to be synonymous with the subgenus Coendou, was "prehensilis" Cuvier, 1822. This represented not the prehensilis of Linnaeus but the Coendou a longue queue of Buffon, already named longicaudatus by Lacépède, 1802. Therefore, although longicaudatus Lacépède (=prehensilis Cuvier) is currently cited as a synonym of prehensilis Linnaeus, that fact remains unproved.

At first sight indeed, unless it can be definitely synonymized with one of the foregoing, the Linnaean *prehensilis* appears not to have much bearing upon the question of the genotypes of the porcupines. The type of *Sphiggurus* Cuvier was designated by Palmer (1904) as *spinosus* Cuvier. That of *Coendou* was "*prehensilis*" Lacépède (?).

It would simplify matters if we could consider Lacépède to have erected *Coendou* for *prehensilis* Linnaeus (formerly composite but restricted by Kerr, 1792, to Marcgrave's porcupine of Brazil). From the emended "Tableaux" of 1802 it appears that Lacépède's *prehensilis* may have been founded upon le coendou of Buffon. But Palmer (1904, p. 194) stated the type of *Coendou* to be "*Coendou prehensilis* (=*Hystrix prehensilis* Linnaeus)."

There is now no prospect of the questions raised in the preceding paragraphs ever being cleared up. But following 'Opinion 54' of the International Commission on Zoological Nomenclature, we may perhaps treat Palmer's views as "reviser's claims" and accept his conclusion that the type of *Coendou* equals *Hystrix prehensilis* Linnaeus. I would, however, also include Kerr's restriction, thus probably confining its type locality to the Pernambuco¹ region. Thus we obtain the following:

GENOTYPES

Coendou Lacépède, 1899

Type by subsequent designation (Palmer, 1904): Hystrix prehen-

silis Linnaeus, 1758

Subgenus Coendou Lacépède

Synonyms? Synoetherus Cuvier, Type by monotypy: prehensilis Cuv-1824

1822 ier.

(=longic audatus)Lacépède, 1802). Assumed syn-

onym of prehensilis Linnaeus

Subgenus Sphiggurus Cuvier, 1824

Type by subsequent designation (Palmer, 1904): S. spinosa Cuvier

LIST OF NAMED FORMS WITH TYPE LOCALITIES

Coendou (Coendou)¹

(=Synoetherus Cuvier?)

a.—Large animals with inflated skulls

prehensilis (Linnaeus)

Synonyms (?):

prehensilis (Linnaeus) cuandu (Desmarest)

longicaudatus Lacépède

boliviensis (Grav)

brandtii (Jentink)

tricolor (Gray)

centralis Thomas

Brazil (probably near Pernambuco) Brazil (probably near Pernambuco) Cayenne

Bolivia

Brazil (Matto Grosso? Suggested by

Thomas, 1903e)

Bolivia?

Chapada, Matto Grosso, Brazil

b.—Moderate-sized animals with less inflated skulls

bicolor (Tschudi)

quichua quichua Thomas

quichua richardsoni Allen simonsi Thomas

rothschildi Thomas sanctaemartae Allen

platycentrotus (Brandt)

Coendou (Sphiggurus)

(=Sphiggurus)

paragayensis (Oken)

Woods between rivers Tullumayo

and Chanchamayo, Peru

Puembo, Upper Guallabamba River, Prov. Pichincha, Ecuador, 2,500

meters

Esmeraldas, Ecuador. Sea level Charuplaya, Securé River, just north of 16° S., Yungas, Bolivia,

1.300 meters

Sevilla Island, off Chiriqui, Panama. Bonda, Santa Marta Distr., Colom-

bia, 150 feet "America australis"?

Paraguay. (Based upon the Coury of Azara. No exact locality)

¹Coendou, although of barbarous origin, may be held to be a masculine noun from Lacépède's use of the masculine adjectival ending in the case of longicaudatus.

Synonym:

couiy¹ (Desmarest)

spinosus² (Cuvier) No locality (Brazil?) insidiosus (Kuhl) No locality (Brazil?)

villosus (Cuvier) Brazi

nycthemera (Kuhl) No locality (Brazil?)

nigricans (Brandt)Brazilaffinis (Brandt)Brazil

sericeus (Cope) São João do Monte Negro, on trib-

utary of Uruguay River, Prov. Rio Grande do Sul, Brazil. Lat.

28° S.

roberti Thomas Roça Nova, Serra do Mar, Prov.

Parana, Brazil. 1,000 meters

chilensis [Riley (?), 1808] Chile

laenatus Thomas Boqueté, Chiriqui, Panama. 5,000

feet

melanurus (Wagner) Barra, Rio Negro, Brazil

melanurus (Gray) (preoccupied?) "Brazils"
nallidus (Waterhouse) "West Indies"?

pallidus (Waterhouse) "West In vestitus Thomas Colombia

nruinosus Thomas Montañas de la Pedregosa, Mérida,

Venezuela. 2,500 meters

mexicanus mexicanus (Kerr) Mexico

Synonyms:

novae hispaniae (Fischer) Mexico liebmani (Reinhardt) Mexico

mexicanus yucataniae Thomas Yucatan (probably near Izamal)

ECHINOPROCTA (Gray)

TAXONOMIC HISTORY

1865. Gray described (pp. 321–322) Erethizon (Echinoprocta) rufescens.

1869. J. A. Allen thought (p. 237) that rufescens was a young Erethizon dorsatus.

1898. Trouessart doubtfully placed (p. 621) rufescens in the synonymy of prehensilis.

1901a. Cabrera redescribed and discussed at length (pp. 158–162) the identity of rufescens and raised Echinoprocta to full generic rank. Since he had not seen Gray's specimen, his conclusions were based upon the assumption that Gray's porcupine and a specimen in his (Cabrera's) possession from Colombia were identical.

¹Based upon the couty of Azara, and therefore a synonym of paragayensis.

²Cuvier remarked, "appears to have been described by Azara under the name of Coui." It is doubtful, however, whether this was so. Should paragayensis (Oken) prove synonymous with spinosus Cuvier, it will equal spinosus, type of Sphiggurus.

It may be noted here that the American Museum possesses a specimen (No. 73678) from Colombia which agrees closely with the descriptions of Gray and Cabrera.

1905. Trouessart now made (p. 514) rufescens a subspecies of prehensilis.

1920. Trouessart, with adult material, reviewed the status of *Echinoprocta rufescens*.

GENOTYPE

Echinoprocta Gray

Type by monotypy: Erethizon (Echinoprocta) rufescens Gray

Species with Type Locality

Echinoprocta Gray rufescens (Gray)

"Columbia"

CHAETOMYS Gray

TAXONOMIC HISTORY

1820. Kuhl described (p. 71) Hystrix subspinosa.

Olfers wrote (p. 211) of *Hystrix tortilis*. This citation (not seen) is based upon those of early authors (Wagner, Waterhouse, Trouessart).

1843b. Gray erected (p. 123) Chaetomys, new genus, to accommodate subspinosus.

1843. Pictet described and named (pp. 225–227) Plectrochoerus moricandi.

1844. Wagner listed (IV, p. 35) Cercolabes subspinosus, with tortilis Olfers shown as a synonym.

1844. Gray further described (p. 36) Chaetomys subspinosus and figured the skull.

1848. Waterhouse wrote upon (p. 399) Chaetomys subspinosus, placing in its synonymy Plectrochoerus moricandi Pictet.

1881 (1880). Trouessart listed (p. 182) subspinosa, with tortilis and moricandi synonyms.

1901a. Cabrera included (p. 162) Chaetomys in his key to the "Cercolabidae."

GENOTYPE

Chaetomys Gray

Type by monotypy: Hystrix subspinosa Kuhl

LIST OF NAMED FORMS WITH TYPE LOCALITIES

Chaetomys Gray

subspinosa (Kuhl) moricandi¹ (Pictet) tortilis² (Olfers) No locality (Brazil?)

CAVIIDAE

DINOMYS Peters

TAXONOMIC HISTORY

1873a.	Peters erected (p. 551) the genus Dinomys to contain the
	new species $D.$ $branickii$.

1873b.	Peters	further	$\operatorname{described}$	(p.	227)	and	figured	Dinomys
	bi	ranickii.						

1904a.	Goe	ldi	wrote	(pp.	158-1	165)	on	Dinomy	8.

1904b.	Goeldi again wrote (pp. 542-549) on <i>Dinomys</i> .
1918.	Ribeiro described (pp. 13–15) Dinomys pacarana.

1921. Anthony described (p. 6) Dinomys gigas.

1921a. Lönnberg described (p. 49) Dinomys branickii occidentalis.

1921b. Lönnberg reviewed (pp. 150–154) Dinomys.

1931. Sanborn reviewed (pp. 149–155) *Dinomys*. He synonymized all the above forms under *D. branickii* Peters.

GENOTYPE

Dinomys Peters

Type by monotypy: Dinomys branickii Peters

LIST OF NAMED FORMS WITH TYPE LOCALITIES

Dinomys Peters

branickii branickii Peters

Montaña de Vitoc, Colonia Amable Maria, central Peru

Synonyms:

branickii occidentalis Lönnberg pacarana Ribeiro gigas Anthony Near Gualea, Ecuador. 5,000-6,000

"procedente do Amazonas," Brazil La Candela, Huila, Colombia. 6,500

CUNICULUS² Brisson, 1762

TAXONOMIC HISTORY

De Laet wrote briefly (p. 484) of "Le Pag ou Pague."

He mentioned a white form (which Kerr, 1792, named alba).

¹Moricandi and tortilis have been treated by authors as synonyms of subspinosa. ²Restricted through separation of the mountain pacas (Stictomys) by Thomas, 1924.

- 1648. Marcgrave described (p. 224) PACA BRASILIENSIBUS.

 1651. Hernandez included (Hist. Anim., IV, p. 2) both Cuniculus and Dasyprocta under his "Tochtli sive Cuniculi."

 (According to Lichtenstein, 1827, Abh. Akad. Wiss., Berlin, p. 101.)
- 1658. Piso wrote (pp. 101-102) of the PACA.
- 1691. Ray cited (p. 226) the PACA of Marcgrave (1648).
- 1741. Barrère listed (p. 152) the paca of Guiana as "Cuniculus major, palustris, fasciis albis notatus."
- 1751. Klein, under "CAVIA PACA" cited (p. 50) Marcgrave's and Ray's descriptions.
- 1756. Brisson wrote (p. 144) of "Le Pak, Cuniculus caudatus."

 His description was marked by ** which, as explained in his preface (p. v), indicated that he had drawn up his description from an actual specimen. He cited also Barrère, Marcgrave, Ray, Klein, Johnston, Piso, and de Laet. Locality: "Guiana and Brazil."

The above-mentioned animal, redescribed in Brisson, 1762, p. 99, was designated by Hollister, 1913, type of the genus *Cuniculus*.

1762. Brisson erected (p. 98) the generic name *Cuniculus*, a composite genus without designated type.

His fourth species (p. 99) was Paca, based directly upon his own "Le Pak" of 1756. This description was likewise accompanied by **, which, on the third page of the preface (1762), was explained as indicating that he had personally examined a specimen. Thus, both editions alluded to a paca which Brisson had personally inspected. He again cited a number of authors who had written about pacas.

Since Brisson's generic bird names are accepted (Int. Comm. Zool. Nomencl., 'Opinion 37'), his generic mammal names, which have a strictly analogous status, ought also to be accepted. However, his specific names, both bird and mammal, although binary are not binomial and are not accepted. (Allen, 1910, Bull. Amer. Mus. Nat. Hist., XXVIII, p. 322.) Consequently his PACA is not to be interpreted as a technical specific name. However, Linnaeus (12th Ed., 1766) formally described paca, listing

1792.

PACA Brisson, 1756 (not 1762) and other authors given beyond.

1763. Buffon described (X, pp. 269–278) "Le Paca," based upon de Lery (1578), Marcgrave, Piso, Ray, Barrère, Brisson, and many other references.

1766. Linnaeus described (12th Ed., p. 81) Mus paca, based upon Brisson (1756), Ray, Marcgrave, Piso, and Johnston. This became type of Cuniculus Brisson, 1762, by subsequent designation (Hollister, 1913).

1767. Linnaeus again listed (13th Ed., p. 81) Mus paca.

Pennant wrote of (p. 244) the "Spotted Cavy" and of the white variety (of de Laet, 1640, and Kerr, 1792).

1777. Erxleben listed (p. 356) Cavia paca.

1779. Blumenbach listed (p. 91) Cavia paca.

1788. Gmelin used (Linnaeus, 13th Ed., reformed, p. 120) the term Calva paca.

1789. Gmelin employed (Linnaeus 13th Ed., reformed, reissued, p. 120) Cavia paca.

Schreber wrote (p. 609) about "DER PAKA" under the name Cavia paca.

Kerr wrote (pp. 216–217) of *C. paca* and *C. paca alba*, basing the latter upon the descriptions of de Laet and Pennant.

1799. Lacépède erected (p. 9) the generic name Agouti, listing the single species Agouti paca which became thus type of Agouti by original designation and monotypy. In consequence Agouti is a pure synonym of Cuniculus.

1801. Azara wrote (II, p. 20) of the "Pay."

1801. Lacépède reprinted (p. 494) his work of 1799.

Buffon ("Didot" Ed., IV, p. 139, and XI, p. 203). The description of Buffon (1763) was reprinted in Vol. IV; the matter contained in Vol. XI was new.

Lacépède ("Didot" Ed., XIV) revised and extended his "Tableaux" of 1799 and 1801 so that his genus Agouti (p. 166) now included members of various other genera besides "Agouti paca, IV, 239 [misprint for 139]; XI, 203." The Roman and Arabic numbers refering to volumes and pages of the "Didot" edition.

1895.

1807. G. F. Cuvier wrote (pp. 203-209) of the "Genre Paca. Coelogenus (Cavia paca, Linnaeus)." He described (p. 206) Coelogenus subniger, which he considered the same as Marcgrave's form, and (p. 207) Coelogenus fulvus, based upon the paca treated by Brisson. (Thus also a synonym of paca Linnaeus.) These two names were placed in the synonymy of paca by Wagner (1843). Illiger, emending the spelling, wrote (p. 92) "Coelogenys" 1811. for Coelogenus of Cuvier. Fischer applied (p. 85) the generic name *Paca* to the pacas. 1814. Desmarest considered (p. 361-362) the species paca to be 1822a.divided between Cuvier's two names subniger and fulvus. Wagler employed (p. 21) Cuniculus. 1830. Rengger wrote at length (pp. 250-259) on the paca, 1830. uniting Cuvier's fulvus and subniger (p. 250). Wagner recombined (IV, p. 52) fulvus and subniger under 1844. paca, naming them var. α and var. β . Waterhouse reviewed (pp. 364-372) known data on 1848. "Coelogenys [sic] paca" and discussed Cuvier's subniger and fulvus. 1854. Burmeister discussed (pp. 227–232) the pacas extensively. Gervais described (I, p. 326) "Coelogenys sublaevis," 1854. based upon a single skull. (At first Thomas, 1905, considered this a Stictomys, but later Lönnberg, 1921, and Thomas, 1924, concluded that it truly represented a female paca.) Giebel reviewed (pp. 466-467) "Coelogenys." 1855. Hensel remarked (p. 58) upon the pacas of south Brazil. 1872b.Alston discussed (pp. 174-175) the distribution of the 1880. pacas in Central America. 1881 (1880). Trouessart wrote (p. 193) "Coelogenys" [sic]. Under it he placed paca Linnaeus (12th Ed.), with fulvus a synonym and subniger and sublaevis distinct forms. 1885. Stolzmann described (pp. 161-167) Coelogenus [sic]

taczanowskii (a Stictomys).

Winge discussed (pp. 64-66) the paca (of Brazil).

Merriam, pointing out (pp. 375-376) that Cuniculus

Brisson, 1762, was a composite genus composed of

1913.

Cavia, Lemmus, Coelogenus, Dasyprocta, Anisonyx, and Allactaga, attempted unsuccessfully to fix (p. 376) its type as "alactaga (Olivier) 1800," by the process of elimination. According to the "Rules," Article 30, and as shown by Hollister (1913) "elimination" was not one of the methods allowed in determining a genotype.

1897b. Palmer listed (p. 248) paca as type of Agouti Lacépède, 1801 (in footnote, p. 243 he corrected this date to 1799).

Trouessart, still not recognizing Cuniculus Brisson, listed (p. 635) in Coelogenys [sic]: paca, sublaevis, and taczanowskii (a Stictomys). Fulvus and subniger were placed in the synonymy of paca.

1901f. Thomas treated (p. 532) paca under the generic name Agouti Lacépède.

1902. Bangs described (pp. 47-48) Agouti paca virgatus.

1904. Palmer recorded (p. 84) the date of fixation of paca as the type of Agouti Lacépède as 1801. (It should now be read Lacépède, 1799.) Of Coelogenus he recorded (p. 193) no fixation of type.

1905a. Thomas described (p. 589) Agouti sierrae (a Stictomys).

He pointed out that the pacas fell into two groups—mountain and plains living—and referred both taczanowskii and sierrae to the mountain group. He considered that sublaevis Gervais, whose skull could no longer be found, was probably a mountain paca. (But see Lönnberg, 1921a, and Thomas, 1924a.)

1908. Hagmann described (pp. 25–27) Coelogenys [sic] paca mexianae.

1912. J. A. Allen recorded (p. 75) paca virgata from western Colombia.

1913b. Goldman described (p. 9) Agouti paca nelsoni.

1913. Lönnberg described (p. 28) "Agouti [Coelogenys] sierrae andina" (a Stictomys).

Hollister, pointing out (p. 79) that Merriam's (1895) designation by elimination of alactaga as type of Cuniculus Brisson (1762) was not valid, formally designated "Paca, Brisson, p. 99, based on Cuniculus major palustris, fasciis albis notatus Barrère, 1741" type of that genus.

As I have shown (Brisson, 1756 and 1762), Brisson did not found Paca solely upon Barrère's description but upon a specimen which he (Brisson) was able to examine, and thus it was upon that specimen that paca Linnaeus (1766) was based.

1914a.

Thomas, in remarks upon "Fiat" vs. "Priority" names, advocated (p. 285) retention of "Coelogenys" with type Mus paca instead of Agouti or Cuniculus which names antedated Coelogenus.

1920.

Goldman, following Hollister, revived (p. 131) *Cuniculus* Brisson for *paca*.

1921a.

Lönnberg, discussing the pacas, proposed (p. 43) that Marcgrave's PACA be held to constitute the basis of Mus paca Linnaeus and suggested Pernambuco for type locality. (This could not be accepted, in view of Hollister's designation, 1913.)

Considering sublaevis Gervais (from Colombia), identical with a paca from Santa Catharina, south Brazil, he reduced sublaevis to a synonym of paca paca.

He described (p. 45) "Coelogenys" paca guanta, comparing it with virgata.

He went on to discuss the mountain pacas (Stictomys), changing sierrae andina to taczanowskii andina.

1921b.

Lönnberg further reviewed (pp. 145-150) the pacas.

1922.

Pocock discussed (p. 424) the relationships of the pacas and agoutis.

1924a.

Thomas distinguished (pp. 237-239) the mountain pacas from the lowland pacas under the new generic name *Stictomys*, with type *Coelogenys taczanowskii* Stolzmann. With *taczanowskii* he placed *sierrae* and *andina*.

He confirmed Lönnberg's view that *sublaevis* was based upon a female *paca* rather than upon some relation of *sierrae*.

He made reference to "thomasi" (p. 239). This was apparently a nomen nudum. At least I have discovered no published description of it.

1924c.

Thomas (and other European authorities) reiterated (p. 346) their opinions that, despite priority of Agouti and Cuniculus, "Coelogenys," with type Muspaca Linnaeus, should be retained with other nomina conservanda.

The International Commission on Zoological Nomenclature, in 'Opinion 90,' reported (pp. 34–40) upon the question of suspension of rules in the case of Coelogenys (emendation by Illiger, 1811, of Coelogenus Cuvier, 1807) vs. Cuniculus or Agouti. The case of Coelogenys was outlined (p. 37). The name Coelogenys appeared among the ten which failed to receive a two-thirds vote in favor of suspension (p. 39) with the result that the Rule of Priority was to remain in force. In the tabulation of Commissioner's votes (p. 40) the case of Coelogenus received ten for and eight against suspension of "Rules."

Accordingly, at the present time, the correct generic name of the lowland pacas must remain *Cuniculus*.

REMARKS

Although there remains no doubt, in view of the action of the Int. Comm. Zool. Nomencl. ('Opinion 90'), that the generic name to be used for the lowland pacas is *Cuniculus*, with genotype *Mus paca* Linnaeus, some question remains as to what *paca* Linnaeus was.

Linnaeus cited under paca the descriptions of Ray, Brisson, Marcgrave, Piso, and Johnston and gave as habitat, "Brasilia, Guiana." Ray cited only Marcgrave. Brisson cited Barrère, Ray, Klein, Marcgrave, Johnston, Piso, and de Laet, but his description, marked with ** was based upon a specimen examined by himself. Klein cited Marcgrave.

Except those of Brisson, all citations focus ultimately upon the work of Marcgrave. The question then remains whether paca Linnaeus must be held founded upon Marcgrave's paca of Brazil or upon Brisson's paca from "Guiana and Brazil." The claim of a reviser "is to be accepted as correct until proved incorrect" ('Opinion 54'). Hollister, when selecting paca Linnaeus as type of Cuniculus, selected as type "Paca, Brisson, p. 99, based on Cuniculus major palustris, fasciis albis notatus Barrère, 1741," which the Int. Comm. Zool. Nomencl. ('Opinion 90') interpreted as equal to Cavia paca Linnaeus. Now Barrère's paca was undoubtedly from French Guiana; so Hollister may be considered as having fixed the type locality of paca as French Guiana. In the event the Guiana paca should prove to be distinct from that of Brazil, the name paca would have to be restricted to the former.

GENOTYPE

Cuniculus Brisson

Type by subsequent designation (Int. Comm. Zool. Nomencl., 'Opinion 90'): Cavia paca Linnaeus. (Mus paca Linnaeus, Syst. Nat., 1766, 12th Ed., I, p. 81.)

LIST OF NAMED FORMS WITH TYPE LOCALITIES

Cuniculus Brisson

paca paca (Linnaeus)
paca alba Kerr
subniger (Cuvier)
fulvus (Cuvier)
sublaevis Gervais
paca virgatus Bangs
paca mexianae Hagmann
paca nelsoni Goldman

paca quanta Lönnberg

Cayenne (Brisson and Barrère)¹ San Francisco River, Brazil Tobago

? Colombia

Divala, Chiriqui, Panama

Isl. Mixiana, Amazonian estuary, Brazil Catemaco, southern Vera Cruz, Mexico

Gualea, Ecuador. 5,000 feet

STICTOMYS Thomas

TAXONOMIC HISTORY

1854.

Gervais described (I, p. 326) Coelogenys sublaevis, based upon a single skull from Colombia. (At first considered by Thomas, 1905, as one of the "mountain pacas," but later Lönnberg, 1921, and Thomas, 1924, treated it as a female of Cuniculus paca.)

1885.

Stolzmann described (pp. 161–167) Coelogenys [sic] taczanowskii.

1905a.

Thomas described (p. 589) Agouti sierrae from Mérida, referring also a specimen from Bogotá to the same species.

He pointed out that the pacas fell into two groups—mountain and plains—and referred taczanowskii and sierrae to the mountain group. He considered sublaevis, whose skull could no longer be found, probably a mountain paca. (See Gervais, 1854.)

1913.

Lönnberg described (p. 28) Agouti [Coelogenys] sierrae andina.

1921a.

Lönnberg discussed (p. 47) the mountain pacas and transferred (p. 48) his subspecies andina (1913) from the species sierrae to taczanowskii, the name becoming taczanowskii andina instead of sierrae andina.

¹See "Remarks."

Contrary to the view of Thomas (1905a) he believed (pp. 43–45) sublaevis Gervais to be synonymous with paca paca.

1921b. Lönnberg reviewed (pp. 145–150) the pacas.

1924a. Thomas erected (pp. 237–239) Stictomys with type "Coelogenys" taczanowskii Stolzmann. With taczanowskii he included sierrae and andina. Finally he agreed with Lönnberg (1921a) that sublaevis was not a mountain paca but a female of a lowland paca (Coelogenus).

GENOTYPE

Stictomys Thomas

Type by original designation: "Coelogenys" taczanowskii Stolzmann

LIST OF NAMED FORMS WITH TYPE LOCALITIES

Stictomys Thomas

 ${\it taczanowskii taczanowskii (Stolzmann)} \ \ {\it Forest on either slope of the Andes,} \\ {\it between 6,000 and 10,000 feet,}$

Ecuador

taczanowskii andina (Lönnberg)

Mt. Pichincha, Ecuador. 9,000–12,000 feet

sierrae (Thomas)

Montaña Pedregosa, Sierra de Mérida, Venezuela

DASYPROCTA Illiger

TAXONOMIC HISTORY

De Rochefort wrote of a species of "Agouty" from the West Indies. In the edition of 1658 the account appears on pp. 123–124.

1640. De Laet, in his chapter on Brazil, briefly mentioned (p. 484) the "ACUTIS ou AGOUTIS."

1648. Marcgrave described (p. 224) "AGUTI vel ACUTI Brasiliensibus." (Origin of aguti Linnaeus, 1766.)

1651. Hernandez included under his "Tochtli sive Cuniculi" both the agouti and the paca of Mexico (according to Lichtenstein, 1827, Abh. Akad. Wiss. Berlin, p. 101). This was probably mexicana de Saussure, 1860.

1658. Piso wrote (p. 102) about the "Aguti" (supplementing the description of Marcgrave).

Ray wrote of (p. 226) "Mus sylvestris americanus cuniculi magnitudine, porcelli pilis & voce. Aguti vel Acuti Brasiliensibus dictus. Marcgr." 1734. Seba wrote (I, p. 67, Pl. xli, fig. 2) of "Cuniculus Americanus," referred to by Kerr, 1792 under his "Aguti americana."

The animal figured as Cuniculus Americanus by

The animal figured as *Cuniculus Americanus* by Seba was probably an agouti, but its tail is too long for that of *Dasyprocta*, too short for any *Capromys*, and too densely haired to be that of *Myoprocta*. It may then fairly be considered as not determinable.

- 1741. Barrère, cataloguing the animals and plants of Cayenne, listed (p. 153) "Cuniculus omniumvulgatissimus, aguti vulgo," which he referred to the agouti of Marcgrave.
- 1743. Catesby described (II, Append., p. 18) his Java Hare (upon which the name *leporinus* Linnaeus, 1758, was based).
- 1751. Klein based his "aguti *vel* acuti" (p. 50) upon de Laet, Marcgrave, and Ray.
- 1756. Brisson's Agouty (p. 143) like his "Pak" was founded upon a specimen examined by him, as indicated by the two asterisks placed by the name. The works of Marcgrave, Ray, Barrère, de Laet, Piso, etc., were cited. His "Lapin d'Amerique" was based upon Seba's description. See under Kerr, 1792.
- 1758. Linnaeus described (10th Ed., p. 59) Mus leporinus, based upon the "Java Hare" of Catesby, 1743.
- 1760. Buffon wrote (VIII, p. 375) of the "AGOUTI" (=cayanus Lacépède, 1802) which he founded upon descriptions by de Laet, Marcgrave, Barrère, and other early authors.
- Brisson employed (pp. 98–104) the generic name Cuniculus, a composite term (see Merriam, 1895), under which he placed "javensis," "aguti," "americanus," "paca," "norvegicus," etc. His aguti was marked with **, meaning that he had examined a specimen. Brisson's specific names are not recognized. (See résumé of Allen's views under Coendou, Brisson, 1762.)
- 1766. Linnaeus described (12th Ed., p. 80) Mus aguti, which he based upon the "Agouty" of Brisson, 1756; on Aguti s. Acuti of Marcgrave (1648) and Piso (1658); and on "Mus sylvestris americanus" of Ray (1693).

(See restriction of aguti by Thomas, 1898, to the agouti of Marcgrave, (1648), from Brazil.)

1767. Linnaeus listed (13th Ed., p. 80) Mus aguti and M. leporinus.

Pennant recognized (pp. 245–246) the Long-Nosed Cavy, based upon Marcgrave, Piso, de Laet, Rochefort, Ray, Klein, Linnaeus, Brisson, Buffon, Barrère. (Thus he here dealt essentially with the agoutis of eastern South America—i.e., his Long-Nosed Cavy was composite.)

1777. Erxleben, under the generic name *Cavia* included (pp. 353–354) *aguti*, based primarily upon the descriptions of de Laet and Marcgrave, but accompanied by a long synonymy which gave it a range from Jamaica to Brazil. He listed also *leporina* of Linnaeus, 1758.

1777. Zimmermann based his *Cavia aguti* (p. 325) upon Klein, Linnaeus, and Buffon.

1778.¹ Schreber wrote (p. 613) of "der Aguti."

1779. Blumenbach listed (p. 91) Cavia aguti.

1785. Boddaert listed (pp. 102–104) Cavia aguti, acouchy, and bicolor (the last based upon Catesby, and so a synonym of leporinus).

1788. Gmelin listed (Linnaeus, 13th Ed., reformed, p. 121)

aguti under the generic name Calva.

1789. Gmelin replaced [Linnaeus 13th Ed., reformed (further corrected and reissued) p. 121] aguti in Cavia. He listed (p. 122) americana, founded upon Seba (1734) and Brisson (1756).

1792. Kerr divided (pp. 217–218) "Cavia aguti" into three varieties: "C. aguti cunicularis" (not determinable according to J. A. Allen, 1895), based partly upon Linnaeus, 1766, and partly on Capromys; "C. aguti leporina," based upon leporina Erxleben, 1777, p. 355, and claimed by Kerr to be from South America; and "C. aguti americana," founded upon Brisson, 1756, and Seba, 1734.

1799. Lacépède listed (p. 9) no true agoutis. The name *Agouti* was employed by him generically for the paca. (See Buffon-Lacépède, 1802.)

¹For this date see Sherborn, 1891, Proc. Zool. Soc. London, p. 589.

- Azara recorded (II, p. 26) the acouti from near Asuncion,
 Paraguay. He wrongly concluded (p. 37), from studying Buffon's works, that agoutis and acouchys were
 one and the same. (Formerly azarae Lichtenstein
 was employed for the acouti. In 1917d, however,
 Thomas showed that azarae was the name of the São
 Paulo agouti and proposed felicia for Azara's species.)

 Buffon ("Didot" Ed., III, p. 78, Pl. vi). The agouti of
- Buffon ("Didot" Ed., III, p. 78, Pl. vi). The agouti of 1760 was rediscussed and figured. In the "Tableaux" (XIV) modified from 1799, Lacépède extended the scope of his genus Agouti to include besides paca: cayanus (new name) III, 78, XI, 201; two true cavies; and the acuschy. The Roman and Arabic numbers following cayanus referred to volume and page of the "Didot" edition in which the description occurred. It is obvious then that cayanus (III, p. 78) referred directly back to the agouti of 1760, VIII, p. 375, and consequently was a synonym of aguti.
- 1803. Buffon (Sonnini Ed., XXVI, p. 153) gave the (1760) account of the *agouti* reprinted with additions.
- 1811. Illiger erected (p. 93) the new genus Dasyprocta to contain the species "Cavia aguti, acuchi Lin. Gmel."
- 1812. G. F. Cuvier employed (p. 290) the generic name *Cloromis* for "les agoutis."
- 1816. Oken's system contained (p. 823) "Dasyprocta . . . 1st Art. S. [= Savia] acuty," "S. acuchy" was treated as an "Abart." of acuty. "S. leporina, javensis" was stated to be "Similar, white beneath. Surinam, not in East Indies."
- Desmarest, after discussing agoutis in general, described (I, p. 213) Cavia cristata.
- 1817. Rafinesque wrote (pp. 361–363) of Cavia cristata.
- Desmarest wrote (pp. 357-358) of Dasyprocta acuti [sic];

 Dasyprocta cristata, giving its origin as Surinam; and
 Dasyprocta acuschy (a Myoprocta).
- 1823. Lichtenstein described briefly (p. 3) Dasyprocta azarae, supposedly based on the Acouti of Azara, but whose locality he gave as São Paulo. (For discussion of status of azarae see Thomas, 1917.)

1825. G. F. Cuvier again treated (p. 181) the agoutis under the name *Chloromys* [sic].

1829. Fischer, besides true agoutis and acouchis, included (pp. 379–382) in Dasyprocta, patachonica (a Dolichotis) and viscaccia (a Lagostomus).

1830. Rengger discussed (pp. 259–266) "Chloromis acuti F. Cuv." [presumably the same as the Acouti of Azara (=felicia Thomas, 1917d)].

1831. Wagler, reviewing the genus Dasyprocta, listed (pp. 617–622) D. aguti Illiger (based upon the reference in Gmelin's edition of Linnaeus, 1789, which in turn was derived from Linnaeus, 12th Ed., 1766), D. croconata (new species), prymnolopha (new species), cristata "Geoffroy" (Desmarest), acuschy Linnaeus (a Myoprocta), and exilis (new species) (also a Myoprocta).

He believed that azarae Lichtenstein was inseparable from aquti Illiger.

1832. Wagler described (p. 1220) Dasyprocta fuliginosa.

1837a. Gervais mentioned (p. 107) an agouti ("Agouti ou Chloromys") of the West Indies.

1841. Lund, after discussing *Dasyprocta*, described (pp. 286–287) *D. caudata*, which he compared with *D. azarae*, *D. aguti*, and *Myoprocta acuchy*.

1842. Wagner described (I, p. 362) Dasyprocta nigricans.

1842. Gray described (p. 264) D. punctata, D. nigra, and D. albida (a Myoprocta according to Waterhouse, 1848, but a Dasyprocta in the opinion of Sclater, 1874).

1843b. Gray listed (p. 124) D. leporina as "the agouchy" (considered a true Dasyprocta by Waterhouse, 1848).

Wagner, under Dasyprocta, recognized (IV, pp. 38-49) azarae Lichtenstein, aguti Erxleben, croconota, cristata, prymnolopha, nigricans, and also two species of Myoprocta, acuschy, and leptura (new species).

He treated *punctata* and *caudata* as synonyms of *azarae*. *Nigra* and *fuliginosa* he made synonymous with *nigricans*.

Croconota and pyrmnolopha were figured in Plates 172B and 172C.

1844. Gray published colored plates and gave (p. 36) very brief remarks upon his *D. punctata* and *D. nigra*.

1845c.

Wagner remarked (pp. 56-57) that nigra and nigricans were identical with fuliginosa; that punctata (later shown to be Central American) equaled azarae.

Commenting upon Lund's separation of *caudata* from *aguti* and *azarae*, Wagner affirmed the intergradation of the rump coloring; that "no difference of size exists; and therefore the specific distinction is inadmissible" between *azarae* and *caudata*.

1845.

Tschudi listed (p. 189–192) "aguti" and described as new variegata.

1845.

Schinz listed (II, pp. 273–277) aguti, azarae, cristata, patagonica (a Dolichotis), acuchy (a Myoprocta) nigricans, punctata, albida, and variegata.

1848.

Waterhouse, reviewing (II, pp. 372-379) the agoutis, wrote upon aguti, croconota, prymnolopha, cristata, fuliginosa, azarae, caudata; and acouchy, leptura, exilis, and albida (all four of which he treated as close relatives—i.e., belonging to the modern genus Myoprocta).

He placed variegata Tschudi in the synonymy of cristata and described "cristata, variety" (p. 384). He considered that nigricans and nigra were equal to fuliginosa, and (following Wagner's views, 1845c) punctata was held to be a synonym of azarae.

However, contrary to Wagner's (1845c) idea, he thought *caudata* Lund distinct from *azarae*.

He stated that *leporinus*, based upon the "Java Hare" of Catesby, was certainly an *agouti* and not an *acouchy*, in spite of the fact that it had been treated as the latter by Gray, 1843b.

1855.

Giebel, in his "Säugthiere," wrote (I, pp. 467–470) a synopsis of the agoutis. Forms considered were aguti Desmarest (1820), azarae, croconota, cristata, prymnolopha, and acuchy (a Myoprocta).

1860.

De Saussure described (pp. 53-56) Dasyprocta mexicana. Hensel wrote (p. 57) of "Dasyprocta aguti."

1872b.

Sclater described (pp. 665–666) Dasyprocta antillensis. He considered that Central America was the home of punctata, although Gray (1842) had written "South America." He suggested that albida (a Myoprocta

1874.

according to Waterhouse, 1848) might be an alb no form of his antillensis.

1876.

Alston, writing (pp. 347–352) "On the genus Dasyprocta, ...," described as new D. isthmica. He recognized cristata, variegata, fuliginosa, mexicana, azarae, punctata, aguti, prymnolopha, and acouchy (a Myoprocta). He placed antillensis in the synonymy of cristata; croconota in aguti (pp. 351–352); and following previous authors (Wagner, Waterhouse, Sclater), he listed nigricans and nigra under fuliginosa, caudata under azarae, and albida (=antillensis Sclater?) under cristata.

1880.

Alston again stated that, besides mexicana and isthmica, punctata Gray was a Central American agouti. He stated that the punctata material was collected by Commanders Belcher and Kellett, "probably on the West Coast of Costa Rica or Nicaragua." He indicated (p. 172) the general range of punctata as Yucatan, Guatemala, and Costa Rica.

1881 (1880).

Trouessart listed (pp. 191–192) isthmica, cristata, variegata, fuliginosa, mexicana, azarae, aguti Linnaeus, prymnolopha, and acouchy (a Myoprocta) as good species. Punctata was shown as a synonym of isthmica; antillensis and albida, respectively, as synonyms and subspecies of cristata; nigra and nigricans as synonyms of fuliginosa; acuti Rengger, aguti Hensel, and caudata as synonyms, and punctata as a subspecies of azarae; and finally croconota as a subspecies of aguti.

1888.

Winge briefly discussed (p. 64) the agutis under "Dasy-procta aguti."

1889.

Cope described (p. 138) Dasyprocta aurea, comparing it with croconota, prymnolopha, and azarae. He recorded "azarae" from Matto Grosso.

1893.

Allen and Chapman remarked (p. 227) upon "D. aguti" from Trinidad.

1895.

J. A. Allen, writing of Kerr's 'Animal Kingdom,' said (p. 189) that *Cavia aguti cunicularis* Kerr (1792) was not determinable—that in part it equaled *Capromys*.

1895. Merriam stated (pp. 375–376) that *Cuniculus* Brisson, 1762, was a composite genus which included *Cavia*, *Coelogenus*, and *Dasyprocta*.

1897b. Thomas described (p. 219) Dasyprocta kalinowskii, comparing it with variegata and fuliginosa.

1898. Bangs described (p. 163) Dasyprocta colombiana, based upon two specimens: the type from Santa Marta, Colombia; the second from Pueblo Viejo (8,000 feet), Colombia.

Thomas, writing (pp. 272–274) upon "Dasyprocta aguti and the species allied to it," restricted aguti Linnaeus (1766) to Marcgrave's (1648) Brazilian animal. He retained croconota for the Amazonian form, and remarking that the red-rumped agoutis of Guiana and Trinidad would require renaming, proposed for them Dasyprocta rubrata and D. rubrata flavescens, respectively.

1898. Trouessart, following the various opinions of authors already set forth in this present paper, recognized (pp. 633–635) the following species: mexicana, punctata, isthmica, cristata, variegata, fuliginosa, azarae, aguti, croconota, aurea, prymnolopha, and acouchy (a Myoprocta).

In the appendix (pp. 1340–1341) he noted Thomas's new forms *kalinowskii*, *rubrata*, and *r. flavescens*, and his restriction of *aguti* to Brazil.

- 1901. Bangs described (pp. 635–637) Dasyprocta callida, comparing it with isthmica, colombiana, and punctata.
- 1901e. Thomas described (pp. 272–273) Dasyprocta ruatanica, "a pauperized insular representative of the continental D. punctata Gray."
- 1902c. Thomas described (p. 136) Dasyprocta coibae, allied to punctata, but unlike callida Bangs.
- 1903d. Thomas described (pp. 491–492) Dasyprocta lucifer, allied to rubrata flavescens, and D. lucifer cayennae.
- 1903f. Thomas erected (p. 464) Myoprocta to contain Dasyprocta acouchy.
- 1903g. Thomas proposed (p. 241) Myoprocta for acouchy. He remarked upon the wide range of "azarae" through Chapada, Paraguay, and São Paulo. (For priority between these two references see under Myoprocta.)

1910c.

1911.

1911.

1912.

1904. J. A. Allen added (p. 443) information regarding colombiana Bangs.

1905. Trouessart made (pp. 522-523) no modifications in the existing arrangement of species.

1908. Hagmann wrote (p. 27) of "croconota" from the island of Mixiana, giving an illustration of its teeth and palate (Pl. II, fig. 3).

1910. Osgood concluded (p. 28) that colombiana and isthmica should be regarded as subspecies of variegata.

Thomas described (pp. 505-506) Dasyprocta variegata yungarum. Like Osgood he remarked upon the nearness of variegata, isthmica, and colombiana to each other, and treated them as merely "geographical subspecies."

G. M. Allen, discussing (pp. 202–206) the West Indian agouti, pointed out that cristata was the name of a continental species, and revived albida Gray for the St. Vincent agoutis (which he thought might be a race of the Trinidad form rubrata Thomas).

Turning to antillensis Sclater, which he considered distinct from the foregoing, he restricted the application of the name to the agoutis of St. Lucia. He also recorded agoutis from Montserrat and St. Kitts.

Surveying the distribution of this genus in the West Indies, Allen showed that it is also present upon Grenada, Guadeloupe, and Dominica. Apparently it is or was distributed throughout the Lesser Antilles.¹

J. A. Allen referred (p. 250) agoutis from Anzoategui, San Esteban, and Estada Lara in Venezuela to rubrata Thomas (of Trinidad), discussing them at some length. No mention was made of the mainland subspecies rubrata flavescens of Caripe, eastern Venezuela.

Other agoutis were identified as *lucifer* (of the Orinoco region).

Miller designated (p. 287) the genotype of *Dasyprocta* as *Mus aguti* Linnaeus. Designation had, however, been accomplished by Thomas (1903f) when, by

¹I myself have seen Dasyprocta sp. in a wild state on the Island of Dominica.

removing acouchy to Myoprocta, he left only agouti in Dasyprocta Illiger (1811). See 'Opinion 6' of International Commission on Zoological Nomenclature.

- 1912. J. A. Allen, remarking upon "variegata variegata" from Colombia, also concluded (pp. 79–95) that colombiana was at most subspecifically separable. He corrected the "basal length" measurement of the skull of colombiana.
- 1912. Osgood recorded (p. 55) rubrata flavescens Thomas from east and variegata colombiana Bangs from west of the entrance of Lake Maracaibo, Venezuela.
- 1913b. Goldman described (pp. 11–14) D. punctata dariensis, D. punctata yucatanica, and D. punctata chiapensis.

 He suggested the probable affinity of punctata dariensis to variegata and colombiana. Yucatanica, he said, marked the northern limit of the punctata group, and chiapensis represented "an arm of the general range of the D. punctata group... northward near the Pacific coast . . . to southern Chiapas, Mexico."
- 1913. Lönnberg recorded (p. 28) "variegata" from Gualea, western Ecuador. "1000 to 4000 feet."
- 1914. G. M. Allen described (pp. 69-71) Dasyprocta noblei, from Guadeloupe, comparing it with antillensis and albida.
- 1914b. Osgood referred (p. 167) some Peruvian agoutis to fuliginosa.
- J. A. Allen described (pp. 625–629) D. fuliginosa candelensis, D. variegata zamorae, and D. variegata chocoensis.
 He proposed (p. 626) as type locality of fuliginosa Villa de Borba (Rio Madeira). The fuliginosa and variegata groups which were very closely related, he suggested ought to be merged together. In this group he included aurea Cope.

Writing (p. 628) of the orange-rumped agoutis, he stated the earliest available names to be *croconota* for the Amazonian form and *prymnolopha* for the Guinea form. For *croconota* he proposed fixing the type locality as "mouth of the Rio Madeira." He reduced *lucifer* Thomas to a subspecies of *croconota*.

Without taking any definite stand as regards *lucifer* cayennae he advocated reduction of prymnolopha also to the rank of a subspecies of croconota.

As a postscript to the above he wrote (p. 633) that examination of aurea Cope convinced him that it was albinistic—"a yellow albino . . . not an albinism of D. azarae." He described as new (p. 634) D. variegata urucuma, previously thought by him referable to aurea Cope.

- Osgood described (pp. 192–194) D. nigriclunis, comparing 1915. it with prymnolopha.
- J. A. Allen placed (p. 568) leptura, hitherto considered a 1916d.synonym of acouchy (a Myoprocta) as a subspecies of D. aguti. (This must surely have been a slip. Allen must have been well aware that leptura was a Myoprocta.)
- Goldman described (pp. 113-115) Dasyprocta punctata nuchalis, allied to D. p. isthmica and D. p. dariensis, and D. punctata richmondi, allied to D. p. isthmica and D. p. yucatanica.

Commenting upon the possible type locality of punctata punctata, he proposed Realejo, on the west coast of Nicaragua. (See Alston, 1880.)

Thomas described (p. 259) D. aguti lunaris, comparing it with aguti and croconota. He doubted (p. 260) whether it came from the Moon Mountains, suggesting as an alternative Demarara.

Commenting upon J. A. Allen's paper of 1915, he opposed the inclusion of prymnolopha as a subspecies of croconota, giving the range of prymnolopha as Pará to Bahia.

He doubted whether nigriclunis Osgood (1915) was separable from prymnolopha.

Thomas, stating (p. 310) that the São Paulo and Paraguayan agutis were certainly distinct, tried to show that azarae Lichenstein and caudata Lund were synonymous, both names referring to the São Paulo species. For the Paraguayan form, hitherto termed azarae, he proposed the new name felicia.

He asserted that aurea Cope was barely distinguishable from azarae.

1917.

1917c.

1917d.

He described *D. azarae catrinae* and *D. variegata boliviae*, the latter intergrading at the northern edge of its range with *D. v. yungarum*.

He described *D. pandora*, "representative of *D. variegata*."

1918. Miller, writing (pp. 508-509) of the aguti of St. Kitts, showed that *D. aguti*, "the golden-rumped Brazilian agouti," had been introduced there at least as long ago as 1852.

1920. Goldman, reviewing the Panamanian agoutis (pp. 126–131) fixed the type of punctata isthmica as Colon, Panama (suggested by Alston, 1876).

1923a. Thomas described (pp. 341–342) D. aguti maraxica.

1926. International Commission on Zoological Nomenclature, in 'Opinion 91,' recommended (pp. 1–2) that Dasy-procta Illiger, 1811, with type Mus aguti Linnaeus, 1758, be placed on the "official list."

1927a. Thomas, in his list of lectotypes, showed (pp. 545–554) for the lectotype of *D. isthmica* Alston: female, B.M. 98.10.25.2 and lectoparatype male, B.M. 98.10.25.1, both from Panama.

1931. Goldman described (p. 481) D. punctata underwoodi.

REMARKS

The type of *Dasyprocta* is unquestionably equal to *Mus aguti* Linnaeus. The identity of that type, however, is doubtful. *Aguti* (Linnaeus) was based upon Brisson, 1756, who described from an actual specimen, and upon Marcgrave. It was thus composite. In this case the "reviser" was Thomas, 1898d, who restricted *aguti* (Linnaeus) to Marcgrave's animal from Brazil. This restriction, it seems to me (see 'Opinion 54,' Int. Comm. Zool. Nomencl.), is sufficient to eliminate Brisson's AGUTI, in spite of the fact that it was founded upon an actual specimen.

The true agoutis apparently fall into three main groups: Central America agoutis, extending from Mexico through Central America and the western margin of Colombia to southern Ecuador; dark gray agoutis, occupying the eastern Andean foothills and western Amazonia and reaching at least as far east as the Rio Madeira, Rio Negro, and the Mt. Duida region; and eastern or "red-rumped" agoutis, stretching from Paraguay through eastern Brazil, the coastal Guianas, lower Orinoco,

to Trinidad, and those other West Indian islands on which Dasyprocta, This arrangement is purely tentative. I have not atis indigenous. tempted to look into the anatomy of the animals to see whether the above grouping, based upon skins and a certain unity of geographical disposition, can be confirmed or not.

The mouth of the Madeira clearly marks one of the meeting places of the red-rumped groups and the dark gray group. Probably this line is carried southwest, more or less along the transition area between west Amazonian forest and Matto Grosso savanna land. At any rate, we have a light brown specimen from Buenavista, eastern Bolivia, which does not belong in the dark gray division. North of the Amazon the dark gray agoutis occupy the whole of the Rio Negro, Cassiquiare, and Alto Orinoco, and, although no agoutis whatever have been recorded in the Roraima area [Schomburgk reports only the Guiana form ("agouti") from the lowlands, I suspect that the dark gray group extends through the sandstone area, possibly being represented by cristata (a darkcolored form).

Concerning Catesby's "Java Hare" (leporinus Linnaeus), I cannot doubt, despite the artists' error in drawing a hairy instead of a naked tail, that a true Dasuprocta was the subject. In seeking its identification, the dark-colored and red-rumped agutis may be dismissed at once. leaving the Central American group and perhaps those of Paraguay and south Brazil as possibilities. The probabilities favor the first of these, and accordingly I have placed leporina at the end of that list of species. It must, however, in all likelihood be classed as unidentifiable.

GENOTYPE

Genus Dasyprocta Illiger

Type by subsequent designation (Thomas, 1903d)¹: Mus aguti Linnaeus² (restricted by Thomas 1898d to the Brazilian agouti of Marcgrave, 1648)

This is the earliest designation which I have discovered. Neither True (1885), Thomas (1896) nor Miller and Rehn (1902) designated a type of Dasyprocta. Nor, so far as I have discovered, did any early workers with the genus do so.

Removal into Myoprocta by Thomas (1903f) of acouchy, the second of the two species listed by Illiger under his Dasyprocta, constitutes, according to the International Commission on Zoological Nomenclature, 'Opinion 6,' fixation of aguti as type of Dasyprocta by subsequent designation. In this case Thomas actually did divide the genus Dasyprocta Illiger in the sense that he separated Myoprocta from all other species of Dasyprocta, thereby including the species aguti.

'Mus aguti Linnaeus (1766) was the basis of "Cavia aguti Lin. Gmel." (1789), which Illiger included with acouchy in his genus Dasyprocta.

LIST OF NAMED FORMS WITH TYPE LOCALITIES Dasyprocta Illiger

Eastern agoutis

noblei G. M. Allen antillensis Sclater albida Gray rubrata rubrata Thomas rubrata flavescens Thomas lucifer lucifer Thomas lucifer cayennae Thomas cayanus (Lacépède) prymnolopha Wagler aguti lunaris Thomas

croconota Wagler

aguti maraxica Thomas

aguti aguti (Linnaeus)

nigriclunis Osgood

aurea Cope azarae Lichtenstein azarae catrinae Thomas caudata Lund felicia Thomas

Central American agoutis punctata punctata Gray

punctata nuchalis Goldman punctata richmondi Goldman

punctata isthmica Alston punctata underwoodi Goldman

punctata ruatanica Thomas punctata dariensis Goldman

punctata yucatanica Goldman

punctata chiapensis Goldman

mexicana de Saussure

Guadeloupe, West Indies St. Lucia, West Indies St. Vincent, West Indies Savannah Grande, Trinidad Caripe, Cumana, Venezuela Caicara, Rio Orinoco, Venezuela Approvague, Cayenne Cayenne Guiana Moon Mountains, British Guiana? (or Demarara?) Amazon River, Brazil. (Fixed by Mouth of Rio Allen, 1915. Madeira) Marajo Island, mouth of Amazon River, Brazil Brazil (Marcgrave. Restricted by Thomas, 1898) São Marcello, upper Rio Preto, Bahia, Brazil Chapada, Matto Grosso, Brazil São Paulo, Brazil Santa Catherina, southern Brazil Rio das Velhas, Minas Geraes, Brazil Near Concepcion, Paraguay

"South America." (Fixed by Goldman, 1917. Realejo, west coast of Nicaragua)
Divala, Chiriqui, Panama
Escondido River, fifty miles above
Bluefields, Nicaragua.
Central America [Colon?]
San Geronimo, District of Pirris, western Costa Rica
Ruatan Island, Bay of Honduras
Head of Rio Limon, Mt. Pirri, eastern Panama. 5,200 feet

peche, Mexico Huehuetan, southern Chiapas, Mexico

Apazote (near Yoheltun), Cam-

Vera Cruz, Mexico

callida Bangs coibae Thomas pandora Thomas colombiana Bangs ? leporina¹ (Linnaeus)

Synonym: bicolor Boddaert

San Miguel Island, Panama Coiba Island, Panama Gorgona Island, off Colombia Santa Marta, Colombia Unknown

Dark gray agoutis

variegata variegata Tschudi

variegata zamorae J. A. Allen variegata boliviae Thomas variegata yungarum Thomas

variegata chocoensis J. A. Allen

variegata urucuma J. A. Allen

kalinowskii Thomas

fuliginosa fuliginosa Wagler

fuliginosa candelensis J. A. Allen

nigricans Wagner

nigra Gray? cristata (Desmarest)

On the edge of the upper forest and Ceja-region, up to 6,000 feet, eastern Peru. (Chanchamayo region) Zamora, eastern Ecuador. 2,000 feet Charuplaya, Bolivia

Chimosi, Yungas, Bolivia. 1,700 meters

Los Cisneros, Choco distr., Colombia. 600 feet

Urucum, near Curumba, Matto Grosso, Brazil

Idma, valley of Santa Ana, Cuzco, Peru. 4,600 feet

Near Amazon River, Brazil. (Fixed by Allen, 1915. Borba, Rio Madeira)

La Candela, Huila, Colombia. 6,500 feet

"From Borba, R. Madeira and from Cocuy, R. Negro," Brazil

South America Surinam

MYOPROCTA Thomas

TAXONOMIC HISTORY

1730. Des Marchais wrote (III, p. 303) "Il y a à Cayenne un autre animal qui l'on apelle Agouchi. C'est un espèce d'Agouti. Il est plus petit, . . . " (Assumed to be the origin of acouchy Erxleben, 1777.)

1741. Barrère listed (p. 153) "Cuniculus minor, caudatus, olivaceus. Akouchy" from Cayenne. No references were given.

1743. Catesby described (II, Suppl., p. 18) the Java Hare, an agouti, treated by Gray (1843b) as a Myoprocta. (Origin for leporinus Linnaeus and almost certainly a Dasyprocta.)

¹Unidentifiable. Treated by authors as a synonym of aguti aguti.

- 1767. Buffon wrote (XV, p. 158) of the "AKOUCHI" (=Agouti acuschy Lacépède), referring only to Barrère.

 1771. Pennant wrote (p. 246) of the "OLIVE CAVY," based upon
- Pennant wrote (p. 246) of the "olive cavy," based Barrère, Buffon, and Des Marchais.
- 1777. Erxleben, under the generic name *Cavia*, applied (p. 354) the specific name *acouchy* to the animal of Des Marchais, Barrère, Buffon, and Pennant.
- 1777. Zimmermann used (p. 508) the spelling "akouchi" for the same animal. (For preferential use of Erxleben's name see Allen, 1902a.)
- 1788. Gmelin, placing the species in his genus *Calva*, employed (Linnaeus 13th Ed., reformed, p. 121) the spelling "acuschy."
- 1789. Gmelin returned (Linnaeus, 13th Ed., reformed and further corrected, p. 121) "acuschy" from Calva to Cavia.
- 1792. Schreber wrote (p. 612) of "der Akuschi."
- 1792. Kerr listed (p. 217) "Cavia acuschy."
- Buffon ("Didot" Ed., VII, p. 337, XI, p. 216) wrote of l'acouchi [sic]. In Lacépède's "Tableaux" (XIV, p. 166 of "Didot" edition) acuschy is placed under the generic name Agouti. The numerals (VII, p. 337 and XI, p. 216) following the word acuschy referred to volumes and pages of the "Didot" edition. Volume VII consists essentially of a restatement of the article in Buffon (1767).
- 1811. Illiger included (p. 93) acuchi [sic] in his genus Dasyprocta.
- 1812. G. F. Cuvier used (p. 290) the generic name *Cloromis* for "les agoutis."
- 1816. Oken treated (p. 823) "acuchy" as an "Abart." of Dasyprocta "acuty."
- 1825. G. F. Cuvier again treated (p. 181) the agoutis under the name *Chloromys* [sic].
- 1831. Wagler, reviewing Dasyprocta, listed (pp. 617–622) Cavia acuschy Linnaeus and described as new D. exilis. "Acuschy Linnaeus" which appeared in the 13th Ed. reformed, 1788, was antedated by acouchy Erxleben, 1777.
- 1842. Gray described (p. 264) Dasyprocta albida. (See Waterhouse, 1848 and Sclater, 1874.)

1848.

1843b. Gray treated (p. 124) leporina (the "Java Hare" of Catesby, 1743) as equal to the "agouchy." This was denied by Waterhouse, 1848.

1844. Wagner, under *Dasyprocta*, listed (IV, pp. 48–49) *D. acuschy* Erxleben and described *D. leptura* (new species).

Waterhouse treated (pp. 391–397) acouchy, with leptura, exilis, and albida as close allies. He pointed out that Catesby's Java Hare (leporina), held by Gray in 1843b to be an acouchy, was in reality a true agouti. He considered leptura Wagner (1843) "a mere variety" and exilis Wagler (1831) "a young specimen" of the acouchy. Albida Gray was said to be about the size of the acouchy, but in very bad condition.

1874. Sclater (p. 665), opposing Waterhouse (1848), thought that albida was an albino form of his antillensis (and therefore a Dasyprocta).

1876. Alston, in his revision of *Dasyprocta*, doubted (p. 351) whether any representative of the acouchy occurred in the West Indies. He agreed (p. 352) with Waterhouse's disposition of *leptura* and *exilis* as synonyms of *acouchy*.

1881 (1880). Trouessart listed (p. 193) under Dasyprocta, acouchy, with subspecies leptura and exilis. Leporinus Linnaeus, the "Java Hare" (a true Dasyprocta?), was placed with doubt in the synonymy of acouchy.

J. A. Allen, writing of Zimmermann's 'Spec. Zoologiae Geographicae' (1777), showed (p. 15) that it was issued simultaneously with Erxleben's 'Systema Regni Animalis' (1777). He concluded (p. 18) that since Erxleben's names had long been current, there was no reason for giving Zimmermann preference over the former. Thus Cavia acouchy Erxleben (= Cavia akouchi Zimmermann) should be considered valid.

1903f. Thomas erected (p. 464) Myoprocta to contain Dasyprocta acouchy "Lin." [sic]. [Should be written Erxleben.]

¹Note: This article was published in the number of Annals and Magazine of Natural History for October, 1903, whereas the article following was only READ at the meeting of the Zoological Society on November 3, 1903.

1926c.

Thomas proposed (II, p. 241) Myoprocta for acouchy. 1903q. 1913. J. A. Allen described (pp. 476-477) Myoprocta milleri, which he compared with acouchy. Pocock described (p. 110) Myoprocta pratti, comparing it 1913. only with acouchy. J. A. Allen (p. 568) treated (apparently erroneously) 1916d.leptura, hitherto considered a synonym of acouchy, as a subspecies of aguti (a Dasyprocta). He recognized exilis Wagler, previously held to be synonymous with acouchy, and fixed as its type locality "near the mouth of the Rio Negro." He placed pratti Pocock in the synonymy of exilis. (See Thomas, 1917c.) Thomas, commenting upon Allen's paper of 1916, dis-1917c.agreed (p. 261) with the latter's inclusion of pratti in exilis. He wrote "how he can deduce that 'D. exilis belongs evidently to the olivaceous and not to the rufous section of the genus' from Wagler's words 'notaeo toto castaneo-fuscescente' I am at a loss to understand." He reiterated that exilis was equal to acouchy. 1920f. Thomas, adhering (pp. 278–280) to his opinion of 1917c concerning the distinctness of pratti and exilis, described Myoprocta pratti limanus from near the mouth of the Rio Negro. He listed three subspecies of the "greenish acouchy." M. pratti pratti [exact type locality now stated (p. 279)]; M. pratti milleri (making milleri a subspecies of pratti); and M. pratti limanus. Lönnberg described (pp. 41-43) Myoprocta exilis parva, 1921a. which he compared with milleri, limanus, and pratti. 1922. Pocock discussed (p. 424) the relationship of the agoutis and pacas. Lönnberg, after discussing (p. 273) the "reddish" and 1925. "greenish" colored Myoprocta, described (p. 274) M. pratti archidonae.

Thomas, writing (pp. 637–639) upon "The acouchis of the *Myoprocta pratti* group," described *M. pratti cay*-

manum and M. p. puralis.

He averred (p. 639) that in spite of "corpore olivaceo" in Erxleben's definition of acouchy, the species referred to was "the reddish acouchy of Cayenne."

GENOTYPE

Genus Myoprocta Thomas

Type by original designation¹: Cavia acouchy Erxleben, 1777. (="Cavia acuchi Lin. Gmel." of Illiger

LIST OF NAMED FORMS WITH TYPE LOCALITIES

Myoprocta Thomas

acouchy (Erxleben) exilis exilis (Wagler) exilis parva Lönnberg leptura (Wagner) milleri Allen

pratti pratti Pocock

pratti limanus Thomas

pratti archidonae Lönnberg

pratti caymanum Thomas

pratti puralis Thomas

1648.

Cayenne

Amazon River, Brazil

Rio Curaray, Prov. Oriente, Ecuador

Rio Negro, Brazil

La Murelia, Caqueta, Colombia.

600 feet

"Amazons," Peru (Pongo de Rentema, Rio Marañón, 78° 20' W.
-Thomas, 1920)

intuba abana Manána

Acajutuba, above Manáos, near the mouth of the Rio Negro, Brazil

Archidona, Prov. Oriente, Ecuador.

2,400 feet

Canabouca, Parana do Jacaré, south side of river Solimões, about 120 kilometers southwest of

Manáos, Brazil

Ayapua, angle between rivers Purus and Solimões, about 300 kilometers southwest of Manáos, Brazil

CAVIA Pallas

TAXONOMIC HISTORY

1547. Oviedo (see Oviedo, 1851) described a small West Indian mammal named cori. See Miller, 1929b, 1930.

Marcgrave wrote of (p. 223) APEREA BRASILIENSIBUS and (p. 224) CAVIA COBAYA with varicolored fur (presumably the domestic guinea pig). Although Erxleben (1777) listed under aperea other citations besides Marcgrave, all hark back to Marcgrave as the original. Aperea Pallas, 1766, being unaccompanied by description is a nomen nudum.

¹On basis of precedent set in 'Opinion 6' (International Commission on Zoological Nomenclature).

1747.	Linnaeus first mentioned (p. 224) Mus cobaya (the domestic guinea pig).
1751.	Klein used (p. 49) Cavia in a generic sense, listing after it cobaya, aguti, paca, aperea, surinamensis, bahamensis, javensis, and hudsonis, all pre-Linnaean names and invalid.
1754.	Linnaeus briefly described (p. 9) Mus brasiliensis ("pre- Linnaean"), which Trouessart (1898, p. 637) placed in the synonymy of Cavia porcellus. Republication of Cavia brasiliensis by Trouessart (1898) does not validate the name. ('Opinion 5,' International Com- mission on Zoological Nomenclature.)
1758.	Linnaeus (10th Ed., p. 59) described <i>Mus porcellus</i> . This name was based upon the domestic guinea pig mentioned by him in 1747.
1766.	Linnaeus (12th Ed., p. 79) listed Mus porcellus.
1766.	Pallas discussed (pp. 30-33) Cavia (sensu lato) in general,
	listing (p. 31) cobaya, acuti, aperea, capybara, and paca. Cobaya Pallas was founded upon CAVIA COBAYA Marcgrave, 1648.
1767.	Linnaeus (13th Ed., p. 79) wrote of Mus porcellus.
1767.	Buffon wrote (XV, p. 160) of l'Aperea (= Agouti aperea Lacépède). See Buffon, "Didot" edition, 1802. Buffon's description was based upon the writings of Marcgrave, Piso, and Oviedo.
1777.	Erxleben wrote of (p. 348) Cavia aperea, Cavia porcellus, C. capensis (a Procavia), C. aguti (a Dasyprocta), etc.
1779.	Blumenbach listed (p. 91) Cavia porcellus.
1782.	Molina described (p. 306) Lepus minimus (probably a Galea).
1785.	Boddaert wrote (pp. 102-104) of Cavia aperea, Cavia cobaya, and Cavia bicolor (=leporinus Linnaeus, a Dasyprocta).
1788.	Gmelin, in Linnaeus (13th Ed., reformed, p. 122) placed aperea and cobaya in Calva.
1789.	Gmelin, in Linnaeus (13th Ed. reformed and further cor-

rected, p. 122) placed aperea and cobaya under Cavia

Schreber wrote (pp. 616-617) of Cavia aperea and Cavia cobaya, and (p. 905) of Lepus minimus (a Galea?).

instead of under Calva (see 1788).

1792.1

¹For this date see Proc. Zool. Soc. London, 1891, p. 587.

1797 (1795). Link wrote (p. 73) of Cavia.

1799. Lacépède employed (p. 9) for the "cabiai" (capybara) the technical name *Cavia cobaya*.

1801. Azara described (II, pp. 65–72) l'APEREA.

Buffon ("Didot" Ed., VII, p. 340). Under l'APEREA were republished the descriptions of Buffon, 1767.

This animal was named by Lacépède (in "Didot" Ed., XIV, p. 166) Agouti aperea. The full reference given was: "4. l'aperea, Agouti aperea. VII, 340."

1812. G. F. Cuvier employed (p. 292) Anoema as a generic name in place of Cavia.

1817. Rafinesque wrote of (pp. 361–363) Cavia cristata Geoffroy (a Dasyprocta).

1820. Geoffroy St. Hilaire and Cuvier proposed (text of Pl. xxII) the name Anoema hilaria, nomen nudum for a form of Cavia allied to aperea.

1820. Wied described (p. 43) Cavia rupestris (a Kerodon).

1822a. Desmarest wrote (p. 356) of *Cavia cobaya*, making all other specific names of *Cavia* synonyms.

1823. Lichtenstein listed (p. 3) Cavia azarae and Cavia obscura, the latter questioningly founded upon Marcgrave and Gmelin, and clearly a nomen nudum. (See Wagner, 1843.)

1825. G. F. Cuvier described (p. 151) Anoema moco (=rupestris, a Kerodon).

1826. Geoffroy St. Hilaire described (p. 120) Cavia sciurus (=rupestris, a Kerodon).

1830. Rengger discussed (pp. 274–278) "Cavia aperea."

1831. Wagler described (p. 512) Cavia fulgida and Cavia spixii (a Galea).

1833. Geoffroy St. Hilaire and d'Orbigny described (Pl. XII)

Cavia australis (a Caviella).

1835a. Bennett described (pp. 189–191) Cavia cutleri. (See especially Thomas, 1917.)

1835. Brandt described (pp. 436–442) Cavia leucopyga and Cavia flavidens (by Thomas, 1916, considered a Galea).

1839. Waterhouse, under "Cavia cobaia," quoted (p. 89)

Darwin's notes on the Cavia of Maldonado.

1841. Lund, discussing the cavies (pp. 282–286) described (pp. 283–284) Cavia rufescens (by Trouessart, 1898, made a

subspecies of porcellus), and very briefly (pp. 285–286) saxatilis (held by Trouessart, 1898, to be a subspecies of Galea boliviensis), which he stated was very distinct from rupestris (a Kerodon). He also mentioned (p. 286) a fossil form bilobidens.

- Wagner, writing (IV, pp. 57-68) of the genus Cavia, listed aperea (with cobaya Desmarest, part, in its synonymy); fulgida Wagler, a redescription of the type (with rufescens Lund in its synonymy); australis (a Caviella); flavidens; spixii (a Galea); leucopyga (with the nomen nudum obscura Lichtenstein, 1823, in synonymy); nigricans (described as new); cutleri; and cobaya (with porcellus Erxleben in synonymy).
- 1845. Tschudi wrote of (pp. 194–196) "Cavia cutleri," renamed tschudii by Fitzinger, 1867.
- 1847. Gay remarked (p. 128) that minimus (Molina) was a Cavia. He placed it in the synonymy of "C. aperea." It was probably a Galea.
- 1847. D'Orbigny and Gervais wrote (p. 26) of Cavia australis (a Caviella) and "Cavia flavidens" (from Bolivia).
- 1848. Waterhouse reviewed the cavies (pp. 162–200). He used the subgenera Cerodon [sic] and Cavia. In the former, besides rupestris, he included flavidens+nigricans+obscurus; spixii (a Galea); boliviensis, with musteloides in synonymy (a Galea); and australis (a Caviella). In subgenus Cavia he placed aperea+cobaya+porcellus; cutleri; fulgida+rufescens; leucopyga; cutleri of Tschudi (=tschudii Fitzinger); saxatilis.
- 1854. Burmeister, discussing the cavies (pp. 242–251) dealt with "aperea," "fulgida," "leucopyga," "spixii" (a Galea), "flavidens," and rupestris (a Kerodon).
- 1861. Burmeister described (p. 425) Cavia leucoblephara (a Galea).
- 1867. Fitzinger renamed (p. 154) "Cavia cutleri" of Tschudi Cavia tschudii.
- 1872b. Hensel discussed (pp. 59–61) "Cavia aperea" and "Cavia cobaya."
- 1879. Burmeister divided (pp. 268–274) Cavia into subgenera Cavia and Anoema. In the first he listed only leu-

1898.

copyga; in the second leucoblephara (a Galea) and australis (a Caviella).

1881 (1880). Trouessart divided (pp. 194–196) Cavia into subgenera Cavia, Galea, and Kerodon. The second comprised Galea and Caviella of the present paper.

Cavia (Cavia) included aperea (Marcgr., Erxleb.)," fulgida, and leucopyga. As forms of aperea he placed cobaya and cutleri. Tschudii Fitzinger (1867) was made a subspecies of leucopyga and aperea of Rengger and azarae Lichtenstein synonyms of the same.

1883. Pelzeln listed (p. 79) the cavies collected by Natterer.

1888. Winge wrote (pp. 66-69) of the cavies. Species discussed were "boliviensis," "flavidens," vates (a new fossil form), and "porcellus."

1889. Nehring discussed (pp. 1–4) the origin of the guinea pig.

1891. Nehring again discussed (pp. 65–77) the origin of guinea pigs.

1895. Merriam pointed out (p. 376) that Cavia Pallas, 1766, formed part of the composite genus Cuniculus Brisson.

1898b. Thomas described (pp. 282–283) Cavia niata (a Monticavia).

1898c. Thomas described (p. 284) Cavia maenas (a Caviella).

Trouessart (pp. 637-640), suppressing Galea, now divided Cavia into subgenera Cavia and Kerodon. In the latter he included true Kerodon rupestris and also modern Galea and Caviella.

"Aperea Gmelin" was placed in the synonymy of porcellus. No mention was made of aperea Erxleben. Rufescens appeared as a subspecies of porcellus. Cutleri was given full specific rank, with cobaya of Schreber and other authors (founded upon Marcgrave's work). Other species listed were fulgida, leucopyga, and tschudii. As before, azarae and aperea Rengger were listed synonyms of leucopyga.

No true Cavia was included under "Kerodon."

1901c. Thomas described (p. 195) Cavia boliviensis littoralis (a Galea).

1901d. Thomas described (pp. 152–153) Cavia porcellus guianae.

1901f. Thomas, under Cavia aperea, discussed (pp. 532–534) the cavies of Brazil and Paraguay. He concluded that aperea should be applied to the large species of Marcgrave and Erxleben, and not to the small "Prea" of authors, which is rufescens Lund (fulgida Wagler being a synonym). Leucopyga Brandt was held to be a synonym of the large aperea, and the "Aperea" of Azara was also held to be closely allied.

He restricted *porcellus* Linnaeus to the domestic guinea pig.

- 1901g. Thomas described (pp. 538-539) Cavia rufescens pamparum (=the "quiso" of Paraguay).
- 1904. Palmer designated (p. 165) cobaya Pallas type of Cavia.
- 1905. Troussart embodied (pp. 525–526) alterations suggested by recent authors. The subgeneric arrangement of 1898 was retained.
- 1910a. Thomas wrote (pp. 239–247) of Cavia rufescens pamparum.
- 1911. J. A. Allen described (pp. 239–273) Cavia porcellus venezuelae.
- 1913. Osgood described (p. 98) Cavia atahualpue.
- 1914. Ribeiro mentioned (pp. 1–49) "Cavia leucopyga."
- 1915. Osgood erected (p. 194) Caviella new subgenus with type Cavia australis Geoffroy and d'Orbigny.

He set forth a classification of the genera and subgenera of the Cavies: *Kerodon* and *Cavia* were treated as full genera, the latter being divided into subgenera *Cavia*, *Caviella*, and *Galea*.

He described (p. 196) Cavia (Galea) wellsi.

- 1916b. J. A. Allen described (pp. 83–87) Cavia (Cavia) anolaimae.

 1916. Osgood wrote (pp. 199–216) of Cavia mustelaides halimensis.
 - Osgood wrote (pp. 199–216) of Cavia musteloides boliviensis (a Galea), suggesting that musteloides and boliviensis might be synonymous.
- 1916d. Thomas discussed (pp. 301–303) the classification of the cavies. Giving a key to them, he made full genera of Cavia, Caviella, Galea, and Kerodon, and erected Monticavia, a new genus with type Cavia niata.
- 1917a. Thomas reviewed (pp. 152–160) the species of the genus Cavia. With fulgida he synonymized rufescens, nigricans, and obscurus (nomen nudum, renamed nigricans by Wagner, 1843). He raised from sub-

species to full species: guianae and pamparum. And he described as new rosida and nana. Azarae Wagner, 1843, was made a subspecies of aperea.¹

He considered *cutleri* Bennett to be a domestic guinea pig (*porcellus*).

In tschudii he recognized the subspecies tschudii tschudii and tschudii atahualpae and described two other subspecies, tschudii umbrata and tschudii pallidior (renamed by Ogood, 1919, tschudii arequipae).

1919. Osgood suggested (p. 34) that in the event of nonrecognition of *Monticavia* as a full genus, *Cavia tschudii* pallidior was preoccupied by *Kerodon niata pallidior* Thomas, 1902d, and proposed instead *Cavia tschudii*

arequipae.

1926b. Thomas described (pp. 607–608) Cavia tschudii sodalis. 1926d. Thomas described (pp. 166–167) Cavia tschudii stolida.

1927e. Thomas described (pp. 604–605) Cavia tschudii festina.

1929. Sanborn recorded (pp. 147-165) Cavia rufescens pamparum.

1929b. Miller wrote (pp. 2, 11, 14) of the now extinct *Cavia* in the West Indies, relating it to the "cori" of Oviedo (1547).

1930. Miller again discussed (p. 8) the West Indian Cavia.

REMARKS

Certain Brazilian species of *Cavia*, usually due to imperfect descriptions and lack of type specimens, are only doubtfully identifiable. Besides *Cavia*, two other modern genera of cavies are certainly present in that country: viz., *Kerodon* and *Galea*. As shown below, the questionable species of *Cavia* have been variously synonymized with different species of the above genera by Thomas, Osgood, Trouessart, and others.

Aperea Erxleben, a large-sized animal (Thomas), was early synony-mized by authors with porcellus. Hensel (1872b), however, distinguished the two. Trouessart (1898) again synonymized them. Thomas (1901f) proposed that porcellus Linnaeus, 1758 (=cobaya Linnaeus, 1747, Boddaert, 1785) be restricted to the domestic guinea pig, aperea Erxleben being used for a large form from Brazil and "rufescens" (fulgida) for a

¹Note: Azarae is not "the Paraguaya cavy," as stated by Thomas (p. 154), but came from São Paulo, Brazil (Lichtenstein, 1823).

smaller species. Trouessart (1905) listed aperea, a full species. Thomas (1917a) again showed aperea to be "largest of the genus" and indicated its range to be eastern Brazil.

Leucopyga Brandt, of which two specimens were brought from "Brazil" by Langsdorff, was stated by its describer to exceed "aperea" and to be equal in size to rupestris. It was compared throughout with "aperea." The general practice has been for authors (Waterhouse, Burmeister, etc.) who synonymized aperea with porcellus to employ leucopyga for the large Brazilian wild cavy. Trouessart (1898) did likewise.

Thomas (1901f) showed that *leucopyga* was a synonym of *aperea* and that both applied to the large cavy of eastern Brazil. Following Thomas, Trouessart (1905) revised his catalogue. Thomas (1917a) again treated *leucopyga* as a synonym of *aperea* Erxleben.

Azarae Lichtenstein (1823), accompanied by a brief description, was definitely stated to have been brought from the Province of São Paulo. Wagner (1843, footnote) looked upon it as a variety of leucopyga (now held to be equal to aperea Erxleben). He cited the second list of duplicates published by Lichtenstein (1835), not the first list (1823). However, this second list, which I have not seen, can in no way alter the validity of the original description. Waterhouse (1848) made no comment on azarae. Burmeister (1854 and 1879) and Trouessart (1898) follow Wagner's views.

Thomas (1901f) erroneously assumed that azarae, whose author he designated as Wagner, was based on the APEREA of Azara and came from Paraguay. In consequence, Trouessart (1905) listed "azarae Wagner." Osgood (1915) made azarae Wagner a subspecies of aperea Erxleben. Finally, Thomas (1917a), evidently still with the same views as in 1901f, wrote Cavia aperea azarae Wagner.

It seems then that azarae Lichtenstein was founded upon the actual specimen described in 1823, which came from the province of São Paulo, and the "azarae" used by Osgood and Thomas for Paraguayan animals is preoccupied. True azarae, then, is probably a synonym of aperea aperea, whereas the Paraguayan form, if separable, will require a new name.

Fulgida Wagler and rufescens Lund. The former was from the "Amazonian" journey of Spix; the latter was collected at Lagoa Santa. Lund described rufescens in great detail (p. 284).

Wagner (1843) was the first author to synonymize these two species, his opinion being confirmed by Waterhouse (1848). But Winge (1888).

giving no reason, stated that "Cavia rufescens Lund = C. porcellus Lin-This latter opinion was acceded to by Trouessart (1898) naeus." who made rufescens a subspecies of porcellus.

Thomas (1901f) disagreed with Winge and inclined to follow Wagner and Waterhouse. He pointed out that Spix, besides traveling up the Amazon, also visited the region inhabited by rufescens. Later (1917a) he actually made rufescens a synonym of fulgida and stated that "Amazonian" was erroneous. The range suggested by him for the species extends from Santa Catherina to Minas Geraes.

GENOTYPE

Cavia Pallas, 1766

Type by subsequent designation (Palmer, 1904): Cavia cobaya Pallas, 1766 (= Mus porcellus Linnaeus, 1758)

The name porcellus, indicated by Thomas (1916d) as type of Cavia, is "excluded from consideration" (Int. Comm. Zool. Nomencl., Rules, Art. 30, Rule, e, α), because it was "not included under the generic name at the time of its original publication"

LIST OF NAMED FORMS WITH TYPE LOCALITIES

Cavia Pallas

Brazil and Paraguay region

aperea aperea Erxleben aperea azarae Lichtenstein fulgida Wagler

?Synonyms: rufescens Lund nigricans Wagner

rosida Thomas

Brazil

Ypanema, Prov. São Paulo, Brazil Amazonia

Lagoa Santa

Roça Nova, Prov. Paraná, Brazil. 1,000 meters

Guiana region

"porcellus" quianae Thomas "porcellus" venezuelae Allen

Kanuku Mts., British Guiana?

Altagracia, Immataca district, Venezuela

North pampas region

rufescens pamparum Thomas

North Andean region

anolaimae Allen

Goya, Corrientes, Argentina

Anolaima, on a branch of the R. Bogotá, west of Bogotá, Colombia

For map showing Spix's travels in Brazil, see Amaral, A. de 1931, Bol. Mus. Nac., VII, 3, p. 196.

South Andean region

atahualpae Osgood tschudii tschudii Fitzinger

tschudii arequipae Osgood (new name for tschudii pallidior) tschudii sodalis Thomas

tstructi socialis I nomas

tschudii stolida Thomas

tschudii festina Thomas tschudii umbrata Thomas nana Thomas

Domestic

porcellus Linnaeus Synonyms: cobaya Pallas cutleri Bennett Cajamarca, Peru. 9,100 feet City of Yca, 70 miles east of Pisco, western Peru

Arequipa, Peru

Norco, 20 kilometers northwest of Vipos, Prov. Tucuman, Argentina Rio Utcubamba, 15 miles south of Chachapoyas, Peru

Huariaca, Junin, Peru. 9,000 feet Incapirca, Zezioro, central Peru Chulumani, Yungas, Bolivia. 2,000

meters

"Brazil"

"Chile," Thomas thought it a domestic guinea pig (1917)

GALEA Meyen

TAXONOMIC HISTORY

1782. Molina described (p. 306) the Cuy, Lepus minimus. See Schreber, 1792, Molina (Riley's translation into English, 1808) and Gay, 1847. The cuy was apparently a cavy, either of the genus Cavia or Galea, and more probably the latter.

1792. Schreber wrote (p. 905) of Lepus minimus (a Galea?).

1831. Wagler described (p. 512) Cavia spixii.

1833. Meyen described (p. 597) Galea musteloides.

1835. Wiegmann remarked (II, pp. 213–215) on Galea.

1835c. Bennett commented (p. 494) upon Galea Meyen.

1841. Lund described very briefly (pp. 285–286) Cavia saxatilis.

1844. Wagner listed (IV, p. 62) spixii.

1847. Gay remarked (p. 128) upon minimus (Molina).

1848. Waterhouse described (II, p. 175) Cavia boliviensis (musteloides in synonymy). He discussed spixii (p. 173); musteloides (p. 179); and saxatilis Lund (p. 199). The last he held to be equal to his "Cavia A. 1," which combined flavidens nigricans and obscurus.

1861. Burmeister described (II, p. 425) Cavia leucoblephara.

1929.

1879. Burmeister remarked further (p. 271) on *leucoblephara*. 1881 (1880). Trouessart placed (p. 195) under Cavia (Galea): boliviensis with subspecies musteloides; australis (a Caviella); flavidens, with varieties nigricans, obscurus, and saxatilis; spixii; and leucoblephara. Troughant listed (pp. 638-640) the several species of 1898. Galea, as well as Caviella and true Kerodon under his subgenus "Cerodon." Thomas described (p. 195) boliviensis littoralis. 1901c.1905. Troughant included (pp. 526-527) Galea, Caviella, Monticavia, and true Kerodon under his subgenus "Cerodon." Thomas described (pp. 606-608) Kerodon palustris, com-1911a.paring it with spixi [sic] and boliviensis. 1911b. Thomas described (pp. 250-256) Kerodon auceps and discussed the relationship of boliviensis with musteloides. Osgood, in his classification of the cavies, made (p. 195) 1915. Galea a subgenus of Cavia. He described (p. 196) Cavia (Galea) wellsi. Species also placed by him in this subgenus were: musteloides, boliviensis, b. leucoblephara Burmeister, b. littoralis, auceps, spixi, and palustris. He made no allusion to flavidens and leucopyga Brandt (see Thomas, 1916d). J. A. Allen alluded (p. 567) to Cavia (Galea) boliviensis. 1916d.1916. Osgood wrote (pp. 199-216) of Cavia musteloides bolivien-He suggested that musteloides and boliviensis might even be synonyms. 1916d.Thomas, in his discussion of the classifications of the cavies, made (pp. 301-303) Galea a full genus. To the species listed by Osgood (1915) he added flavidens Brandt. 1919b.Thomas described (pp. 211-212) Galea negrensis. 1919c.Thomas wrote (pp. 489-500) of Galea species. 1919d.Thomas described (pp. 134–135) Galea comes. 1921i. Thomas described (pp. 623–624) Galea boliviensis demissa. 1926a.Thomas reduced (p. 327) both boliviensis and comes to

synonyms of Galea musteloides.

Thomas wrote (pp. 34–45) of *Galea littoralis*, remarking that *negrensis* was indistinguishable from it.

REMARKS

Galea seems to fall into two geographical groups, musteloides ranging from the Bolivian highlands southeast across Argentina, and spixii, palustris, wellsi, and their allies occupying eastern Brazil. It seems not improbable that these latter cavies may belong in a single species, as has been shown for the subspecies of musteloides.

Spixii Wagler (1831) was described as from "Amazon River." Wagner (1843) considered it a good species. Waterhouse extended the range of "spixii" to Rio de Janeiro. Trouessart (1898) followed earlier authors, but later (1905) listed Cerodon [sic] spixi [sic]. Osgood (1915) placed spixi [sic] in the subgenus Galea. He identified as spixi specimens from Ceará and advocated disregard of Wagler's statement of locality and selection of Campo Geraes de San Felipe, just east of Januaria, Bahia. Thomas (1916d); making Galea a full genus, included spixi [sic] in it.

Saxatilis Lund (1841) which was most inadequately described, remained unnoticed by Wagner (1843). Waterhouse (1848) suspected it to be the same as his "Cavia A. 1" or "Rufous-brown Cavy" (=Galea flavidens). Winge (1888, p. 143) stated arbitrarily that saxatilis equaled boliviensis (=Galea musteloides), consequently Trouessart (1898 and 1905) made it a subspecies of boliviensis. Osgood (1915) and Thomas (1916d) ignored the name.

What saxatilis from Lagoa Santa represented may never be determined. Lund's comparative measurements and fragmentary description show that it was quite a small cavy. Whether it was a Cavia or a Galea is open to question. If the former, it may have been fulgida; if the latter, either spixii or wellsi. Mainly on the basis of Winge's statement, the likelihood is greater that it was a Galea, but not boliviensis. Between spixii and wellsi, I would perhaps assign it to spixii.

Flavidens Brandt and nigricans Wagner. The former, collected in "Brasilia" by Langsdorff, slightly exceeded "aperea," but was smaller than Brandt's leucopyga (now held to be equal to aperea Erxleben). Wagner (1843) recognized it as a distinct form and then described nigricans, based upon a specimen in the Frankfurt museum labeled "obscurus." Waterhouse (1848) combined the above two under his "Cavia A. 1" or "Rufous-brown Cavy." Burmeister (1854) concurred with Waterhouse. Winge (1888) recognized "flavidens Brandt." Trouessart (1898 and 1905) listed flavidens with nigricans in its synonymy under "Kerodon." Osgood (1915) in his arrangement of the cavies omitted all mention of flavidens, but Thomas (1916d) placed it in the full genus Galea.

GENOTYPE

Galea Meyen

Type by monotypy: Galea musteloides Meyen, 1833

LIST OF NAMED FORMS WITH TYPE LOCALITIES

Galea Meyen

Bolivia, Chile, Argentina

musteloides musteloides Meyen

Synonyms: boliviensis boliviensis (Waterhouse)

comes Thomas

musteloides auceps (Thomas)

musteloides demissa Thomas

musteloides leucoblephara (Burmeister)

musteloides littoralis (Thomas) Synonym: negrensis Thomas

minimus (Molina)1

Brazil

1835a.

spixii (Wagler)

?Synonym: saxatilis Lund

palustris (Thomas)
flavidens Brandt

?Synonym: nigricans Wagner

wellsi Osgood

Pass of Tacara and Tajori, western

Andes, northwest Bolivia

Highlands between Cochabamba and

La Paz, Bolivia

Maimara, Jujuy, Argentina, 2,230

meters

Guarina, southeast end of Lake

Titicaca, Bolivia

San Antonio, Parapiti, lowlands of southeastern Bolivia. 600 meters

Mendoza to Tucuman, Argentina

Bahia Blanca, Argentina

Pilcañeu, Upper Rio Negro, Argen-

tina. 1,400 meters

Chile

Brazil

Lagoa Santa

Cameta, lower Rio Tocantins, Brazil

Brazil (sent by Langsdorff)

Brazil

São Marcello, junction Rio Preto and

Rio Sapaō, Bahia, Brazil

CAVIELLA Osgood

TAXONOMIC HISTORY

1520. Pigafetta, reporting on Magellan's voyage, mentioned "rabbits (conigli) smaller than ours." (See translation by J. A. Robertson, 1906, I, p. 63.) It seems likely that these were Caviella rather than Dolichotis.

1833. Geoffroy St. Hilaire and d'Orbigny described (4 pages of

text, and Pl. XII) Cavia australis.

Bennett described (pp. 189–191) Kerodon kingii, a synonym of australis (?).

¹Probably Galea musteloides subspecies.

1844. Wagner listed (IV, p. 60) at	australis.
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1847. D'Orbigny and Gervais wrote (p. 26) of Cavia australis.

1848. Waterhouse wrote (pp. 180–183) of Cavia australis.

1855. Baird recorded (pp. 153–171) Cavia australis from Chile (lat. 33°S.).

1879. Burmeister wrote (pp. 272–273) of australis.

1881 (1880). Trouessart placed (p. 195) australis, with subspecies kingii, under Cavia (Galea).

1894. Matschie commented (pp. 57–64) on Cavia australis.

1898. Trouessart listed (p. 639) australis, with synonym kingii, under his subgenus "Cerodon." The scope of Kerodon in 1880 had been limited to rupestris.

1898c. Thomas described (p. 284) Cavia maenas.

1905. Trouessart listed (p. 527) moenas [sic] and australis under his subgenus "Cerodon."

1915. Osgood erected (p. 194) Caviella new subgenus of Cavia with type Cavia australis Geoffroy and d'Orbigny.

1916d. Thomas, in his classification of the cavies (pp. 301–303) made *Caviella* a full genus. He listed only *australis* and *maenas*.

1921d. Thomas reviewed (pp. 445–448) the genus Caviella, treating all forms as subspecies of a single species. He reviewed C. australis australis and C. australis maenas, and described C. australis nigriana, C. australis joannia, and C. australis salinia.

1929. Thomas wrote (pp. 35-45) of Caviella australis, stating that the original australis came from lower Rio Negro, and not from far southern Patagonia. In consequence he synonymized australis nigriana with australis australis and revived australis kingii for the southern form, if distinct.

GENOTYPE

Caviella Osgood

Type by original designation: Cavia australis Geoffroy and d'Orbigny

LIST OF NAMED FORMS WITH TYPE LOCALITIES

Caviella Osgood

australis australis (Geoffroy and d'Orbigny)

Rio Negro and southward, Patagonia (Thomas, 1929, states "lower Rio Negro")

Synonym (Thomas, 1929):

australis nigriana Thomas Nequen, Rio Negro, Argentina

australis kingii Bennett australis joannia Thomas australis maenas Thomas Port Desire, Patagonia Cañada Honda, San Juan, Argentina Chilecito, Rioja, Argentina. 1,200 meters

MONTICAVIA Thomas

TAXONOMIC HISTORY

1898b.	Thomas described (pp. 282–283) Cavia niata.
1902d.	Thomas described (pp. 222-230) Kerodon niata pallidior.
1905.	Trouessart listed (p. 527) niata and niata pallidior under
	his subgenus "Cerodon."
1915.	Osgood, in his classification (p. 195), placed niata and
	$niata \ pallidior \ in \ Caviella.$
1916d.	Thomas, in his classification of the cavies, erected
	(p. 303) Monticavia with genotype Cavia niata. He
	included with it niata pallidior.
1919.	Osgood clearly doubted (pp. 33-36) the validity of Monti-
	cavia as a full genus (see under Cavia, 1919).

GENOTYPE

Monticavia Thomas

Type by original designation: Cavia niata Thomas

LIST OF NAMED FORMS WITH TYPE LOCALITIES

Monticavia Thomas

niata niata (Thomas) niata pallidior (Thomas) Mount Sajama, Bolivia. 4,000 meters Pampa Aullaga, west of Lake Poopo, Bolivia. 3.700 meters

NANOCAVIA Thomas

TAXONOMIC HISTORY

1925a. Thomas erected (p. 419) Nanocavia to contain the new species Nanocavia shiptoni.

SPECIES WITH TYPE LOCALITY

Nanocavia Thomas

shiptoni Thomas Laguna Blanca, Catamarca, Argentina. 3,400 feet

1916d.

KERODON Cuvier

TAXONOMIC HISTORY

1820.	Wied described (VI, p. 43) as Cavia rupestris, the Moco
	of eastern Brazil.
1825.	G. F. Cuvier erected (p. 151) the generic name Kerodon to contain the Mocco, and thus rupestris.
1826.	Geoffroy St. Hilaire, under article 'Kerodon,' described
1020.	(p. 120) "Le Moco, Kerodon sciureus," a synonym of rupestris.
1835a.	Bennett described (pp. 189–191) Kerodon kingii (a Caviella).
1839.	Waterhouse, under "Kerodon kingii," cited (pp. 88–89)
1000.	Darwin's description of Caviella australis.
1841.	Lund discussed (pp. 285–286) Kerodon rupestris.
1844.	Wagner listed (IV, p. 60) australis (a Caviella) under Cavia.
1848.	Waterhouse discussed (pp. 163–168) Cerodon [sic] rupestris.
	Trouessart, under Cavia (Kerodon), included (p. 196) only
1881 (1880).	rupestris, with moco and sciureus shown as synonyms.
1000	• •
1898.	Troughant, changing his arrangement of 1881, united
	(pp. 638–640) the species of Caviella, Galea, and true
	Kerodon under his subgenus Cerodon (spelling
1000	emended, 1848, by Waterhouse).
1902c.	Thomas used (pp. 125–143) Kerodon for boliviensis (a Galea).
1902d.	Thomas employed (pp. 222-230) Kerodon again for boli-
	viensis and for niata pallidior (a Monticavia).
1905.	J. A. Allen employed (p. 25) Kerodon for australis (a
	Caviella).
1905.	Trouessart continued (pp. 526-527) his generic arrange-
	ment of 1898, including also niata (a Monticavia)
	in his subgenus "Cerodon."
1910b.	Thomas used (pp. 500–503) Kerodon for spixii (a Galea).
1911a.	Thomas named (pp. 606–608) palustris (a Galea) under
	the generic term $Kerodon$.
1911b.	Thomas used (pp. 250–256) Kerodon for boliviensis and
10110.	for auceps.
1915.	Osgood, in his classification of the cavies (pp. 194-195),
	restricted Kerodon to the single species rupestris
e 1	Wied.
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Thomas, in his discussion of the cavies, accepted (pp. 301-303) Osgood's restriction of Kerodon to rupestris.

1756.

1762.

REMARKS

The genus *Kerodon* Cuvier, originally proposed to contain *rupestris*, was expanded by various authors to embrace also species of *Galea* and *Caviella*. Osgood's restriction (1915) and Thomas's acceptance of the same (1916d) indicate that the genus is monotypic.

GENOTYPE

Kerodon Cuvier, 1825

Type by monotypy: Cavia rupestris
Wied

LIST OF NAMED FORMS WITH TYPE LOCALITIES

Kerodon Cuvier

rupestris Wied

Rio Grande de Belmont, Rio Pardo, Rio San Francisco, etc., Brazil

Synonyms: moco Cuvier

sciureus Geoffroy St. Hilaire

HYDROCHOERUS Brisson

TAXONOMIC HISTORY

1640.	DeLaet mentioned briefly (p. 484) "LES PACAS," which
	may have been either capybaras or true pacas.
1640	Managrava described (p. 920) CARVILLE DE ASH LENGINUS

1648. Marcgrave described (p. 230) Capybara brasiliensibus.

(Basis of hydrochaeris Linnaeus and of capybara Erxleben in part.)

1658. Piso wrote (p. 99) of the CAPYBARA.

1693. Ray cited (p. 126) the "Capy-Bara" of Marcgrave.

1730. Des Marchais wrote (III, p. 314) of the Cochon d'eau.

1741. Barrère described (p. 160) the capybara under the name "Sus maximus, palustris. . . . "

Brisson employed the term (pp. 116–117) Hydrochoerus (pre-Linnaean) in the generic sense, basing it upon Marcgrave, Ray, Piso, and later authors' descriptions.

Brisson erected (pp. 80–81) the generic name *Hydrochoerus* and also the specific name *hydrochoerus*, based upon Marcgrave, Johnston, Barrère, and des Marchais; but Brisson's specific names are not considered valid. (J. A. Allen, 1910, Bull. Amer. Mus. Nat. Hist., XXVIII, p. 322.) It may be noted that Brisson's account of this animal is NOT marked **, and therefore he did not describe from an actual specimen.

1764.	Buffon discussed (XII, pp. 384–401) the capybara under the name "Cabiai," derived from "Cabionara" and cited the writings of Marcgrave, Piso, Ray, and others.
1766.	Linnaeus described (12th Ed., p. 103) Sus hydrochaeris [sic], which he based¹ upon the writings of Marcgrave and Ray but stated that it came from Surinam. Marcgrave's capybara was from Brazil (probably Pernambuco region). Yet Hollister (1914a) fixed Surinam as type locality and proposed hydrochaeris notalis for the Paraguayan (and Marcgravian?) capybaras.
1767.	Linnaeus listed (13th Ed., p. 103) Sus hydrochaeris.
1777.	Erxleben used (p. 193) the combination <i>Hydrochoerus</i> capybara. His <i>Hydrochoerus</i> , however, was composite, the other species being <i>Hydrochoerus tapir</i> .
1785.	Boddaert listed (pp. 47, 102) Cavia capybara. Hydro- choerus was employed (pp. 51, 161) for the tapir.
1788.	Gmelin employed (13th Ed., reformed, Linnaeus, p. 123) Calva capybara for Hydrochoerus.
1789.	Gmelin wrote (13th Ed., reformed, reissued, p. 123) Cavia capybara.
1792.	Schreber wrote (p. 620) of Cavia capybara.
1797.	Link (1795) following Erxleben and Boddaert, used (p.

105) Hydrochoerus for the tapir.

Azara wrote (II, p. 12) of the "CAPIYGOUA." 1801.

Buffon ("Didot" Ed., V, p. 304, Pl. 1) reproduced the 1802. Cabiai of Buffon (1764) to which Lacépède in Vol. XIV, p. 165, gave the name Cavia cobaya. (This may be considered a synonym of hydrochaeris Linnaeus. It is also a homonym of C. cobaya Pallas, 1766.)

1841. Lund described briefly (p. 100) Hydrochoerus sulcidens (fossil).

Waterhouse published (pp. 201-207) a thorough discus-1848. sion of the capybara.

1854. Burmeister discussed (pp. 237-242) the capybara extensively.

1855. Giebel reviewed (pp. 464–466) Hydrochoerus.

¹He stated that he had seen a juvenile specimen, but his description had apparently not been drawn up from that animal.

1872b. Hensel remarked (p. 61) upon the capybaras of south Brazil.

1881 (1880). Trouessart treated (p. 197) hydrochaerus [sic] as a synonym of capybara. The fossil form sulcidens was considered a distinct species.

1888. Winge discussed (pp. 69-70) the capybara.

1895. Merriam (pp. 375–376) pointed out that *Hydrochoerus* Brisson, 1762, was a valid genus and held that its type should be *H. hydrochoerus* Brisson. (But Brisson's specific names are not now considered valid. See reference to Allen's remarks under Brisson, 1762.)

1897a. Palmer stated (p. 106) that *Hydrochoerus* Brisson should date from 1762, not 1756.

1898. Trouessart treated (p. 643) "hydrochoerus [sic] L., 1766" and sulcidens Lund as synonyms of capybara Erxleben, 1777.

1900. Berg attributed (pp. 221–222) the specific name hydrochoerus [sic] to Linnaeus (12th Ed., p. 103).

1904. J. A. Allen used (p. 444) the combination *Hydrochaerus* hydrochaeris Linnaeus.

1904. Palmer accepted (p. 334) hydrochoerus Brisson, 1762, as a valid specific name and stated the type to be "Hydrochoerus hydrochoerus Brisson (=Sus hydrochoeris Linnaeus, 1766)." Brisson's specific names are not valid. See under Brisson, 1762, and Merriam, 1895.

1905. Trouessart wrote (p. 529) "capyraba" (misprint?) Linné. Capybara was retained in synonymy. Sulcidens was made a synonym of a fossil species giganteus Winge.

1911. International Commission on Zoological Nomenclature, in 'Opinion 37,' ruled that Brisson's generic names of birds were available under the Code. Since his generic bird and animal names are comparable in status, this should be extended to his mammalian genera and would then confirm the standing of his genus *Hydrochoerus*.

1912c. Goldman described (p. 11) Hydrochoerus isthmius.

1912. Osgood recorded (p. 56) *Hydrochoerus hydrochaeris* from Lake Maracaibo, northwest Venezuela.

1914a.

Hollister described (pp. 58-59) Hydrochoerus hydrochaeris notialis. He compared it with "h. hydrochaeris from Surinam." If Linnaeus's capybara is held to be from Surinam, then the capybara of Marcgrave would

Surinam, then the capybara of Marcgrave would probably be referable to *notialis* (Hollister mentions intergrading forms from Brazil). But see "Remarks."

1922. Pocock placed (p. 426) *Hydrochoerus* in the family Hydrochoeridae distinct from the Caviidae.

REMARKS

The specific name hydrochaeris Linnaeus, 1766, was founded upon two citations only: Marcgrave, 1648, and Ray, 1693. The only authority cited by Ray for his "Capy-Bara" was Marcgrave. Linnaeus remarked incidentally that he had seen a juvenile specimen. Thus the Linnaean species was based wholly upon Marcgrave's description and upon the young animal (without stated locality) seen by Linnaeus. Instead, however, of giving Brazil as locality, Linnaeus wrote Surinam.

Under these circumstances it is doubtful whether Hollister, 1914a, had sufficient justification for his selection of Surinam as type locality for hydrochaeris; at all events the Linnaean account provides insufficient evidence in favor of that selection. On the contrary, Linnaeus gives two citations which point clearly to Brazil, besides which, as every student knows, he made frequent errors in his localities.

One cannot but conclude that the type locality of hydrochaeris, based upon Marcgrave's writings, must be fixed as Brazil (probably the province of Pernambuco). In such case it may later be shown that hydrochaeris notialis Hollister from Paraguay is a synonym of h. hydrochaeris Linnaeus. Furthermore, should the capybara of Surinam prove to be a distinct form, the name capybara Erxleben might be available. Besides Marcgrave, Ray, Piso, and others whose works refer to Brazilian capybaras, Erxleben cited Des Marchais, Barrère, and Fermin whose accounts refer definitely to Surinam; and on this basis it might be possible to restrict the name to such a Surinam form whose distinctness, however, still remains to be demonstrated.

GENOTYPE

Hydrochoerus Brisson, 1762

Type by subsequent designation (Palmer, 1904): Sus hydrochaeris Linnaeus, 1766

LIST OF NAMED FORMS WITH TYPE LOCALITY

Hydrochoerus Brisson

hydrochaeris hydrochaeris (Linnaeus) hydrochaeris notialis Hollister capybara Erxleben

capybara Erxleben sulcidens Lund (fossil) isthmius Goldman Brazil (based upon Marcgrave)

Paraguay

Brazil (based upon Marcgrave)

Lagoa Santa, Brazil

Marraganti, near head of tidewater, Rio Tuyra, eastern Panama

Dolichotis Desmarest

TAXONOMIC HISTORY

- 1694. Narborough described (p. 33) "hares" briefly in his account of Magellan's Strait.
- 1774. Hawkesworth, in the account of Byron's voyage, described (I, p. 23) a "lièvre," with "la chair très blanche et d'un goût très agreable."
- 1780. Zimmermann described (p. 328) "Cavia (Patagonum)
 " He alluded to Pennant's knowledge of the
 animal, but no mention of it by Pennant appears
 until his second edition of 'History of Quadrupeds.'
- 1792. Kerr wrote (p. 220) of the "Patagonian Cavy—Cavia magellanica."
- 1793. Pennant wrote (2d Ed., II, p. 91) of the "Patagonian Cavv."
- 1801. Shaw wrote II (1), p. 226 of the "Patagonian Cavy.

 Cavia patachonica."
- 1801. Azara wrote (II, pp. 51–56) of the "Lièvre pampa," extending from lat. 35° S. to Patagonia.
- 1816. Oken, under Cavia, listed (p. 825) "Cavia patagonum, Lepus patagonicus [sic]."
- Desmarest erected (pp. 205–211) the genus *Dolichotis*, with type *Cavia patachonica* Shaw. (Palmer, Science, (2) VI, pp. 105–106 gives the date as 1819.)
- 1822a. Desmarest placed (p. 358) patachonica in Dasyprocta but in the footnote (pp. 359–360) called attention to the name Dolichotis.
- 1827. Lesson employed (p. 295) the combination Lepus magellanicus. He listed also (p. 301) "Chloromys patagonicus; Dasyprocta patagonica."
- 1829. Lesson and Garnot (1826) wrote (I, pp. 168–170) in detail about "Lepus magellanicus."

1902a.

1830.	Lesson wrote (p. 113, Pl. XLII) of Mara patagonica.
1842.	Lesson still used (p. 103) Mara as generic name for Doli-
	chotis.
1844.	Wagner employed (IV, p. 66) Dolichotis patagonica.
1848.	Waterhouse discussed (pp. 155-162) Dolichotis thoroughly.
1855.	Giebel reviewed (p. 464) Dolichotis.
1875.	Burmeister described (pp. 634-637) Dolichotis salinicola, and added remarks concerning "D. patachonica."
1876.	Burmeister added (pp. 461–462) notes upon D. salinicola.
1877.	Weyenbergh described as new (pp. 247–257) Dolichotis centralis, commenting extensively upon the genus.
1879.	Burmeister reduced (pp. 260-263) salinicola to a color phase of "patagonica."
1879.	Thomas, discussing the mammals of Kerr's 'Animal
	Kingdom,' stated (p. 397) that <i>D. patachonica</i> (Shaw, 1801) must now stand as " <i>D.</i> " magellanica (Kerr, 1792).
1881 (1880).	Trouessart treated (pp. 196–197) salinicola as a sub-
	species of <i>patagonica</i> . <i>Magellanica</i> was made a synonym of <i>patagonica</i> and <i>centralis</i> a synonym of <i>salinicola</i> .
1893.	Holmberg discussed (pp. 238–240) the species of Dolichotis.
1895.	J. A. Allen, also writing upon Kerr's 'Animal Kingdom,'
	stated (pp. 179-192) that C. magellanica Kerr, 1792,
	= C. patachonica Shaw, 1801, = Dolichotis magellani- cus Thomas, 1879.
1898.	Berg found (pp. 23-24)D. salinicola a good species.
	He placed <i>centralis</i> and part of <i>patagonica</i> in its synonymy.
1898.	Remy St. Loup considered (p. 43) salinicola a good species.
1898.	Trouessart listed (p. 641) magellanica Kerr "1818,"
	salinicola Burmeister and centralis Weyenberg in the synonymy of patagonica Shaw, 1801.
1902e.	Thomas described (p. 242) Dolichotis magellanicus
	centricola.

J. A. Allen, commenting upon Zimmermann's 'Geo-

graphische Geschichte, 1780, showed (p. 22) that Cavia patagonum Zimmermann took precedence over C. patagonica (1801) Shaw and that the name should now stand Dolichotis patagona (Zimmermann).

1904.	Palmer	gave	(p.	242)	the	\mathbf{type}	\mathbf{of}	Dolichot is	as	Cavia
	pat	agonic	a Sh	naw.						

1905. J. A. Allen wrote of (p. 28) Dolichotis magellanica (Kerr).

1905. Trouessart listed (p. 528) patagonica (Shaw) and magellanica (Kerr) as distinct species.

1906. Loder commented (pp. 96–97) upon the species of *Doli- chotis*.

1922. Pocock placed (p. 426) Dolichotis in the Dolichotinae, subfamily of the Caviidae.

1929. Thomas considered (p. 44) *Dolichotis* a masculine noun and wrote "magellanicus."

GENOTYPE

Dolichotis Desmarest, 1820 Type by original designation:

Cavia patachonica Shaw, 180

(=patagonum Zimmermann, 1780)

LIST OF NAMED FORMS WITH TYPE LOCALITIES

Dolichotis Desmarest

patagona (Zimmermann)Patagoniamagellanica (Kerr)Magellanpatachonica (Shaw)Patagonia

salinicola Burmeister Stations Totoralejo and Recreo, Central Argentine Railway, 29° S.,

65° W., Argentina Cordova, Argentina

centralis Weyenbergh
magellanicus centricola Thomas

Cruz del Eje, central Cordova,

Argentina

CHINCHILLIDAE

CHINCHILLA Bennett

TAXONOMIC HISTORY

1590.	Acosta wrote (p. 288) about the chinchilla.
1593.	Hawkins described the "chinchilla."

1782. Molina described (pp. 301–302) Mus laniger.

1788. Gmelin (Linnaeus, 13th Ed. reformed, p. 134) listed Mus laniger.

1822a. Desmarest wrote (p. 313) of Cricetus laniger.
1827. Brants wrote of (p. 170) Cricetus laniger.

1829.¹ Bennett erected (pp. 1–12) Chinchilla to contain laniger (Molina) and summarized known data upon that species.

¹Bennett's own preface was dated June 30, 1830. Sherborn under *Chinchilla* gave 1829, but in his bibliography, 1831. British Museum Catalogue gave 1830. Wiegmann, 1835, Arch. für Naturg., II, p. 205, stated that actual date of printing was 1829.

1829 (Suppl., 1830.	1830). Fischer employed (p. "392"=592) Eriomys. Gray published an original description (II, p. 11) of the genus Chinchilla (later than Lichtenstein, according
1830.	to Wiegmann, 1835, p. 207). Lichtenstein wrote of and figured (Pl. xxvIII) Eriomys chinchilla (date from Sherborn; Wiegmann, 1835, p. 206, gave 1829).
1830.	D'Orbigny fils et I. Geoffroy St. Hilaire placed (pp. 282–297) Chinchilla in their composite genus Callomys.
1831.	Van der Hoeven discussed (pp. 105–118) the chinchilla at length. He used for it (p. 115) the generic name <i>Eriomys</i> .
1831.	Wagler reviewed (pp. 612–617) the genus <i>Lagostomus</i> Brookes.
1832.	Rousseau wrote (pp. 337–365) upon the chinchilla, basing his work upon Bennett's articles.
1833.	Bennett, discussing the Chinchillidae, drew up (p. 59) a short diagnosis of <i>Chinchilla</i> .
1833.	Baer wrote (pp. 497–500) of Eriomys chinchilla.
1833.	(Date from Bennett, 1835b.) Meyen (1832) wrote (p. 587) of "Chinchilla" and (p. 593) of "Eriomys."
1835b.	Bennett wrote (pp. 35–64) extensively upon the Chinchillidae.
1835.	Van der Hoeven (p. 139) wrote of <i>Eriomys</i> .
1835.	Wiegmann reviewing the history of the Chinchilla, maintained (pp. 204–220) that <i>Eriomys</i> Lichtenstein held precedence over <i>Chinchilla</i> Bennett. He held (p. 211) <i>chinchilla</i> Lichtenstein to be distinct from <i>lani</i> -
	gera Gray. He gave a key to the Chinchillidae.
1835c.	Bennett compared (pp. 491–495) his own papers on Chin- chillidae with Meyen's work and that of other authors.
1836.	Meyen remarked (pp. 59-64) on the Chinchillidae.
1836.	Van der Hoeven distinguished (p. 64) between large and small chinchillas.
1840.	Van der Hoeven (p. 159) wrote of the number of toes of chinchillas and (p. 105) of the dentition.
1843.	Wagner recognized (III, pp. 301–305) two species of <i>Eriomys</i> .
1845.	Tschudi wrote (pp. 160–163) of "Eriomys chinchilla."
1847.	Gay, discussing the chinchillas (pp. 89–91) at some length, united laniger Molina and chinchilla Lichtenstein.

1906.

1848. Waterhouse, dealing with the Chinchillidae (pp. 207–242) acknowledged two species of *Chinchilla*, "lanigera" [sic] and brevicaudata, new name (and synonym) for chinchilla Lichtenstein.

1860. Philippi recorded (p. 157) "Chinchilla lanigera Gray" from the Atacama region.

1881 (1880). Trouessart made (pp. 189–190) brevicaudata a subspecies of laniger Molina, placing chinchilla Lichtenstein under it as a synonym.

1898. Trouessart recognized (pp. 517–518) the two named forms laniger and brevicaudata. With the former he synonymized chinchilla Meyen and with the latter chinchilla Lichtenstein and laniger Wagler.

1900. Albert wrote (pp. 913–934) a treatise upon the chinchilla.
1904. Palmer wrote (p. 270) that chinchilla Lichtenstein was based upon skins without skulls shipped from Car-

tagena, Colombia, and La Guaira, Venezuela. Lahille advocated (pp. 43–44) *Chinchilla* as opposed to

1929. Yepes showed (p. 471) the distribution of "Chinchilla lanigera" in Chile and Argentina.

GENOTYPE

Chinchilla Bennett

Type by monotypy: Mus laniger Molina

LIST OF NAMED FORMS WITH TYPE LOCALITIES¹

Chinchilla Bennett

laniger (Molina)

Northern provinces of Chile

?Synonyms: chinchilla Lichtenstein Unknown brevicaudata Waterhouse Unknown

Eriomus.

LAGIDIUM Meven

TAXONOMIC HISTORY

A number of historians and travelers to South America, whose comments have been summarized by Bennett (1835b) and others, have described animals referable to Lagidium under such names as vizcacha, chinchille, etc., as follows: Cieca, 1533, p. 268 v; Acosta, 1590, p. 288; Nieremberg, 1635, p. 161; Garcilasso de Vega, 1609, part I, fol. 216; de Laet,

¹In Zool. Anz., 1934, Bd. 108, No. 56, pp. 97-103, it is stated that Brass described *Chinchilla boliviana* in 'Aus dem Reiche der Pelze,' II, p. 613, 1911. I have not seen that work.

1831.

Wagler reviewed (pp. 612-617) the species of the genus "Lagostomus Brookes," expanding the term to include

both Callomys and Chinchilla.

- 1833. (date from Bennett, 1835b). Meyen (1832) proposed (p. 576) the generic name *Lagidium*, with single species peruanum. He commented on Callomys.
- 1833. Bennett, in a discussion of the Chinchillidae (pp. 57–60), erected *Lagotis*, with single species *cuvieri*. Besides being synonymous with *Lagidium*, *Lagotis* was preoccupied by *Lagotis* Blainville, 1817 (= *Pedetes*).
- 1835a. Bennett described (pp. 67–68) Lagotis pallipes, comparing it with cuvieri.
- 1835b. Bennett, writing of the Chinchillidae (pp. 35-64), discussed the history and anatomy of the "Peruvian viscachas" ("Lagotis").
- 1835b. Bennett elaborated (pp. 331–334) his description of pallipes. On the last page (334) he discussed precedence of Lagidium and Lagotis.
- 1835. Wiegmann pointed out (p. 204) the priority of *Lagidium* over *Lagotis* and (pp. 211–212) gave a key to the Chinchillidae.
- 1835c. Bennett compared (pp. 491–495) his own work upon Chinchillidae with that of other authors.
- 1836. Meyen remarked (pp. 59–64) on the Chinchillidae.
- 1840. Van der Hoeven wrote (p. 159) of the number of toes of Chinchillas.
- 1843. Wagner, writing (III, pp. 305–308) of Lagidium (= Lagotis), recognized two species cuvieri and pallipes.

 Peruanum was placed in the synonymy of cuvieri. He was undecided (p. 309) where to place Callomys aureus.
- 1845. Tschudi characterized (pp. 163–170) "Lagidium peruvianum" and "L. pallipes."
- 1847. Gay considered (pp. 91–96) "Lagotis criniger Lesson" equal to Lepus viscacha Molina. He mentioned also pallipes.
- 1848. Waterhouse, discussing (pp. 207–242) the family Chinchillidae, recognized *Lagidium cuvieri* and *L. pallipes*. The names *peruanum* and *aureus* were put in the synonymy of *cuvieri*.
- 1860. Philippi recorded (p. 157) "Lagotis criniger Lesson" among the mountains of the desert of Atacama.
- 1879. Burmeister wrote (pp. 251–255) of "Lagidium peruanum Meyen."

- 1881 (1880). Trouessart gave (p. 190) Lagidium the significance it has today, i.e., the mountain viscachas. Pallipes was made a subspecies, and cuvieri, criniger, aureus, and vizcacha of Molina were listed as synonyms of peruanum.
- 1896. Philippi, discussing Lagidium (pp. 7-10) described Lagidium lutescens and remarked upon Lagidium "crinigerum." He described (p. 10) Lagidium crassidens from a single skull.
- 1897a. Thomas described (pp. 466–467) Lagidium moreni.
- 1898. Trouessart gave (p. 517) pallipes full specific rank.
- 1901a. Thomas held (p. 25) that *viscacia* (Molina) was "probably" a *Lagidium*. He was in doubt as to the position of *Callomys*.
- 1901. J. A. Allen, discussing the status of *Callomys*, recommended (pp. 181–182) that it be held indeterminable.
- 1906. Lahille showed (pp. 39-43, 44) that *Viscacia* Oken should be applied to the members of the genus *Lagidium*, *Lagostomus* being revived for the plains viscacha.
- 1907a. Thomas, briefly reviewing the mountain viscachas, subscribed (pp. 439–444) to the views of Lahille and employed the generic term *Viscaccia* Oken for *Lagidium* Meyen.

He described (pp. 440-441) Viscaccia wolffsohni.

He characterized briefly viscaccia (Molina), cuvieri (Bennett), pallipes Bennett, peruana (Meyen), and went on to describe further races as new: Viscaccia inca, V. arequipae, V. subrosea, V. saturata, V. punensis, V. cuscus, V. lutea, V. perlutea, and V.

1914a. Thomas, reversing his views of 1907a, advocated (p. 285) the fixation under fiat ruling of *Lagidium*, with type *L. peruanum*, for the mountain viscachas.

tucumana.

- 1919c. Thomas described (pp. 499–500) Lagidium lockwoodi.

 He referred lutescens Philippi to cuvieri and crassidens Philippi to lutescens (= cuvieri), all of which he referred to viscaccia of Molina.
- 1919d. Thomas described (pp. 133–134) Lagidium vulcani, "near L. tucumanum."
- 1920g. Thomas described (pp. 421-422) Lagidium famatinae.

1921b. Thomas described (pp. 179–181) Lagidium boxi, which he compared with moreni.

1921h. Thomas described (pp. 219–221) Lagidium tontalis and Lagidium viatorum.

1924c. Thomas and others again advocated retention of *Lagidium* for the mountain viscachas in his 'Nomina Conservanda' list (p. 347).

1925. International Commission on Zoological Nomenclature gave out in 'Opinion 90' that *Lagidium* (for which suspension had been requested) received a two-thirds vote in favor of suspension and was referred to a special committee for final decision. (See 'Opinion 110,' 1929).

1926f. Thomas described (pp. 639-640) Lagidium sarae, and compared it with boxi and moreni.

1929. Yepes wrote (p. 471) of "Lagidium viscaccia (Molina)."

1929. International Commission on Zoological Nomenclature (Special Committee), in 'Opinion 110,' suspended Rules in favor of Lagidium Meyen, with type peruanum Meyen, in preference to Viscaccia Oken, with type "Lepus chilensis Molina." (See 1925.)

GENOTYPE

Lagidium Meven

Type by monotypy: Lagidium peruanum Meyen.

Chile and Argentina

LIST OF NAMED FORMS WITH TYPE LOCALITIES

Lagidium Meyen viscaccia (Molina) Chile. (Thomas, 1907a) ?Synonyms: cuvieri (Bennett) Peru lutescens Philippi Prov. Tacapuca, between Copacoya and Inocaliri, northern Chile crassidens Philippi Chile chilensis Oken Chile crinigerum Philippi Chile viscaccica Brandis Chile peruanum Meyen Southern Peru pallipes Bennett "believed . . . Chilean Andes" moreni Thomas Hills near Chubut, Argentina wolffsohni Thomas Sierra de los Baguales, y de las Vizcachas, lat. 50° 50' S., long. 72° 20' W., on the boundary between

inca Thomas	Incapirca, Zezioro, Junin, Peru			
arequipae Thomas	Sumbay, near Arequipa, Peru. 4,000 meters			
subrosea Thomas	Galera, west of Oroya, Dept. Lima, Peru, 4,800 meters			
saturata Thomas	Limbane, Inambari, Dept. of Puno, Peru. 3,500 meters			
punensis Thomas	Puno, Lake Titicaca, Peru. 3,800 meters			
cuscus Thomas	Paratani, about 66° W., 17° 5′ S., Bolivia. 2,600 meters			
lutea Thomas	Esperanza, Mt. Sajama, Bolivia. 4,000 meters			
sublutea Thomas	Pampa Aullaga, 67° W., 19° 30′ S., Bolivia. 3,800 meters			
tucumana Thomas	Cumbre de Mala-mala, Sierra de Tucuman, Argentina. 3,000 meters			
lockwoodi Thomas	"Otro Cerro," northeastern Rioja, Argentina. 3,000 meters			
vulcani Thomas	Cerro Casabindo, northwestern Jujuy, Argentina. 4,800 meters			
famatinae Thomas	La Invernada, 35 kilometers north of Invernada de Famatina, north- west Rioja, Argentina. 3,800 meters			
boxi Thomas	Pilcañeu, near Rio Negro, Argentina. 1,200 meters			
tontalis Thomas	Los Sombreros, Sierra Tontal, 60 kilometers west of San Juan, Ar- gentina. 2,700 meters			
viatorum Thomas	Punta de Vacas "Transandean route in Mendoza," northwest Mendoza Argentina. 2,300 meters			
sarae Thomas	Piño Hachado, Nequen, Argentina. 1,500 meters			
LAGOSTOMUS Brookes				

LAGOSTOMUS Brookes

TAXONOMIC HISTORY

Molina, under his "Lepus viscaccia" (a Lagidium) incorrectly wrote (pp. 307-308) of its habit of picking up and secreting objects dropped by travelers. This suggests that he had at least heard accounts of the lowland viscacha, Lagostoma, and had confused the two genera.

Dobrizhoffer first (?) wrote an account of (I, pp. 306–307) the plains viscacha.

1816.

1801. Azara wrote (II, pp. 41-50) of " la vizcache."

1815. Rafinesque used (p. 56) the name Viscacia, without description (nomen nudum).

Oken employed (II, pp. 835–837) Viscaccia in the generic sense. However, he included in it only two animals: (1) "Lepus chilensis" (p. 836); and (2) Mus laniger, Chinchilla (p. 837).

Oken's use of *Viscaccia* applied to the viscacha of Molina (a *Lagidium*) and Not to the plains animal (*Lagostomus*). However, according to Allen (1902b), his descriptive matter is borrowed from Azara. This led Allen to apply *Viscaccia* Oken to *Lagostomus*. By the action of the International Commission on Zoological Nomenclature ('Opinions 90, 110') suspension was made of the rules of priority, and *Lagidium* for the mountain viscachas was given preference over *Viscaccia* Oken, which became a synonym.

Vizcaccia Schinz (1825?) although based entirely upon the plains viscacha cannot be used, since it is a homonym of Viscaccia Oken.

1817. Desmarest described (XIII, p. 117, under article Gerboise) Dipus maximus, said to be from "New Holland."

1825? Schinz (1824) erected (p. 243) Vizcacia for the plains viscacha, using the specific name pamparum. See Palmer (1897) and Allen (1902).

1825. Schinz used (IV, p. 429) Viscaccia americana. See Thomas (1901a).

1827 (or later). Griffith remarked (III, pp. 170–171) upon the viscacha of Brookes under the name *Marmot diana*.

1828. Brookes described (pp. 95–104) Lagostomus, with single species trichodactylus (held to be a synonym of maximus).

1829. Fischer wrote of (p. 381) Dasyprocta? [sic] viscaccia, a composite of the mountain and plains viscachas.

1830. Oken, in Isis (p. 905), gave date of Brookes's paper as 1829.

1830. D'Orbigny and I. Geoffroy St. Hilaire erected (pp. 282–297) the generic term *Callomys* to include *Lagostomus* "viscacia," *Chinchilla laniger*, and "Callomys aureus," founded upon a furrier's skin in bad condition.

1831.	Lesson discussed (pp. 186-190) the lowland viscachas.
1831.	Wagler reviewed (pp. 612-617) the species of the genus "Lagostomus Brookes," including in it all three genera of the Chinchillidae.
1832.	(Date from Sherborn.) Lesson figured and discussed (Pl. viii) Lagostomus trichodactylus.
1833.	Bennett, discussing the Chinchillidae, gave (p. 59) a short diagnosis of <i>Lagostomus</i> .
1833.	(Date from Bennett, 1835b.) Meyen (1832) wrote (p. 575) of "Viscacha" and (p. 583) of "Lagostomus." He recognized two species, trichodactylus and viscacha, which Bennett claimed were identical.
1833.	Geoffroy St. Hilaire (according to Bennett, 1833, p. 44) abandoned his idea of the generic identity of the viscacha and the chinchilla.
1835b.	Bennett wrote (pp. 35-64) at length upon the Chinchillidae.
1835.	Wiegmann drew up (pp. 211–212) a key to the Chinchillidae.
1835c.	Bennett compared (pp. 491–495) his own papers on the Chinchillidae with those of other authors.
1836.	Meyen remarked (pp. 59-64) on the Chinchillidae.
1839.	Waterhouse quoted (p. 88) Darwin's comments on the viscacha.
1842.	Lesson employed (p. 105) the name <i>criniger</i> for Cuvier's figure.
1843.	Wagner wrote (III, pp. 309-312) of Lagostomus tricho- dactylus.
1848.	Waterhouse, treating the Chinchillidae (pp. 207–242), wrote (pp. 210–220) of Lagostomus trichodactylus.
1879.	Burmeister wrote (pp. 244–250) of Lagostomus tricho-

1879. Burmeister wrote (pp. 244–250) of Lagostomus trichodactylus.

1881 (1880). Trouessart used (pp. 190–191) Lagostomus for the low-land viscachas. Trichodactylus was the only specific name recognized, with maximus, viscaccia, and viscacha in synonymy.

1897a. Palmer attempted to show (pp. 21–22) that the name Lagostomus trichodactylus was untenable, and that the name should be "Vizcacia maxima (Blainville)." Lagostomus is now valid, but trichodactylus is replaced by maximus.

1900.

Rehn wrote (p. 166) that Brandis applied the name Lepus viscaccica to the Viscacha of Molina (1776), which he (Rehn) considered identical with Dipus maximus. He concluded that the name of the viscacha should stand: "Vizcacia viscaccica (Brandis)." Molina's viscacha was actually a Lagidium.

1900.

Berg listed (p. 221) a synonymy of "Viscacia maxima (Blainville) Palmer."

1900b.

J. A. Allen, commenting on the remarks by Palmer (1897) and Rehn (1900), pointed out (pp. 183-184) that the name originated with Molina (1782) as Lepus viscacia. He reached the conclusion that the name should be: Vizcacia viscacia (Molina). However, viscacia (Molina) was a Lagidium.

1901a.

Thomas, referring (p. 25) to Rehn's remarks (1900), like Allen, thought that the name viscacia (Molina) clearly ousted viscacica Brandis. However, he contented himself with the remark that viscacia Molina was probably a Lagidium.

In view of the uncertainty of the date of "vizcacia" Schinz, 'Naturgeschichte,' he suggested adoption of Viscaccia [sic] Schinz, Cuviers' Thierreich (1825). This last, as stated under Oken, 1816, is not possible.

1902b.

J. A. Allen, discussing (pp. 373–378) Oken's 'Lehrbuch der Zoologie,' 1816, adopted (p. 374) Viscaccia as the first name of the viscacha, in spite of the fact that Oken included in it only the species "chilensis" and "laniger."

Of the former, Allen wrote (p. 378) that *chilensis* represented the earliest name available for the Argentine viscacha. This was not so, since Molina's animal, upon which Oken's work was based, was in reality a *Lagidium*.

1905.

J. A. Allen tried to fix (pp. 30-31) the type of Viscaccia Oken as "Lepus chilensis Oken = Dipus maximus Desmarest (ex Blainville)" by the elimination method. He showed (p. 31) that Oken's description was based "wholly on 'la Viscache' of Azara."

1905.

Trouessart replaced (pp. 516-517) Lagostomus (used by him in 1898) by Viscacia Schinz, 1825, for the low-

land viscachas. For the specific name he employed viscacia [sic] Molina. (This name is now currently referred to the genus Lagidium.)

Lahille, after a facetious introduction, showed (pp. 39-1906.

44) that the name viscacha was derived from the term "Uiskacha" of the Quichua Indians of Peru, and tried to show that the name Viscacia should be applied to members of the genus Lagidium.

He thought that *Lagostomus* should be revived for the pampas viscacha, with specific name maximus (Desmarest).

1907a. Thomas concurred (pp. 439-444) in Lahille's views regarding the generic name Viscaccia Oken.

1908. Sordelli employed (p. 14) the combination "Lagostomus viscacia Molina."

1910a.Thomas mentioned (pp. 245-246) typical Argentine Lagostomus maximus from south of 30° S. and described Lagostomus maximus immollis and Lagostomus crassus (based upon a skull only).

1914a. Hollister described (p. 58) Lagostomus maximus petilidens.

GENOTYPE

Lagostomus Brookes

Type by monotypy: Lagostomus trichodactylus Brookes (= maximus Desmarest, 1817)

Argentina? loc. unknown

LIST OF NAMED FORMS WITH TYPE LOCALITIES

Lagostomus Brookes

maximus maximus Desmarest ?Synonyms: diana Griffith

trichodactylus Brookes

criniger Lesson pamparum Schinz

americana Schinz

viscacia d'Orbigny and Geoffroy

St. Hilaire

maximus immollis Thomas

maximus petilidens Hollister

crassus Thomas

Tapia, Tucuman, Argentina. 700

meters

8 miles south of Carmen de Patagones, southern Argentina

Santa Ana, Cuzco, Peru. 3,500 feet

1743.

1779.

1822.

CAPROMYIDAE

CAPROMYS Desmarest

TAXONOMIC HISTORY

Oviedo described (not seen by me) various West Indian mammals. See comments by MacLeay, 1829, and particularly the reprint of Oviedo's work, 1851.

Catesby described (p. 79) the Bahama Coney. His plate apparently represents one of the long-tailed species of *Capromys*.

1756. Browne (1st Ed. not seen), see Browne, 1779.

1778. Pallas wrote under (p. 91) Mus pilorides, a composite name, a description based in part upon a rodent of Ceylon, in part upon Megalomys of Martinique.

Pilorides Pallas was based upon the following citations:

Brisson (1762) p. 122, referring to "Mus albus ceylonicus."

Zimmermann (1777), Zool. Geogr., p. 325, referring to "Mus amphibius," Old World water rats.

Buffon (1763), X, p. 2, referring to piloris of Rochefort (Megalomys).

Pennant (1771), p. 247, referring to piloris of Rochefort (Megalomys).

Zimmermann (1777), Zool. Geogr., p. 509, referring to piloris of Rochefort (*Megalomys*).

It seems impossible, therefore, that *pilorides* Pallas could be connected in any way with *pilorides* Say and the genus *Capromys*.

Browne (2nd Ed., p. 484) described the LARGE BROWN INDIAN CONEY, probably Capromys pilorides.

Say (November)¹ erected (pp. 330–343) Isodon [preoccupied by a marsupial named by Geoffroy St. Hilaire (1806) and also synonymous with Capromys], with type species Isodon pilorides. Say employed the specific name pilorides in consideration of the possible identity of his animal and pilorides (Pallas). His generic name was invalidated, but his specific name had priority over fournieri Desmarest.

510	Dancetti American maseum of Matarat Hostory [101. 1121111
1822b.	Desmarest (December) ¹ erected (p. 185) Capromys, containing the single species fournieri (synonym of pilorides Say).
1823.	Desmarest further discussed (pp. 43-60) Capromys fournieri.
1824.	Bell thought (pp. 230–231) that <i>Isodon pilorides</i> Say and <i>Capromys furnieri</i> [sic] were probably not synonymous as to species.
1824.	Poeppig described (pp. 11-15) Capromys prehensilis.
1829.	Fischer listed (p. 312) C. furnieri [sic] and C. prehensilis. In his section "addenda et emendanda," p. "389" (=589) he named the QUEMI of Oviedo (1547) quemi (probably a Quemisia) and the SMALL INDIAN CONEY of Browne (1756) brownii (a Geocapromys).
1829.	MacLeay, in a letter to Vigors, discussed (pp. 269–278) the relation of the accounts of Oviedo and de Laet (based on Oviedo) to <i>Capromys</i> Desmarest, and gave an account of its habits. He thought that four species might be found on Cuba.
1832.	MacLeay remarked further (pp. 179–180) upon the habits of the hutias and discussed <i>prehensilis</i> , <i>pilorides</i> , and <i>fournieri</i> .
1834.	Guerin described and figured as new (Pl. xv) Capromys poeyi and mentioned furnieri [sic] and prehensilis.
1840.	Ramon de la Sagra wrote upon (III, p. 11) the Capromys of Cuba.
1842.	Lesson erected (p. 124) Mysateles to contain prehensilis Poeppig, which he renamed poeppingii [sic].
1843.	Wagner united (III, pp. 320–326) Capromys and Plagio- dontia subgenerically.
1844.	Guerin-Meneville figured (I, Pl. xv) and shortly discussed (III, p. 23) C. poeyi.
1848.	Waterhouse reviewed (II, pp. 287–294) Capromys, giving dates of publication of that genus and of Isodon. He employed pilorides Say and treated poeyi as a

subspecies of prehensilis.

Oviedo [reprinted. Madrid edition, Book 12, Chapters 1–6 (pp. 389–392)]. This is the edition upon which Miller (1929b) based his comments. He correlated

1851.

Oviedo's four rodents with known genera (fossil in kitchen middens and caves) as follows: Hutia (Plagiodontia or Isolobodon); Quemi (Quemisia); Mohuy (Brotomys); and Cori (Cavia). See also MacLeay, 1829. It may be noted that in the event Quemisia gravis, founded upon a fossil specimen, should be equal to the Quemi of Oviedo, the name quemi Fischer, Addenda et Emendanda, p. "389" [=589] would preoccupy gravis Miller. The name of the Quemi would be Quemisia quemi (Fischer).

1851. Hill, in Gosse, described (pp. 468–481) Capromys brachyurus (a Geocapromys).

1855. Giebel reviewed (p. 489) Capromys.

1864. Peters described (p. 384) Capromys melanurus and (in a footnote) C. pallidus.

1866. Gundlach in Poey (pp. 54–55) reviewed the Cuban hutias, listing fournieri, poeyi, and melanurus.

1873. Gundlach (1872) listed (p. 253–255) Capromys fournieri, poeyi, and melanurus.

1881 (1880). Trouessart listed (p. 181) pilorides, melanurus, and prehensilis. Pilorides of Pallas, fournieri, and quemi were included in the synonymy of pilorides Say. Brachyurus and brownii, however, were listed under Plagiodontia. Poeyi was made a synonym of prehensilis.

1888. True described (pp. 469-472) Capromys brachyurus thoracatus (a Geocapromys).

1891. J. A. Allen described (pp. 329–336) Capromys ingrahami (a Geocapromys) related to "Capromys brachyurus Hill." He discussed other records of hutias from the Bahamas and elsewhere.

1892. Chapman, writing (pp. 279–350) on the mammals of Cuba mentioned Capromys pilorides and described Capromys columbianus (fossil), made type of Synodontomys G. M. Allen in 1917.

1895. J A. Allen considered (p. 189) that Cavia aguti cunicularis
Kerr (1792), although unidentifiable, was based in
part upon Capromys. Kerr's name included a single
reference to the Mus agouti described by Linnaeus,
12th Ed., p. 80.

- 1898. Trouessart modified (p. 613) his list of 1881. He removed brachyurus Tomes from Plagiodontia to Capromys, recognizing besides pilorides (of Pallas, with pilorides Say in synonymy), melanurus, prehensilis (with poeyi a synonym), brachyurus, b. thoracatus, and ingrahami.
- 1899. Poussargues described (pp. 150–154) Capromys geayi (a Procapromys); and included a general discussion of the genus Capromys.
- 1901b. Cabrera described (pp. 367–373) Capromys elegans, "nearest to C. melanurus Poey."
- 1901. Chapman, revising (pp. 313-324) the genus Capromys, erected Procapromys, full genus, to accommodate geayi and Geocapromys, subgenus, to contain the short-tailed brownii, thoracatus, and ingrahami, leaving in the subgenus Capromys only the long-tailed pilorides, prehensilis, and melanurus. He described C. prehensilis gundlachi.
- 1911. G. M. Allen discussed Capromys (pp. 179, 207–212), describing as new C. pilorides relictus. He further commented upon pilorides, prehensilis, p. gundlachi, melanurus, and the forms of Geocapromys (thoracatus, brownii, and ingrahami).
- 1917. Miller recorded (p. 4) pilorides and prehensilis (both fossil) from Santo Domingo.
- 1917b. G. M. Allen described (pp. 53–56) Capromys nana (fossil). He remarked (p. 55) that pallidus Peters (1864) was probably a pale form of either melanurus or prehensilis.
- 1918. G. M. Allen discussed (pp. 133–148) the relationships of nana to other species of Capromys. He compared prehensilis and melanurus.
- 1919. Anthony reported (pp. 628–630) upon *C. pilorides* (Pallas) and *C. nana*, mentioning it as living (p. 630) in central Cuba.
- 1922. Pocock, discussing the external anatomy of the *Hystri-comorpha* (pp. 365–427) gave details of 'Capromys pilorides."
- 1929b. Miller listed (pp. 1–16) Capromys pilorides. He discussed the mammals described by Oviedo (1547, reprinted 1851). See under the latter.

GENOTYPE

Capromus Desmarest

monotypy: Capromys Type by fournieri Desmarest, December, 1822b (= pilorides Say, November, 1822)

LIST OF NAMED FORMS WITH TYPE LOCALITIES

Capromus Desmarest

Synonyms: Isodon Say, 1822

Mysateles Lesson, 1842

pilorides pilorides (Say)

Synonym: fournieri Desmarest

pilorides relictus G. M. Allen

Casas Mts., Nueva Gerona, Isle of

prehensilis prehensilis Poeppig

Synonyms: poeyi Guerin

Meneville

poeppingii (Lesson)

prehensilis gundlachi Chapman melanurus Peters

pallidus Peters

elegans Cabrera

Cuba

Nueva Gerona, Isle of Pines

Manzanillo, Cuba

Cuba

Cuba

Cuba

"Cuba or nearby islands"

GEOCAPROMYS Chapman

TAXONOMIC HISTORY

Browne (1st Ed. not seen. See Brown, 1779). 1756.

Browne described (p. 484) the SMALL Indian Coney. 1779.

Fischer applied (Add. et Emend., p. "389" [=589]) 1829. Capromus brownii to the SMALL INDIAN CONEY of

Browne.

1851. Hill, in Gosse, described (pp. 468–481) Capromys brachyurus, which he considered (p. 481) equal to the SMALL Indian Coney of Browne, 1756 and 1779 (i.e.,

brownii).

1881 (1880). Trouessart listed (p. 181) brownii in Plagiodontia.

1888. True described (pp. 469-472) Capromys thoracatus.

1891. J. A. Allen described (pp. 329–336) Capromys ingrahami.

1901. Chapman, revising (pp. 313-324) the genus Capromys, proposed the subgenus Geocapromys to include the short-tailed species brownii Fischer, thoracatus True (now a full species), and ingrahami Allen. Brownii was designated (p. 313) as type of Geocapromys and brachyurus was placed in the synonymy of brownii.

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1911. G. M. Allen reviewed (pp. 210–212) the species thoracatus, brownii, and ingrahami.

1916a. Miller noted (p. 48) remains of brownii and (doubtfully) thoracatus from Jamaica.

1917a. G. M. Allen made (pp. 1–12) Geocapromys Chapman a full genus and described (p. 9) G. cubanus (fossil).

1918. G. M. Allen compared certain (p. 133–148) structures of Capromys and Geocapromys and synonymized Synodontomys with Geocapromys and cubanus with columbianus.

1919. Anthony reported (pp. 630–631) Geocapromys columbianus (Chapman). He mentioned a palatal character for the separation of Capromys and Geocapromys.

Pocock described (pp. 413–418) the external anatomy of brownii. He continued to treat Geocapromys as a subgenus (see Chapman, 1901; G. M. Allen, 1917a).

GENOTYPE

Geocapromys Chapman

374

Type by original designation: Capromys brownii Fischer

LIST OF NAMED FORMS WITH TYPE LOCALITIES

Geocapromys Chapman

brownii (Fischer)

Synonym: brachyurus Hill thoracatus True ingrahami J. A. Allen Jamaica

Jamaica

Little Swan Island, off Honduras "easternmost of the Plana Keys, lat. about 22° 33' north, long. 72° 30' west, and about halfway between the northeast point of Acklin Island and Mariguana of the Bahamas"

PROCAPROMYS Chapman

TAXONOMIC HISTORY

1899. Poussargues described (pp. 150–154) Capromys geayi.
1901. Chapman, revising (pp. 313–324) the genus Caprom

Chapman, revising (pp. 313-324) the genus *Capromys*, erected (pp. 322-323) *Procapromys*, full genus, to accommodate *geayi*, which he considered "the ancestral mainland type whence *Capromys* descended."

GENOTYPE

Procapromys Chapman

Type by monotypy: Capromys geayi
Poussargues

SPECIES WITH TYPE LOCALITY

Procapromys Chapman geayi (Poussargues)

"Mountainous coastal region of the north, on the slopes of the range which separates the town of Caracas from the port of La Guayra," Venezuela

PLAGIODONTIA Cuvier

TAXONOMIC HISTORY

1547.	Ovied	o described th	$\mathbf{e}\mathbf{H}\mathbf{u}\mathbf{r}\mathbf{i}\mathbf{a}$.	See Ovied	o, editio	on of 1851,
	a	nd comments	by Miller	, 1929b.		
	_	/a				

1756. Browne (1st Ed. not seen). The small Indian coney (brownii Fischer, 1829) was placed by Trouessart, 1898, in Plagiodontia. See Browne, 2d Ed., 1779.

1779. Browne (2d Ed., p. 484) described briefly the small Indian coney, held by Chapman, 1901, to be a *Geocapromys*.

1829. Fischer, in "addenda et emendanda" (p. "389" [=589])
named the small Indian Coney of Browne (1756)
brownii. (Placed by Trouessart, 1898, as a synonym
of aedium, but shown by Chapman, 1901, to be a
Geocapromys.)

1836a. G. F. Cuvier erected (pp. 347-353) *Plagiodontia*, with single new species *aedium*.

 $\textbf{Wagner united} \ Plagiodontia \ \textbf{with} \ Capromys \ \textbf{subgenerically}.$

1848. Waterhouse treated (II, p. 295) *Plagiodontia* as a full genus.

1851. Oviedo (reprinted ed., Madrid). The hutia was considered by Miller (1929b) as referable either to Plagiodontia or to Isolobodon.

1855. Giebel discussed (p. 491) Plagiodontia.

1881 (1880). Trouessart listed (p. 181) aedium with brownii Fischer and brachyurus (a Capromys) as synonyms. Brownii Fischer was applied to the Capromys of Browne's 'Civil and Natural History of Jamaica.'

1898. Trouessart removed (p. 613) brachyurus to Capromys.

1901. Chapman removed (p. 320) brownii to Geocapromys.

1916b. Miller recorded (p. 47) the rediscovery of *Plagiodontia*aedium (fossil). He considered *Plagiodontia* nearer
to *Adelphomys* of the Santa Cruz beds of Patagonia
than to *Capromys*.

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1927.	Miller, writing (pp. 1-8) upon Plagiodontia, discussed its
	history very fully and described as new hylaeum.

1929a. Miller wrote (pp. 18-19) of *Plagiodontia aedium* and described *Plagiodontia spelaeum* (fossil).

1929b. Miller listed (pp. 8-10) P. aedium and P. hylaeum. He attributed (p. 12) the HUTIA of Oviedo either to Plagiodontia or Isolobodon.

1930. Miller listed (pp. 4, 8) Plagiodontia hylaeum and (p. 8)
P. aedium.

GENOTYPE

Plagiodontia Cuvier

Type by monotypy: Plagiodontia aedium Cuvier

LIST OF NAMED FORMS WITH TYPE LOCALITIES

Plagiodontia Cuvier aedium Cuvier hylaeum Miller

Santo Domingo Guarabo, 10 miles east of Jovero, Samana Prov., Dominican Republic

MYOCASTOR Kerr

TAXONOMIC HISTORY

1776.	Molina, under vernacular names, wrote about (pp. 80–81)
	the Guillin or Guillino and the Coipu, both ap-
	parently Myocastor, though the former is confused
	with the otter, and should perhaps be considered unidentifiable.
	unidentinable.

1782. Molina described (1st Ed., p. 285) Castor huidobrius and (p. 287) Mus coypus. Huidobrius is the Latinized name for the GUILLINO (1776).

1788. Gmelin in Linnaeus listed (13th Ed., reformed, p. 125)

Mus coypus, referring only to Molina, p. 255 (French Ed.).

1792. Kerr erected (p. 225) Myocastor, in which he placed coypus and zibethicus (the latter an Ondatra).

1794. Link wrote (p. 76) of Ondatra coypus and O. zibethicus (muskrat).

1801. Azara wrote (II, pp. 1-11) of the "Quouiya."

1806. Etienne Geoffroy St. Hilaire referred (1805, p. 82) to Commerson's ms. name *Myopotamus bonariensis*, hence the name *bonariensis*, published for the first

time in 1806, was attributable to Geoffroy. He next synonymized *bonariensis* with *coypou* [sic] and placed both in *Hydromys* (an Australian genus).

1815. Burrow described (pp. 167–169) Mus castoroides, apparently a synonym of bonariensis.

1822a. Desmarest, following Geoffroy (1806), wrote (p. 296) of *Hydromis coypus*.

Desmarest employed (XLIV, p. 491) under article "Rat," the term *Potamys coypou*.

1830. Rengger used (p. 237) Myopotamus bonariensis, with "Hydromys coypus Geoffr." a synonym.

1839. Waterhouse, citing Darwin, wrote (p. 78) of Myopotamus coypus.

1841. Wesmael described (pp. 59–61) Mastonotus popelairi.

1842. Lesson employed (p. 126) the generic term Guillinomys chilensis for huidobrius Molina.

1844. Wagner used (IV, p. 9) the generic term Myopotamus.

1847. Gay used (p. 47) the name "Lutra huidobria" for the composite animal of Molina (1776, 1782).

1848. Waterhouse described (pp. 297–303) Myopotamus coypus.

1872b. Hensel wrote (pp. 53–56) of Myopotamus coypus.

1879. Burmeister wrote (pp. 234–237) of Myopotamus.

1881 (1880). Trouessart listed (p. 176) all species of "Myopotamus," with the exception of a subspecies chilensis Lesson (1842), as synonyms of coypus.

1895. J. A. Allen pointed out (pp. 179–192) that *Myocastor*Kerr supplanted such names as *Myopotamus*. He selected (p. 181) coypus as type of *Myocastor* (by elimination). He was apparently unacquainted with *Ondatra* Link.

1898. Trouessart treated (p. 612) all names of living species of *Myocastor* as synonyms of *coypus*.

1904. Palmer, under *Ondatra* Lacépède wrote (p. 951) "not *Ondatra* Link, 1795, a synonym of *Myocastor* Kerr, 1792 (type *Mus coypus* Molina) . . ."

1911. Hollister selected (pp. 13–14) "Ondatra coypus" as type of Ondatra Link, 1795, under Canon XXVI of the A. O. U. code (XXII of revised edition).

1913. The International Commission on Zoological Nomenclature in 'Opinion 55' definitely fixed *zibethicus* as type of

Ondatra Link, thus overthrowing Hollister's designation of 1911.

1914a. Hollister described (pp. 57-59) Myocastor coypus sanctaecruzae. He recognized three races of coypus: c. coypus, c. bonariensis, and c. sanctaecruzae.

GENOTYPE

Myocastor Kerr

Type by subsequent designation (Palmer, 1904): Mus coypus Molina

LIST OF NAMED FORMS WITH TYPE LOCALITY

Myocastor Kerr

coypus coypus (Molina) Chile
Synonym: popelairii (Wesmael) Chile?
coypus bonariensis (Geoffroy) Paraguay
Synonym: castoroides (Burrow) Brazil?

coypus sanctaecruzae Hollister Rio Salado, near Los Palmaros, Santa Cruz, Argentina

OCTODONTIDAE

OCTODON Bennett

TAXONOMIC HISTORY

1782.	Molina described (p. 303) Sciurus degus.
1788.	Gmelin (Linnaeus, 13th Ed. reformed, p. 152) listed
	Sciurus degus.
1832.	Bennett erected (pp. 46–48) Octodon with single species
	cumingii.

1833. Meyen wrote (p. 601) of *Dendrobius degus*. 1835c. Bennett remarked (p. 495) upon *Octodon*.

1835c. Bennett remarked (p. 495) upon Octodon.
1839. Waterhouse wrote (pp. 82-83) of Octodon, stating that cumingii was the "pegu" of Molina.

1841. Bennett, comparing Octodon, Ctenomys, and Poephagomys, wrote (pp. 75-86) of Octodon cumingii.

1843. Wagner discussed (III, pp. 316–318) Octodon cumingii.

1844. Gervais and d'Orbigny described (p. 22) Octodon gliroides (an Octodontomys).

1844. Waterhouse wrote (pp. 153-157) of Octodon degus and described Octodon bridgesi.

1845b. Wagner, after commenting upon Octodon, described (p. 33) Octodon pallidus.

1845. Tschudi wrote (pp. 170–173) of Octodon cumingii (= peruana Waterhouse, 1848).

1902a.

D'Orbigny and Gervais wrote further (p. 24) of Octodon gliroides (an Octodontomys).

1848. Waterhouse, writing of the genus Octodon (pp. 252–263) recognized degus (with cumingii and pallidus synonyms), and proposed "var. peruana" for "cumingi" of Tschudi, 1845. He pointed out the distinctness of gliroides (an Octodontomys).

1869. Franzius misidentified (p. 275) as degus what was probably a geomyid.

1881 (1880). Trouessart recognized (p. 175) degus, bridgesii [sic], and gliroides (an Octodontomys). Under degus were listed pallidus and cumingii var. peruana as subspecies. Cumingii was shown as a synonym of degus, and degus of Franzius (some kind of geomyid) was placed as a synonym of peruana.

1898. Trouessart slightly altered (p. 601) his treatment of 1881.

*Cumingii pallidus and magellanicus of Gay¹ were put in the synonymy of degus; and peruanus was made a subspecies. Degus Franzius, 1869, was doubtfully included.

Thomas renamed (pp. 114–117) as Neoctodon simonsi, a specimen which he subsequently (1913) recognized as gliroides. Thus he considered gliroides generically distinct from Octodon. See also under Octodontomys.

1905. Trouessart applied (p. 500) the name franziusi to the geomyid misidentified as "degus" by Franzius, 1869.

This name should be taken into account by workers upon the Geomyidae.

1927b. Thomas described (pp. 556–557) Octodon degus clivorum and considered that O. cumingii var. peruanum Waterhouse, recorded first by Tschudi was erroneously labeled as from Peru.

GENOTYPE

 ${\it Octodon}$ Bennett

Type by monotypy: Octodon cumingii
Bennett

¹Magellanicus (Gay) is listed by Trouessart "fide Jentink." As yet I have been unable to locate the allusion to Jentink. (He wrote nothing on the subject in 'Notes of the Leyden Museum.') Also, under Octodm Gay (1847, pp. 98-101) makes no mention of any name magellanicus. Magellanicus Trouessart has the appearance of a nomen nudum.

LIST OF NAMED FORMS WITH TYPE LOCALITIES

Octodon Bennett

degus degus (Molina) Chile

degus peruana Waterhouse San Juan de Matucana, east of Lima,

Peru. 9,000 feet

degus clivorum Thomas Puente Alto, east of Santiago, Chile.

800 meters

cumingii Bennett Between Valparaiso and Santiago,

Chile

bridgesi Waterhouse Chile pallidus Wagner Chile

OCTODONTOMYS Palmer

TAXONOMIC HISTORY

1844. Gervais and d'Orbigny described (p. 22) "Octodon" gliroides.

D'Orbigny and Gervais further described (IV, (2), p. 24) gliroides, with a figure (Pl. xvi) to which Thomas (1913) alluded.

1848. Waterhouse pointed out (p. 263) a number of differences between *gliroides* and *degus* (a true *Octodon*).

1898. Trouessart retained (p. 601) gliroides in Octodon.

1902a. Thomas erected (pp. 114-117) Neoctodon with type N. simonsi, not realizing that his species was identical to "Octodon" gliroides.

1903. Palmer pointed out (p. 873) that *Neoctodon* Thomas was preoccupied by *Neoctodon* Bedel (Coleoptera) and proposed in its stead *Octodontomys*.

1913. Thomas, writing (p. 143) of Octodontomys gliroides admitted supposing gliroides a member of the genus Octodon. He reduced simonsi to a synonym of gliroides.

GENOTYPE

Octodontomys Palmer

Type (ipso facto): Neoctodon simonsi Thomas (=gliroides Gervais and d'Orbigny) (Int. Comm. Zool. Nomencl., "Rules," Art. 30, f.).

LIST OF NAMED FORMS WITH TYPE LOCALITIES

Octodontomys Palmer

gliroides (Gervais and d'Orbigny) Bolivian Andes, near La Paz,

Bolivia Synonym: simonsi (Thomas) Potosi, Bolivia

SPALACOPUS Wagler

TAXONOMIC HISTORY

	THEOROMIC THEORY
1782.	Molina described (p. 300) Mus cyanus.
1788.	Gmelin (Linnaeus 13th Ed. reformed, p. 132) listed Mus
	cyanus.
1829.	Froriep, quoting from a letter from Poeppig used (p. 279)
	Bathyergus maritimus, nomen nudum, a ms. name of
	Poeppig's for Spalacopus.
1832.	Wagler erected (pp. 1218-1221) Spalacopus with single
	species poeppigii, based upon the rodent described
	by Froriep from Poeppig's letter.
1834.	G. F. Cuvier described (pp. 321–326) Poephagomys ater.
1835a.	Poeppig described (pp. 252–255) Psammoryctes noctivagus.
1835b.	Poeppig employed (I, p. 166) Psammomys for Spalacopus.
	Psammomys Poeppig was preoccupied by Psam-
	momys Rüppel and Cretzschmar.
1836.	Eydoux and Gervais discussed (pp. 17–24) Poephagomys.
1839.	Waterhouse, under "Poephagomys," gave (p. 82) Darwin's comments on Spalacopus.
1841.	Bennett compared (pp. 75-86) Octodon, Ctenomys, and Poephagomys.
1843.	Bridges gave it as his opinion (p. 130) that <i>Poephagomys</i>
	ater Cuvier equaled Mus cyanus Molina.
1843.	Wagner, under Psammoryctes recognized (III, p. 318)
	noctivagus with poeppigii and ater in its synonymy.
1847.	Gay wrote (pp. 102–104) of "Poephagomys ater."
1848.	Waterhouse reviewed (pp. 267–272) the status of Spalacopus poeppigii.
1855.	Baird recorded (p. 157) Spalacopus poeppigii.
1881 (1880).	Trouessart used (p. 174) poeppigii, with ater and nocti-
, ,	vagus in synonymy. Cyanus Molina was questioningly made a subspecies.
1925b.	Thomas described (pp. 585–586) Spalacopus tabanus.
20200	He wrote of a series of "Spalacopus cyanus" secured
	from Wolffsohn.
	He stated (p. 586) that the type locality of both
	poeppigii and noctivagus was Quintero and of ater
	Coquimbo.
	//

"The original Mus cyanus, Molina, should also be

assigned to the same species. . . . "

GENOTYPE

Spalacopus Wagler

Type by monotypy: Spalacopus Wagler (=cyanus)poeppigii

Molina?)

LIST OF NAMED FORMS WITH TYPE LOCALITIES

Spalacopus Wagler

cyanus (Molina)

Chile

?Synonyms: poeppigii Wagler

Quintero, Rio Aconcagua, Chile

Coquimbo ater (Cuvier)

noctivagus (Poeppig)

Sand dunes at Quintero, Río Acon-

cagua, coast of Chile

tabanus Thomas

South Chile (exact locality unknown)

ACONAEMYS Ameghino

TAXONOMIC HISTORY

1842. Waterhouse (1841) erected (pp. 89-92) Schizodon with single species fuscus.

1848. Waterhouse reviewed (pp. 263-267) data upon Schizodon fuscus.

1881 (1880). Trouessart listed (p. 174) Schizodon fuscus.

1891. Ameghino showed (p. 245) that Schizodon Waterhouse, 1841, was preoccupied by Schizodon Agassiz, 1829, and proposed instead Aconaemys.

1897a.Palmer gave (p. 106) correct date of Schizodon as 1842. not 1841.

1917b.Thomas described (pp. 281–282) Aconaemys porteri, which he compared with fuscus.

GENOTYPE

Aconaemys Ameghino

Type (ipso facto): Schizodon fuscus Waterhouse (Int. Comm. Zool. Nomencl. "Rules," Art. 30, f.)

LIST OF NAMED FORMS WITH TYPE LOCALITY

Aconaemys Ameghino

fuscus (Waterhouse) Valle de las Cuevas, 6 leagues from

Volcano Peteroa (S. lat. 75°) eastern slope of Andes, Argentina.

6,000 feet

porteri Thomas Osorno, southern Chile

OCTOMYS Thomas

TAXONOMIC HISTORY

Thomas erected (pp. 117-119) the genus Octomys, with 1920d.type species mimax. Octomys was compared with Aconaemys and Octodontomys.

Thomas described (pp. 214-221) Octomys joannius. 1921h.

LIST OF NAMED FORMS WITH TYPE LOCALITIES

mimax Thomas

joannius Thomas

La Puntilla, near Tinogasta, Catamarca, Argentina. 1,000 meters Pedernal, 60 kilometers southwest of San Juan, Prov. San Juan, Argentina. 1,200 meters

ABROCOMIDAE

ABROCOMA Waterhouse

TAXONOMIC HISTORY		
1837.	Waterhouse erected (pp. 30-32) Abrocoma with two species bennettii and cuvieri.	
1839.	Waterhouse further discussed (pp. 83–87) Abrocoma and the above two species.	
1842.	Wagner described (pp. 5–8) <i>Habrocoma</i> [sic] helvina, which, however, he later synonymized (p. 288) with bennettii.	
1881 (1880).	Trouessart, under <i>Habrocoma</i> , listed (p. 175) bennettii and cuvieri, helvina being made a synonym of the former.	
1916.	Wolffsohn described (pp. 6–7) Abrocoma murrayi.	
1918.	Miller and Gidley separated (p. 447) Abrocoma from the Octodontidae as a full family, the Abrocomidae.	
1919d.	Thomas described (pp. 132–133) Abrocoma cinerea.	
1920b.	Thomas described (pp. 475–477) Abrocoma budini. He synonymized (p. 477) cuvieri with bennettii.	
1920d.	Thomas agreed (p. 118) with the exclusion of <i>Abrocoma</i> from the Octodontidae proposed by Miller and Gidley (1918).	
1920g.	Thomas described (pp. 419–420) Abrocoma famatina. He corrected (in note) published measurements of feet of cinerea.	
1921h.	Thomas described (pp. 216–217) $Abrocoma\ schistacea$ and	

Abrocoma vaccarum. He remarked that the Argentina species of Abrocoma were very closely allied.

GENOTYPE

Abrocoma Waterhouse

Type¹: Abrocoma bennettii Waterhouse

LIST OF NAMED FORMS WITH TYPE LOCALITY

DIDI OF TURBED TOTAL	IIII ZIII Doomaii
Abrocoma Waterhouse	
bennettii Waterhouse	Flanks of cordillera, near Aconcagua (Beagle), Chile
?Synonyms: helvina Wagner	Chile
cuvieri Waterhouse	Valparaiso, Chile
$murrayi \ { m Wolffsohn}$	Vallenar, Prov. Atacama, Chile. 600 meters
cinerea Thomas	Volcano of Casabindo, Jujuy, Argentina. 4,800 meters
budini Thomas	Otro Cerro, 18 kilometers north- northwest of Chumbicha, Cata- marca, Argentina. 3,000 meters
famatina Thomas	La Invernada, 35 kilometers north of Nevada de Famatina, northwest Rioja, Argentina. 3,800 meters
schistacea Thomas	Los Sombreros, Sierra Tontal, 60 km. west of San Juan, Prov. San Juan, Argentina. 2,700 meters
vaccarum Thomas	Punta de Vacas, northwest Mendoza, Argentina. 3,000 meters

CTENOMYIDAE

CTENOMYS Blainville

TAXONOMIC HISTORY

	TAXONOMIC HISTORY
1782.	Molina described (p. 302) Mus maulinus. This animal
	should be treated as fictitious. The description pre-
	cludes everything except the lowland viscacha,
	which does not occur in Chile. It has nothing to do
	with Ctenomys maulinus Philippi.
1788.	Gmelin (Linnaeus, 13th Ed. reformed, p. 137) listed Mus
	maulinus (see above).
1801.	Shaw wrote [II (1), p. 122] of "Arctomys" maulina (see
	above).
1802.	Azara wrote (II, p. 69) of the Tucotuco.
1826.	Blainville erected (p. 62) Ctenomys with single species
	brasiliensis.

¹I cannot find that the type of *Abrocoma* has previously been designated.

- 1830. Lichtenstein described (text of Pl. xxxx) Ctenomys torquatus (named Georychus torquatus on the plate).
- 1835a. Bennett described (p. 190) Ctenomys magellanicus.
- 1841. Bennett compared (pp. 75–86) Octodon, Ctenomys, and Poephagomys (= Aconaemys).
- 1843. Wagner, discussing (III, pp. 375–378) Ctenomys, dealt with magellanicus, brasiliensis, and torquatus.
- 1847. D'Orbigny and Gervais mentioned (p. 25) the places of capture of *brasiliensis* as Corrientes, Argentina, and Santa Cruz de la Sierra, Bolivia. Apparently *brasiliensis* as first described was a composite species.
- 1847. Gay found (p. 87) Mus maulinus Molina unidentifiable.
- 1848. Waterhouse reviewed (pp. 272–285) Ctenomys, discussing brasiliensis (in the synonymy of which he placed torquatus), and magellanicus. He described C. boliviensis and C. leucodon.
- 1848. Wagner wrote (pp. 72–78) at some length upon "Ctenomys brasiliensis" and described Ctenomys nattereri and Ctenomys opimus. He commented upon torquatus.
- Burmeister, although he had not encountered the genus personally, discussed (pp. 212–215) *Ctenomys* fully.
- Philippi described (pp. 157-158) Ctenomys fulvus, C. atacamensis, and remarked upon "C. brasiliensis," and "C. leucodon."
- Philippi described (pp. 38-41) Ctenomys mendocina and remarked briefly on "brasiliensis," leucodon, and, magellanica.
- 1872. Philippi described (pp. 442–445) Ctenomys maulinus from the high cordillera of the Province of Maule. This name has nothing to do with Mus maulinus Molina, 1782.
- 1880. Philippi described (pp. 276–279) Ctenomys fueginus.
- 1881 (1880). Trouessart recognized (p. 174) three species of Ctenomys:

 brasiliensis, leucodon, and magellanicus. Under the
 first he placed nattereri, torquatus, boliviensis, and
 opimus, and under the last mendocina, maulinus,
 and fueginus.
- 1887. Nehring described (pp. 45-47) Ctenomys minutus, related to magellanicus.

1905.

Philippi described (pp. 10-17) Ctenomys robustus, Cteno-1896. mys pallidus, Ctenomys pernix, and Ctenomys chilensis. Robustus Philippi preoccupies robustus Allen, 1903 and 1905. Thomas described (pp. 311-312) Ctenomys perrensi, 1896. suggesting that it may be the Tucotuco of Azara (1802). But see azarae Thomas (1903c). Thomas described (pp. 283–286) Ctenomys talarum. 1898c.Trougssart made little change (pp. 598-599) in his list of 1898. 1881. He made *minutus* Nehring a subspecies. Nehring described (pp. 420-425) Ctenomys pundti and 1900a, b.commented upon his C. minutus. He discussed the Brazilian form of the genus. He described (pp. 535-541) Ctenomys neglectus based on a pick-up skull. He discussed nattereri at length, and commented on pundti and the fossil lujanensis. 1900b. Thomas described (pp. 301–302) Ctenomys tucumanus. Thomas, discussing Ctenomys (pp. 383-385) wrote of 1900c.opimus Wagner, "brasiliensis" of Waterhouse (1848), and described Ctenomys opimus nigriceps, Ctenomys opimus luteolus, and Ctenomys dorsalis. Thomas, writing of opimus (pp. 227–228), suggested its 1902d.identity with "several of the forms described by Philippi." He described (pp. 228–229) Ctenomys frater. 1902e. Thomas described (pp. 241-242) Ctenomys bergi, "allied to mendocinus. . . ." He considered the latter a good species. 1903. J. A. Allen described (pp. 185-189) Ctenomys robustus (preoccupied by robustus Philippi, 1896, and renamed osgoodi by Allen, 1905), Ctenomys sericeus, and Ctenomys colburni. Thomas described (pp. 228-229) Ctenomys azarae, allied 1903c.to mendocinus. The locality given was erroneous. See next entry. 1903e.Thomas corrected (p. 243) the locality of azarae to 780 kilometers southwest of Buenos Aires, Argentina; NOT Sapucay, Paraguay.

> J. A. Allen, discussing (pp. 34-44) Ctenomys, wrote of magellanicus, fueginus, robustus, sericeus, and colburni.

Robustus (preoccupied by robustus Philippi, 1896) was renamed (p. 191) Ctenomys osgoodi. It is so shown on Plate vII.

1907b. Thomas described (pp. 164–165) Ctenomys steinbachi.

1910a. Thomas described (pp. 242–244) $\it Ctenomys talarum antonii$, compared with $\it C. t. talarum$ and with $\it C. azarae$.

He described also Ctenomys fodax, allied to osgoodi.

1912b. Thomas described (p. 241) Ctenomys talarum recessus.

1912c. Thomas described (pp. 639-640) Ctenomys saltarius.

1913. Thomas described (pp. 141–143) Ctenomys budini.

1914. Ribeiro described (pp. 39–42) Ctenomys rondoni and Ctenomys bicolor.

1916d. J. A. Allen published (pp. 569, 595) an account of nattereri in Matto Grosso.

1916. Osgood, writing of *Ctenomys opimus* (p. 210), suggested the probably wide range of local differentiation of *Ctenomys*.

1916e. Thomas described (pp. 304-305) Ctenomys porteousi, which he compared with azarae.

He erected (p. 305) a new subgeneric division *Haptomys* to contain *Ctenomys leucodon*.

1918. Thomas described (pp. 38-40) Ctenomys latro, "closely allied to . . . C. tucumanus," and also he described Ctenomys pontifex, hitherto assigned to mendocinus.

He recorded a specimen in what he believed to be Philippi's handwriting from "Mendoza," and suggested that it might be typical.

1919a. Thomas described (pp. 117–118) Ctenomys fochi, allied to bergi.

1919b. Thomas described (pp. 210–211) haigi and haigi lentulus, allied to colburni.

1919c. Thomas described (pp. 498–499) knighti, allied to budini.

1919d. Thomas recorded (p. 132) luteolus, first described (Thomas, 1900c) as a subspecies of opimus.

1919e. Thomas described (pp. 155–156) Ctenomys sylvanus, from "thick forest."

1920a. Thomas described (pp. 193–194) Ctenomys sylvanus utibilis, and Ctenomys juris, allied to fochi.

1920d. Thomas described (pp. 119–120) Ctenomys coludo.

1920e. Thomas described (pp. 243-244) Ctenomys occultus, allied to juris.

1928.

- Thomas described (pp. 420–421) Ctenomys famosus, com-1920g.pared with coludo. Thomas described (pp. 136-137) Ctenomys goodfellowi, 1921a.compared with boliviensis. He selected male B. M. 46.7.28.57 as lectotype of boliviensis Waterhouse. Thomas described (pp. 185–186) Ctenomys budini barbarus. 1921c.He concluded that sylvanus, utibilis, budini, and barbarus were subspecies of the species budini. Thomas described (pp. 523-524) Ctenomys coludo johan-1921f. nis, near coludo and famosus. 1921h.Thomas stated (p. 218) his uncertainty whether coludo johannis was really a subspecies of coludo. He described (pp. 218-219) Ctenomys tulduco. Thomas described (pp. 583-584) Ctenomys tuconax. 1925b.1926a.Thomas described (pp. 323-326) Ctenomys lewisi, a semiaquatic form, and Ctenomys sylvanus mordosus. Thomas described (pp. 637-639) Ctenomys emilianus and 1926f. reported additional specimens of C. mendocinus. He stated that the type locality of maulinus Philippi was "Laguna de Maule, eastern Chile, about 36° . . . S . . . ," and suggested that maulinus Philippi and mendocinus might be synonymous. 1927c.Thomas, following his suggestion of 1926f, now employed (p. 657) the combination "mendocinus maulinus Philippi." 1927d.Thomas suggested (p. 205) that azarae was a synonym of mendocinus. He compared (pp. 201-202) the Ctenomys of the eastern slope of the Andes, terming them "the C. mendocinus group." He again referred to maulinus Philippi and also to C. haigi lentulus. He would now unite all the Ctenomys from Las Lajas to Maiten under the name mendocinus haigi.
 - Rusconi published (pp. 235–250) a distributional review of *Ctenomys*, together with a table of cranial measurements and a map showing type localities. The various species were in many cases accompanied by annotations.

He showed (p. 239) that the subgenus *Haptomys* was no longer valid. *Negelectus* was considered a

synonym of magellanicus. He confused (p. 245) lentulus with luteolus.

1929. Thomas recorded (p. 43) a fresh specimen of the rare Ctenomys magellanicus. He mentioned that the British Museum contained the type, B. M. 55.12.24.

198.

He stated that *neglectus* was a synonym of *magellanicus*.

He included (p. 44) recessus as a subspecies of mendocinus and suggested that sericeus graded into mendocinus and talarum.

1931. Rusconi, in his paper on fossil *Ctenomys* (pp. 129–163), gave a systematic résumé of the genus and then proceeded to discuss certain fossil species.

GENOTYPE

Ctenomys Blainville

Type by monotypy: Ctenomys brasiliensis Blainville

LIST OF NAMED FORMS WITH TYPE LOCALITIES

Ctenomys Blainville

Brazil (and Corrientes)

brasiliensis Blainville torquatus Lichtenstein

minutus Nehring

perrensi Thomas rondoni Ribeiro

bicolor Ribeiro nattereri Wagner

Bolivia and Jujuy

opimus opimus Wagner opimus nigriceps Thomas

opimus luteolus Thomas boliviensis Waterhouse

leucodon Waterhouse

frater Thomas

Minas Geraes, Brazil

"Southern provinces of Brazil and the banks of the Uruguay River" "Campos," east of Mundo Novo, Rio Grande do Sul, Brazil Goya, Corrientes, Argentina Juruena (or Maria de Molina?) Matto

Grosso, Brazil No locality. Matto Grosso, Brazil Caissora, Matto Grosso, Brazil

Bolivia (reported)

Tetiri, 40 miles west of Puno, Puno-Moquegua Road, S. Peru. 16,000 feet.

Cordilleras of Jujuy, Argentina Plains of Santa Cruz de la Sierra, Bolivia

San Andres de Machaca, S. of Lake Titicaca, La Paz (dept.), Bolivia Potosi, Bolivia. 4.300 meters steinbachi Thomas

saltarius Thomas budini budini Thomas

budini barbarus Thomas

cinerea Thomas

sylvanus sylvanus Thomas

sylvanus utibilis Thomas

sylvanus mordosus Thomas

juris Thomas

goodfellowi Thomas

lewisi Thomas

Northern Argentina and Paraguay

tucumanus Thomas dorsalis Thomas latro Thomas

fochi Thomas

knighti Thomas

coludo coludo Thomas

coludo johannis Thomas

occultus Thomas

famosus Thomas

Campo of Province Sara, near Santa Cruz de la Sierra, Bolivia

Salta, northern Argentina

Cerro de Lagunita, east of Maimara, center of province of Jujuy, Argentina. 4,500 meters

Sunchal, Sierra de Santa Barbara, southeast Jujuy, Argentina. 1,200 meters

Volcano de Casabindo, northwest Jujuy, Argentina. 4,800 meters

Tartagal, Prov. Salta, Argentina. 600 meters

Yuto, 70 miles north of Villa Carolina, Rio San Francisco, 20 kilometers east of San Pedro de Jujuy, Argentina

Tambo, 75 kilometers east of Tarija, Bolivia. 2,200 meters

El Chaguaral, between San Pedro and Villa Carolina, Rio San Francisco, 20 kilometers east of San Pedro de Jujuy, Jujuy, Argentina

Esperanza, near Concepcion, Prov. Nuflo de Chaves, eastern Bolivia Sama, 50 kilometers west of Tarija,

Bolivia, 4,000 meters

Tucuman, Argentina. 450 meters Northern Chaco, Paraguay

Tapia, 20 miles north of Tucuman City, Tucuman, Argentina. 600 meters

Chumbicha, Catamarca, Argentina. 600 meters

"Otro Cerro," 45 kilometers west of Chumbicha, Catamarca, Argentina. 3,000 meters

La Puntilla, near Tinogasta, Catamarca, Argentina. 1,000 meters

Cañada Honda, Dept. of San Juan, Argentina. 500 meters

Monteagudo, 80 kilometers southeast of Tucuman City, Argentina

Potrerillo, Famatina range, northwest Rioja, Argentina. 2,600 meters tulduco Thomas

tuconax Thomas

viperinus Thomas

Central Argentina azarae Thomas

mendocina Philippi pundti Nehring

bergi Thomas

pontifex Thomas

talarum talarum Thomas

talaram antonii Thomas

talarum recessus Thomas porteousi Thomas

emilianus Thomas

Southern Argentina

haigi haigi Thomas

haigi lentulus Thomas

sericeus Allen

fodax Thomas

colburni Allen

Los Sombreros, Sierra Tontal, 60 kilometers west of San Juan, Prov. San Juan, Argentina. 2,700 meters Concepcion, Prov. of Tucuman, Argentina

Tablelands above Norco, near Vipos,Dept. of Trancas, Tucuman, Argentina. 2,500 meters

Central pampas, lat. 37° 45′ S., long. 65° W., 780 kilometers southwest of Buenos Aires, Province Buenos Aires, Argentina. (Not Sapucay, Paraguay.) See also Rusconi, 1928

Mendoza, Argentina

Alejo Ledesna, southern Cordoba, Argentina

Cruz de Eje, Salina District, central Cordova, Argentina

"East side of the Andes near Fort San Rafael, Province of Mendoza," Argentina

"Los Talas," Ensenâda, La Plata, Argentina

"Los Yngleses" ranch, district of Ajo, inland of Cape San Antonio, halfway between La Plata and Mar del Plata, eastern Buenos Aires, Argentina

Bahia Blanca, Argentina

Bonifacio, 36° 40′ S., 62° W., southwest Buenos Aires, Argentina

Chos Malal, lat. 37° S., upper Rio Nequen, Prov. Nequen, Argentina. 605 meters

Maiten, western Chubut, Argentina. 700 meters

Pilcañeu, Upper Rio Negro, Argentina. 1,400 meters

Cordilleras, upper Rio Chico de Santa Cruz, Patagonia

Valle de Lago Blanco, cordillera region of southern Chubut, Patagonia. (46° S., 71° W.)

Arroyo Aike, basalt canyons, 50 miles southeast of Lake Buenos Aires, Patagonia osgoodi Allen (new name for robustus Allen, preoccupied by robustus Philippi) Rio Chico de Santa Cruz, near the Cordilleras, Patagonia

Magellan

magellanicus Bennett fueginus Philippi neglectus Nehring Port Gregory, Straits of Magellan Eastern Island of Tierra del Fuego Patagonia

Chile

1820.

fulvus Philippi atacamensis Philippi robustus Philippi

pallidus Philippi pernix Philippi chilensis Philippi maulinus Philippi Desert of Atacama, Chile
Desert of Atacama, Chile
"Canchones" near Pica, Prov. of
Tarapaca, Chile. 1,200 meters
Breas, desert of Atacama, Chile
Near Aguas Calientes, Chile
Linares, Chile
High Andes of Prov. of Maule, Chile

ECHIMYIDAE

Proechimys Allen

TAXONOMIC HISTORY

1817. Desmarest described (pp. 59-60) Echimys cayennensis and Echimys setosus (subgenus Trinomys).

Lichtenstein, probably with a *Proëchimys* in mind, proposed (pp. 192–196) the name *rufa* for the RAT EPINEUX of Azara (a *Euryzygomatomys*) and described *Loncheres myosuros*, allied to "*rufa*." The colored figure (Pl. I, fig. 2) of *myosuros* is that of a *Proëchimys* in gray juvenile pelage.

1830. Rengger described (pp. 236–237) *Echimys longicaudatus*. 1830. Lichtenstein wrote of and figured (Pl. xxxvi and text)

two spiny rats, both of which from his drawings appear to me to be *Proëchimys*. The first of these he referred to *spinosus* (=the RAT ÉPINEUX of Azara, a *Euryzygomatomys*); the second he interpreted as *longicaudatus* Rengger, renaming it, however, as follows: in the text *leptosoma*, with the names *myosuros* Lichtenstein (1820) and *longicaudatus* Rengger in the synonymy, on the plate *cinnamomeus*, with *myosuros* written beneath.

The 1830 illustration was, however, taken from an adult animal, whereas that of 1820 (*myosuros*) was drawn from an immature specimen.

It becomes clear then that in Lichtenstein's account, apart from *Euryzygomatomys spinosus*, we have to consider three rather long-tailed animals, which may or may not be synonymous:

longicaudatus Rengger

From north of Paraguay (20° S. and practically the Matto Grosso of today)

Apparently from Bahia and São

leptosoma or cinnamomeus Lichtenstein

Paulo

muosuros Lichtenstein

Also from Bahia

1838a.

Isidore Geoffroy St. Hilaire, in his review of the spiny rats (extracted pp. 122-127) described *albispinus*, (a rather heavily spined *Proëchimys* of the subgenus *Trinomys*).

1840.

Isidore Geoffroy St. Hilaire, in the full text of his review of the spiny rats (pp. 1-57), discussed the following four *Proëchimys: setosus*, cayennensis, myosurus, and albispinus.

Longicaudatus Rengger (1830) and leptosoma Lichtenstein were considered synonyms of myosurus.

1841.

Lund described (p. 245) Loncheres elegans.

1841.

Pictet wrote (pp. 143–153) upon the age variations of cayennensis and also redescribed it (pp. 154–156).

His view was that setosus, cayennensis, and myosurus were more or less synonymous and represented age differences only. His plates (I-III) showed one young animal, one with the 4th molar erupting, and one fully adult, and also the progressive development of spines.

He considered that the juvenile corresponded to setosus, the young adult to cayennensis, and the old adult to myosurus. He wrote next (pp. 152-153) a complete synonymy, based upon the above conclusions, of cayenensis (oldest name), including in it also longicaudatus.

Pictet described (pp. 154-156) the skeleton of cayenensis.

1843.

Wagner, under the emended term "Echinomys" (III, pp. 339-347), employed "leptosoma Brants" for the species of Proëchimys united by Pictet (1841) under

¹Brants had drawn his description (pp. 150-152) from Lichtenstein (1820).

cayennensis. He described (p. 343) E. fuliginosus and included under the above heading albispinus and hispidus Geoffroy (a spiny, short-footed form. Not Proëchimys).

"Brachyurus Rengger" (= Euryzygomatomys spinosus?) was also placed under "Echinomys."

1845. Tschudi wrote of (pp. 174-175) "Echinomys leptosoma."

1848. Waterhouse treated (pp. 332–351) cayennensis, with synonyms setosus, longicaudatus, and fuliginosus; albispinosus [sic]; and "brachyurus" under Echimys.

1854. Burmeister discussed (pp. 199–202) myosurus under "Echinomus."

1858. Tomes recorded (p. 548) "Echimys cayennensis" from Ecuador, later (1860) redescribed as Echimys semispinosus.

1860. Tomes described (pp. 265-268) Echimys semispinosus, based upon his "cayennensis" of 1858 and on additional material.

1876. Günther described (pp. 745–747), besides species not referable to *Proëchimys*, *Echimys dimidiatus*, and *Echimys brevicauda*.

He remarked that *inermis* and *brachyurus* of Waterhouse (not *inermis* of Pictet which was a *Cercomys*) were probably the same as *brevicauda*.

1879b. Jentink described (pp. 97–98) Echimys macrourus.

1881 (1880). Trouessart (pp. 179–180), under Echimys (Thricomys), synonymized inermis (a Cercomys) and brachyurus Waterhouse with brevicauda. Under E. (Echimys) he listed semispinosus, macrurus (emended), albispinosus, dimidiatus, and cayennensis. Under the last, either as subspecies or in synonymy he placed myosurus, leptosoma, anomala,¹ cinnamomeus, elegans, setosus, fuliginosus, and longicaudata.

1883. Pelzeln wrote (pp. 66-67) of Echimys cayennensis.

1888. Winge discussed (pp. 84–88) "cajennensis" [sic].

1889. True recorded (p. 467) "Echinomys semispinosus" from Nicaragua. (Probably a Hoplomys?)

1893. Allen and Chapman described (pp. 223-227) Echimys trinitatis (later made the type of Proëchimys).

¹Various authors placed anomala Kuhl (1820), p. 72, in the Echimyidae. I see no reason to consider it other than a *Heteromys*, probably *H. anomalus* (Thompson) of Trinidad and eastern Venezuela.

1898a.

1898.

1899b.

1900a.

1900b.

1896. Thomas described (pp. 312–313) Echinomys centralis (a Proëchimys).

1897c. Thomas described (pp. 550–551) *Echimys gymnurus* (a *Hoplomys*).

Thomas recorded (pp. 243-245) the discovery of what he believed to be the type of "*Echimys semispinosus*" (based upon Fraser's handwriting), and he described as new *E. chrysaeolus*.

Trouessart again placed (p. 607) brevicauda in Thricomys.

Cayennensis, with various synonyms and anomalus

Kuhl as a subspecies, together with setosus, cinnamomeus, longicaudatus, fuliginosus, macrurus [sic]

Jentink, and others were recognized under the genus

Echimys.

1899a. J. A. Allen described (pp. 198–200) Echimys mincae, E. urichi, and E. canicollis.

1899b. Thomas described (pp. 282–283) Echimys decumanus. 1899c. Thomas described (pp. 381–382) Echimys cherriei.

J. A. Allen erected (p. 264) the genus Proëchimys with type Echimys trinitatis. "The following, besides other species, seem probably referable to Proëchimys": cayennensis, hispidus (a Mesomys), setosus, albispinus, dimidiatus, ferrugineus (a Mesomys), semispinosus, centralis, chrysaeolus, decumanus, gymnurus (a Hoplomys), trinitatis, canicollis, urichi, mincae, and cherriei.

Thomas described (pp. 219–221) Proëchimys rosa, P. centralis panamensis, and P. centralis chiriquinus.

Thomas, remarking on brevicauda Günther, wrote (p. 301) that the skin and skull from Chamicuros, Huallaga River, Peru (received in 1869), ought to be treated as type and not the "adult male in spirit," since "there is unquestionably great doubt as to their specific agreement."

1900b. Thomas described (pp. 300–301) *Proëchimys simonsi*. 1901. Bangs described (pp. 640–642) *Proëchimys burrus*.

1901b. Thomas described (pp. 27–28) Proëchimys quairae.

1901d. Thomas doubtfully recorded (p. 152) from British Guiana "P. cayennensis (Desmarest)." He stated that they belonged in "the same rufous groups as P. cherriei,

urichi, trinitatis," etc. These same animals were described later (1903d) as P. vacillator.

- 1901f. Thomas described (pp. 531–532) Proëchimys roberti. "It no doubt represents in southern Brazil the Paraguayan P. longicaudatus Rengger, and the Bolivian P. bolivianus."
- 1901g. Thomas described (pp. 537-538) Proëchimys bolivianus, allied to simonsi. He remarked upon the "trifling" but "locally quite constant" cranial differences in Proëchimys.
- 1902c. Thomas described (pp. 140–141) Proëchimys securus, "allied to P. bolivianus."
- 1903d. Thomas described (pp. 490–491) Proëchimys vacillator, "allied to P. cherriei" (=specimens determined earlier (1901d) as "P. cayennensis"). He had just received a series of topotypical cayennensis. He mentioned the "variation in the number of laminae to the posterior molars."
- 1904b. Thomas described (pp. 195–196) Proëchimys oris, "allied to P. cayennensis and P. roberti."
- 1905. Bangs described (pp. 89–90) Proëchimys gorgonae, "apparently nearest to P. centralis panamensis."
- 1905a. Thomas described (pp. 587–588) Proëchimys goeldii, comparing it with oris and cayennensis.
- 1905b. Thomas described (pp. 312–313) Proëchimys warreni, related to cherriei.
- 1911. Goldman described (pp. 238–239) Proëchimys steerei. He contrasted it with "semispinosus" and trinitatis.
- 1911b. Thomas described (pp. 252–255) Proëchimys iheringi, allied to albispinus, P. gularis allied to brevicauda and P. semispinosus calidior.

The type of semispinosus Tomes is B.M. 7.1.1.173.

- Goldman attempted (p. 94) to show that *Cercomys* and *Proëchimys* were congeneric and that "*Cercomys* should replace *Proëchimys* as the generic name at least for the species having three enamel islands in the crowns of the first and second upper molars." (See Thomas, 1912d, in reply.)
- 1912b. Goldman gave (p. 186) precise locality of *Proëchimys* steerei (see 1911).

1915.

1916a.

1916c.

1921c.

1912. Osgood described (pp. 56-57) Proëchimys ochraceus, which he compared with guairae canicollis and cherriei.

1912d. Thomas, replying to Goldman's paper (1912a), contended (pp. 115–116) that *Ceromys* was not a *Proëchimys* but equal to *Thrichomys*.

He concluded that the original *Cercomys cuni*cularius skin had a *Proëchimys* skull wrongly assigned to it (which Cuvier figured).

1913. J. A. Allen described (p. 479) Proëchimys o'connelli, compared with chrysaeolus and cherriei.

1914a. Hollister described (p. 57) Proëchimys rubellus, compared with centralis.

1914a. Osgood described (p. 141) Proëchimys poliopus, compared with urichi, ochraceus, mincae, and canicollis.

1914b. Osgood remarked (pp. 168–169) upon brevicauda and two other varieties which he did not name, all from Yurimaguas, Peru.

1914. Ribeiro described (pp. 42–43) Proëchimys leucomystax.
 1914b. Thomas described (pp. 60–61) Proëchimys centralis columbianus.

J. A. Allen described (pp. 629-630) Proechimys kermiti. He compared it with centralis and semispinosus.

J. A. Allen mentioned (p. 206) that, according to Thomas, the type locality of *semispinosus* Tomes was Gualaquiza, Ecuador (on back of label).

J. A. Allen described (p. 523) *Proëchimys boimensis* of the Rio Tapajoz.

Thomas, writing of *Proëchimys* from southeastern Brazil (pp. 140–143), divided the genus into two subgenera, *Proëchimys* and *Trinomys*, based, among other characters, on the number of laminae in the cheek teeth. He designated *Proëchimys albispinus* genotype of *Trionomys*.

He described as new Proëchimys (Trinomys) albispinus sertonius.

The south Brazilian species mentioned by Thomas were allocated as follows:

Proëchimys, subgenus

roberti iheringi dimidiatus Trinomys, subgenus

setosus albispinus albispinus albispinus sertonius

He attempted to fix the type locality of dimidiatus Günther as Rio de Janeiro and discussed the status of the names setosus, myosuros, cinnamomeus, elegans, fuliginosus, and albispinus.

1923b.

Thomas described (p. 694) Proëchimys pachita, allied to P. brevicauda.

1924b.

Thomas described (p. 534) Proëchimys hilda, compared with brevicauda, gularis, pachita, and semispinosus.

1926d.

Thomas described (pp. 162-164) Proëchimys hendeei and Proëchimys rattinus, both with blackish, scarcely spinous fur. ". . . the two seem to form a special group of the genus."

1927a.

Thomas published (p. 553) as lectotype of brevicauda Günther, B. M. 69.3.31.7 from Chamicuros, Rio Huallaga, Peru, and "lectoparatype" B. M. 66.1.29.8, from Upper Amazons.

1927e.

Thomas, under *Proëchimys pachita* (p. 604), pointed out the variability of Peruvian species of *Proëchimys*.

1928a.

Thomas wrote (p. 262): "The bewildering instability of these spiny rats makes it at present impossible to sort them according to locality into separate species, subspecies or local races. Whether they represent the forms which have been called brevicauda, simonsi, pachita, or hilda, they all seem too variable to distinguish at all constantly from each other."

REMARKS

This genus is one of the most definite and easily recognized of the group. Since its erection by Allen (1899b) no cases of wrong generic assignation have occurred with respect to it. Old species were usually described under "Echimys" or "Echinomys" and a few under "Loncheres." Despite its easy recognition there is no doubt that the genus with its numerous species will present a problem of the first magnitude to its reviser.

GENOTYPE

Proëchimys Allen

Type by original designation: *Echimys* trinitatis Allen and Chapman

LIST OF NAMED FORMS WITH TYPE LOCALITIES

Proëchimys (Proëchimys) Allen

Central America, Colombia, and Ecuador

rubellus Hollister

centralis centralis (Thomas)

centralis panamensis Thomas centralis chiriquinus Thomas

centralis columbianus Thomas

burrus Bangs chrysaeolus (Thomas)

mincae (Allen)

canicollis (Allen)

gorgonae Bangs ochraceus Osgood

semispinosus calidior Thomas

decumanus (Thomas)
rosa Thomas

Orinoco, Guiana, and Trinidad

cayennensis (Desmarest) macrourus (Jentink) vacillator Thomas warreni Thomas

urichi (Allen)

guairae Thomas trinitatis (Allen and Chapman) cherriei (Thomas)

o'connelli Allen poliopus Osgood

Western Amazonia

semispinosus semispinosus (Tomes)

gularis Thomas

brevicauda (Günther) simonsi Thomas Angostura Valley, Costa Rica San Emilio, southern end of Lake Nicaragua, Nicaragua

"Savanna near Panama," Panama Bogava, Chiriqui, Panama. 250 meters

Condoto, Choco, western Colombia. 300 feet

San Miguel Island, Panama Muzo, north of Bogotá, Colombia Minca, Santa Marta district, Colombia

Bonda, Santa Marta district, Colombia

Gorgona Island, Colombia

El Panorama, Rio Aurare, Zulia, Venezuela

San Javier, Lower Rio Cachavi, northwestern Ecuador. 60 feet Chongon, Prov. Guayas, Ecuador Santa Rosa, southwest Ecuador

Guiana

Surinam

Kanuku Mts., British Guiana Comaccka, 80 miles up Demarara River, British Guiana

Quebrada Seca, Prov. Sucre, Venezuela

La Guaira, Venezuela Princestown, Trinidad

Munduapo, Upper River Orinoco, Venezuela

Villavicencio, Colombia. 1,600 feet San Juan de Colon, State of Tachira, Venezuela. 2,500 feet

Eastern Ecuador (Gualaquiza. See Allen, 1916a)

Canelos, Rio Bobonaza, Prov. del Oriente, Ecuador

Chamicuros, Huallaga River, Peru Perene River, Prov. Junin, Peru. 800 meters

Puerto Leguia, Rio Pachita, Peru.

San Lorenzo, Rio Marañón, just

Puco Tambo, 50 miles east of Chacha-

above mouth of Rio Huallaga,

2,000 feet

Peru. 500 feet

1817.

1822a.

1838a.

pachita Thomas

hilda Thomas

hendeei Thomas

poyas, Peru. 5,100 feet Tushemo, Masisea, Rio Ucavali, rattinus Thomas Peru. 1,000 feet bolivianus Thomas Mapiri, Upper Rio Beni, Bolivia. 1,000 meters Charuplaya, Securé River, just north securus Thomas of 16° S., Bolivia. 1,350-1,400 meters Hyutánaham, north side of Rio Purus, steerei Goldman Brazil kermiti Allen Lower Solimões, Brazil Eastern Amazonia aoeldii Thomas Santarem, Rio Tapajoz, Brazil boimensis Allen Boim, Rio Tapajoz, Brazil Igarapé-Assu, near Pará, Brazil oris Thomas Brazil dry belt,—Matto Grosso,—southern Bolivia elegans (Lund) Lagoa Santa, Minas Geraes, Brazil roberti Thomas Rio Jordão, Araguary district, southwest Minas Geraes, Brazil longicaudatus (Rengger) North of Paraguay (20° south) Matto Grosso, Brazil leucomystax Ribeiro Utiarity, Rio Papagaio, Matto Grosso, Brazil Southern Brazil, Paraguay myosuros (Lichtenstein) Bahia, Brazil Bahia and São Paulo, Brazil leptosoma (Lichtenstein) = cinnamomeus (Lichtenstein) fuliginosus (Wagner) Brazil dimidiatus (Günther) South Brazil (Thomas, 1921c) iheringi Thomas Island of São Sebastian, São Paulo, Brazil

Subgenus **Trinomys** Thomas
Taxonomic History

Desmarest described (p. 59) Echimys setosus.

125) as new Echimus albispinus.

Desmarest remarked (p. 293) further on Echimys setosus.

Geoffroy St. Hilaire, in the abstract of his 1840 paper, listed (p. 124) *Echimys setosus*, and described (p.

1840. Geoffroy St. Hilaire in his revision of the spiny rats, wrote (p. 52) of *E. setosus* and (p. 53) *E. albispinus*.

1841. Pictet expressed the view (pp. 143–153) that setosus was a juvenile of cayennensis.

1848. Waterhouse treated (pp. 339-340) setosus as a synonym of cayennensis and wrote (pp. 341-342) of "albispinosus" [sic].

1881 (1880). Trouessart placed (p. 180) setosus in the synonymy of elegans (a Proëchimys). Both elegans and albispinus were listed under Echimys (Echimys).

1899b. J. A. Allen placed (p. 264) both setosus and albispinus in his genus *Proëchimys*.

1921g. Thomas, writing of south Brazilian spiny rats, erected (pp. 140–143) *Trinomys*, new subgenus of *Proëchimys*, with type of *Proëchimys albispinus*.

The subspecies *albispinus sertonius* was described as new.

The species setosus was also placed in *Trinomys*.

GENOTYPE

Trinomys Thomas

Type by original designation: *Echimys albispinus* Geoffroy

LIST OF NAMED FORMS WITH TYPE LOCALITIES

Proëchimys (Trinomys) Thomas albispinus albispinus (Geoffroy) albispinus sertonius Thomas

Ilha de Deos, near Bahia, Brazil Lamarão, Bahia, 70 miles north of Bahia City, Brazil. 300 meters "Brazil" (Geoffroy)

setosus (Desmarest)

HOPLOMYS Allen

TAXONOMIC HISTORY

1889. True recorded (p. 467) "Echinomys semispinosus" from Nicaragua.

1897c. Thomas described (pp. 550-551) Echimys gymnurus.

1908. J. A. Allen erected (pp. 649-652) Healennes with

J. A. Allen erected (pp. 649-652) Hoplomys with new species H. truei. Hoplomys was contrasted with Proëchimys (particularly with the genotype trinitatis). "Echimys gymnurus Thomas is to be referred to this genus, and probably also Echimys subspinosus Tomes..."

In a footnote (p. 651) he showed that Thomas had suspected *gymnurus* of being generically distinct.

1912c.

Goldman described (pp. 10-11) Hoplomys goethalsi, compared with truei and gymnurus.

REMARKS

The distribution of this group is apparently closely comparable to that of *Diplomys*. Aside from the fact that *Proëchimys* is also present in Central America, *Hoplomys* seems to bear much the same distributional relation to *Proëchimys* that *Diplomys* does to *Isothrix*—i. e., it is excluded from the main part of South America by the Venezuelan-Colombian-Ecuadorian Andes.

GENOTYPE

Hoplomys Allen

Type by original designation: Hoplomys truei Allen

LIST OF NAMED FORMS WITH TYPE LOCALITIES

Hoplomys Allen

truei Allen Lavata, Prov. of Matagalpa, Nicara-

gua

goethalsi Goldman

Rio Indio, near Gatun, Canal Zone,

Panama

gymnurus Thomas

Cachavi, northern Ecuador, 170

meters

EURYZYGOMATOMYS Goeldi

TAXONOMIC HISTORY

1801.	Azara described (II, pp. 73-81) the RAT PREMIER OU	
	RAT ÉPINEUX (origin of spinosus Desmarest).	

- Azara reprinted (II, p. 76) under Espinoso, the above description.
- 1809. G. F. Cuvier, writing of the teeth of rodents, included in *Echimys* the lerot a queue dorée (an *Echimys*) and the "rat épineux de d'Azara."
- 1812. G. F. Cuvier, under "les Échimis," discussed (pp. 283-284) and figured (Pl. xv, fig. 14) the teeth of the RAT ÉPINEUX, compared with those of the LEROT A QUEUE DORÉE.
- 1812. G. L. C. F. D. Cuvier remarked (p. 18) upon "Les echimys." His figure (Pl. I, fig. 14) in "Ossement Fossiles" is identical with that on Pl. xv, 1812.

- 1814. Fischer listed (p. 105) Rattus spinosus, based upon the RAT ÉPINEUX.
- 1815. Illiger listed (p. 108) "? brachyura" (nomen nudum) under Loncheres. This probably constitutes the origin of the brachyura mentioned by Rengger (1830).
- 1817. Desmarest employed (pp. 57-58) Echimys spinosus for the Rat épineux.
- 1817. G. F. Cuvier again listed (I, pp. 194–195) under *Echimys*, chrysuros [sic] (an *Echimys*), and the RAT ÉPINEUX, which he called "l'Echimys roux."
- 1820. Lichtenstein proposed (pp. 187–192) the name Loncheres rufa for the RAT ÉPINEUX. He recapitulated the history of the species.
- 1822a. Desmarest again wrote (pp. 291–292) of *Echimys spinosus*.
- Rengger wrote (pp. 234–236) of spinosus Desmarest, with "Loncheres brachyura Illiger" in synonymy (see Illiger, 1815). Lichtenstein (Pl. xxxvi and text) claimed that Azara had confused a true spiny rat and a Ctenomys under his RAT ÉPINEUX. The "spinosus" described and figured by Lichtenstein appears to me to have been a Proëchimys. I find myself unable to agree with Geoffroy's (1840, p. 19) claim that the lengthened tail in Lichtenstein's figure was due to a shadow drawn in by the artist. The tail resembles that of Proëchimys.
- 1835. Brandt described (pp. 432–434) Hypudaeus guiara.
- 1838a. I. Geoffroy St. Hilaire listed (p. 124) spinosus in his *Echimys* (a generic group almost equal in scope to *Proëchimys*).
- 1840. Geoffroy St. Hilaire discussed (pp. 17–19) spinosus under Echimys. He classed it (p. 35) with species with the tail partly hairy and (p. 54) remarked that the cranial characters given by Cuvier in 'Ossements Fossiles' are not those of spinosus, as indicated, but probably of "Nelomys didelphoides."
- 1843. Wagner wrote (III, pp. 346-347) of "Echinomys brachyurus." He did not know Rengger's authority for ascribing the name to Illiger.
- Waterhouse also employed (pp. 345-348) the name brachyurus for Azara's Rat épineux. In his text,

however, "tail about as long as body" demonstrates clearly that the Bolivian animals of which he wrote were NOT spinosus. He thought that spinosus Rengger was distinct from Azara's rat.

Burmeister (pp. 205–209) concluded with Reinhardt that spinosus should be included with Mesomys, and that ecaudatus was merely a tailless spinosus. He suggested that guiara Brandt belonged in the group.

1881 (1880). Trouessart followed (pp. 178–179) Reinhardt and Burmeister in placing *spinosus* in *Mesomys*. *Guiara* was also doubtfully included.

Winge wrote (pp. 92–96) of and figured (Pls. vi; viii, figs. 5, 6) "Mesomys spinosus."

1899b. J. A. Allen attempted to show (pp. 257–264), on the basis of elimination and division of a genus containing two species, that *spinosus* was to be regarded as the type of *Echimys*.

1901. Goeldi erected (p. 179) Euryzygomatomys with type Echimys spinosus Rengger.

1909. Thomas (pp. 240-242) compared spinosus and laticeps (a Clyomys).

1916a. Thomas called attention (pp. 71–72) to Rattus spinosus Fischer (1814), suggesting that Rattus be used instead of Euryzygomatomys.

1916a. J. A. Allen showed (pp. 205–206) Rattus, which dated from Fischer, 1803 (for decumanus), to be unavailable to replace Euryzygomatomys.

1916b. Thomas admitted (p. 240) that Rattus could not replace Euryzygomatomys.

1916c. Thomas, remarking upon (pp. 300–301) Euryzygomatomys, separated the previously included species "Echimys" laticeps as a new genus Clyomys.

He described (p. 301) as new *Euryzygomatomys* catellus, which he pointed out might be only a subspecies of *spinosus*.

REMARKS

Why Goeldi fixed the type of this genus as *spinosus* Rengger, rather than *spinosus* Desmarest, is not clear. Perhaps some material of Rengger's still existed in the museums of Germany when he wrote. In any

case, *Echimys spinosus* Rengger, if not identical to *Echimys spinosus* Desmarest, is a homonym and without validity. If the two are identical, the type of *Euryzygomatomys* becomes equal to *spinosus* Desmarest.

I am persuaded that the short-tailed rats typified by *spinosus* are entitled at least to subgeneric recognition. The American Museum of Natural History possesses two, an adult from Villarica, Paraguay, and a juvenile from Serra Caparão, Brazil, of *Cavia*-like aspect and coloring which conform to Rengger's and Azara's (except the fine hairs on the spines) accounts. Our specimens are apparently fossorial, for the claws are strongly developed. Their molars resemble those of *Proëchimys*, at least superficially, but the skulls are short and broad and heavily built.

The range of the genus probably is throughout the pampa country of Paraguay, northern Corrientes, Parana, Santa Catharina, and Rio Grande do Sul, possibly in sandy areas. Certainly, it has nothing to do with *Mesomys ecaudatus*, with which Burmeister wished to synonymize it.

As we examine the writings of Cuvier, Desmarest, and Geoffroy on *spinosus*, there is evident a strong tendency to lengthen its tail somewhat, to identify it with some kind of *Proëchimys*, and to extend its supposed range to Cayenne. I suggest that no one of those authors had seen a specimen of what I believe to be true *spinosus*; though undoubtedly they had all seen *Proëchimys*. (German writers, however, may well have examined material of Rengger's.) Hence the gradual shift in color descriptions, and hence the name "Rat roux" of Cuvier.

I must admit that my location of guiara Brandt in this genus is determined chiefly by the shortness of the tail. In Brandt's description the animal is stated to be spiny and "octopollicaris." The molar teeth are not described. Possibly it should be associated with Clyomys laticeps.

GENOTYPE

Euryzygomatomys Goeldi

Type by original designation: *Echimys spinosus* Rengger

LIST OF NAMED FORMS WITH TYPE LOCALITIES

Euryzygomatomys Goeldi spinosus (Desmarest)

nstein?

=rufa Lichtenstein? =brachyurus Rengger? guiara (Brandt) catellus Thomas Atira, 8 leagues east of Asuncion, Paraguay

Ypanema São Paulo, Brazil Joinville, Santa Catharina, Brazil

CLYOMYS Thomas

TAXONOMIC HISTORY

1841.	Lund listed (p. 924) Loncheres laticeps (a nomen nudum).
1881 (1880).	Trouessart gave (p. 179) the following reference (prob-
	ably in a separately paged copy) to laticeps Lund:
	"Blik. Bras. Dyr., 4, p. 63." Apparently this was the
	same as appeared in Afh. K. Danske Vid. Selsk., 1842,
	IX, p. 199, where laticeps appears as a nomen nudum.
1888.	Winge stated (p. 143) "Loncheres laticeps Lund = Mesomys
	spinosus Desmarest."
1909.	Thomas described (pp. 240-242) laticeps, which had been
	used as a nomen nudum by Lund and again by Winge.
1916c.	Thomas erected (pp. 300-301) Clyomys with type species
	Echimys laticeps. He stated that he had been un-
	able to locate any description of laticeps by Lund.
	Therefore, on the basis of Winge's remark quoted
	above, he gave Winge as authority for the name.
	· · · ·

REMARKS

The mere fact that Winge quoted the nomen nudum, laticeps Lund, does not make the name valid (International Rules, 'Articles 21, 25'). In consequence laticeps must be attributed to Thomas who first described it.

SPECIES AND TYPE LOCALITY

Clyomys Thomas laticeps Thomas

1848.

Joinville, Santa Catherina, Brazil

CARTERODON Waterhouse

TAXONOMIC HISTORY

1841.	Lund described (pp. 99, 242) fossil remains of <i>Echimys</i>					
	sulcidens.					
1842.	Lund gave (p. 136) sulcidens the new name Aulacodus					
temminckii (a. synonym).						

Waterhouse employed (pp. 351–354) the generic term Carterodon for sulcidens.

1851. Reinhardt described (pp. 22–26) the living Carterodon sulcidens.¹

^{&#}x27;Translations of Reinhardt's letter appear in 1852, Arch. für Naturg., I, pp. 277-282 and in 1852, Ann. Mag. Nat. Hist., (2) X, pp. 417-420.

1854. Burmeister discussed (pp. 209–211) Carterodon sulcidens.

1888. Winge wrote (pp. 96-99) of Carterodon sulcidens.

GENOTYPE

Carterodon Waterhouse

Type by monotypy: Echimys sulcidens Lund

SPECIES AND TYPE LOCALITY

Carterodon Waterhouse sulcidens Lund

Lagoa Santa (fossil), Brazil. Reinhardt's recent animals came from "the open Pampas" (Lagoa Santa?)

CERCOMYS Cuvier

TAXONOMIC HISTORY

1829. Isidore Geoffroy St. Hilaire and Cuvier described and figured (III, Pl. Lx, and accompanying text) Cercomys cunicularius, generically related to "Equimys."

1832. G. F. Cuvier published (pp. 449-452) an anatomical description of *Cercomys* comparing it with "échimys," particularly dactylinus (a Dactylomys); cristatus (=chrysurus); and didelphoïdes.

He figured what he believed to be the teeth and skull of *Cercomys* (Pl. xvIII, fig. 1; Pl. xix, figs. 1 and 2). See discussion by Goldman, 1912a and Thomas, 1912d.

1841. Lund described (p. 98) Echimys apereoides, which he renamed, redescribed (pp. 242, 246), and figured (Pl. xxII and xXIII) as Nelomys antricola.

1843. Wagner wrote (III, pp. 349–350) of Cercomys cunicularius.

1843a. Pictet described (pp. 207–210) and figured *Echimys inermis*.

1845a. Wagner, when describing *Isothrix pachyura*, suggested (p. 146) that it might be the same as *antricola* Lund (= apereoides).

1848. Waterhouse wrote (pp. 304–305) of Cercomys cunicularius and (pp. 350–351) Echimys antricola, concluding that the latter must be close to inermis Pictet.

1854. Burmeister discussed (pp. 191–192) Cercomys. He considered Cercomys and Dactylomys members of the Capromyidae. He wrote (pp. 202–205) also of Nelomys antricola.

1912a.

1881 (1880). Trouessart proposed (p. 179) the generic term Thricomys to embrace the species antricola, with ynonyms apereoides, pachyurus (an Isothrix), and crassicaudus (= pachyurus); inermis; and brevicauda (a Proëchimys.)

1888. Winge further described (pp. 88–92) Nelomys antricola Lund, giving excellent figures (Pl. VIII) which show Proëchimys-like molars.

1898. Trouessart recognized (pp. 606–607) antricola and put apereoides in its synonymy.

1903c. Thomas described (pp. 227–228) Thricomys fosteri.

"... The genus ... has been recorded hitherto from one locality only, Lagoa Santa, where Lund obtained his 'Echimys apereoides,' afterwards renamed by him Nelomys antricola, under which term it is described in Winge's 'Rodents of Lagoa Santa.'"

1904a. Thomas described (pp. 254–255) Thricomys laurentius, "allied to apereoides."

Goldman attempted to show (p. 94) that *Cercomys* should replace *Proëchimys*. There is a very definite external resemblance between Lund's and Pictet's illustrations of *apereoides* and *inermis* and the many species of *Proëchimys*. I agree with Thomas (1912d), however, that Cuvier's (1832) figure represents an old skull and not a young one.

1912d. Thomas, replying (pp. 115–116) to Goldman (1912a), stated that Cuvier's figure was that of an old animal showing much crown wear and having the 4th upper molar lost. He believed, however, with Goldman, that the skull in question was that of a *Proëchimys*, suggesting erroneous association of that skull with the skin of *Cercomys*.

Thomas had borrowed the only skull in the Paris Museum assigned to *Cercomys* and found it to be a *Thricomys*. He concluded that *Cercomys* was equal not to *Proëchimys* but to *Thricomys*.

REMARKS

Much remains to be found out concerning this genus, with which I am unfamiliar personally. Quite apart from the question of dentition

(see Thomas, 1912d) the general likeness of the illustrations of cunicularius in Geoffroy and Cuvier, 1829, of antricola in Lund, 1841, and of inermis of Pictet, 1843a, to species of Proëchimys is, to say the least, striking, and this perhaps accounted in part for Goldman's (1912a) suggestions as to the probable identity of Cercomys and Proëchimys.

Recently Böker (1929, 1932) has discussed bipedal leaping adaptations of *Cercomys laurentius*. This fact indicates wide distinction from *Proëchimys*, which may be regarded as terrestrial waterside rats. Thomas (1904a) states that it (*laurentius*) frequents rocky places.

Cercomys apparently occurs throughout eastern Brazil from Pará to Paraguay.

GENOTYPE

Cercomys Geoffroy and Cuvier

Type by monotypy: Cercomys cunicularius Geoffroy and Cuvier

LIST OF NAMED FORMS WITH TYPE LOCALITIES

Cercomys Geoffroy and Cuvier

laurentius (Thomas)

cunicularius Geoffroy St. Hilaire and

Cuvier

apereoides (Lund)

= antricola Lund (new name)
inermis (Pictet)

fosteri (Thomas)

1830.

1832.

São Lourenço, near Pernambuco, Brazil

"capitanerie des Mines," Brazil. (Waterhouse gave Minas Geraes) Lagoa Santa, Minas Geraes, Brazil

Bahia, Brazil Sapucay, Paraguay

Mesomys Wagner

TAXONOMIC HISTORY

1817. Desmarest described (pp. 58-59) Echimys hispidus and Echimys didelphoïdes.

1822a. Desmarest wrote further (p. 292) of hispidus and didelphoïdes.

Lichtenstein determined (Pl. xxxv and text) as "Mus hispidus" a species subsequently renamed by I. Geoffroy armatus (an Echimys).

G. F. Cuvier discussed (pp. 450-451) and figured (Pl. xviii, fig. 2) the dentition of didelphoïdes, mentioning the proportions of the molar tooth rows and palate, "qui sont du double plus longues que larges, etc." Both the form of teeth themselves (as shown in his figure) and the above remark about the palate conform not to Mesomys, with its Proëchimys-like teeth, but to such species as chrysurus and blainvillei.

1841.

1843.

1845a.

1848.

1838a and b. Geoffroy St. Hilaire, in the abstract of his review of the Echimyidae, wrote of didelphoides under "Nelomys" and hispidus under "Echimys." He renamed "hispidus" Lichtenstein, armatus (an Echimys).

Geoffroy St. Hilaire in the full text of his revision of the spiny rats (see 1838a and b), besides discussing "Echimys" hispidus and "Nelomys" didelphoïdes, printed excellent colored plates of both, together with tooth diagrams of hispidus. The supposed teeth of didelphoïdes had already been depicted by Cuvier (1832).

Now, Geoffroys' illustration of the animal didel-phoïdes appears to me unquestionably very close to hispidus and ferrugineus. His diagram of the teeth of hispidus, moreover, shows Proëchimys-like teeth conforming to the present concept of Mesomys, yet in Cuvier's (1832) drawing the teeth of "didelphoïdes" show the elongated form and distinct transverse ridges of paleacea or chrysurus. It seems to me probable that some transposition of skulls may have taken place by which, under the specific name didelphoïdes, a Mesomys skin became associated with an Echimys skull.

1840. Wagner described (pp. 196–210) Loncheres obscura.

Pictet wrote (pp. 156–159) a detailed description of a skin of "Echimys hispidus." This was certainly a Mesomys of some species. It came from the province of Bahia.

Wagner treated under his division of Loncheres with scaly tails, armatus and obscura (also semivillosa which is not a Mesomys). In a footnote (III, p. 336) he considered didelphoïdes (a Mesomys) close to armata (an Echimys).

Wagner erected (p. 145) Mesomys, with single new species ecaudatus. This represented apparently the first separation of the heavily spined, short-footed, spiny rats. The words "cauda nulla" are clearly without diagnostic value, since it is now well known that many kinds of spiny rats are prone to lose their tails.

Waterhouse commented upon (p. 322) didelphoïdes, (p. 323) obscura, (p. 331) on Mesomys ecaudatus, and (p. 343) on "Echimys" hispidus.

1849. Reinhardt discussed (p. 110) Mesomys ecaudatus.

Wagner further discussed (pp. 293-295) Mesomys ecauda-1850. tus. He mentioned its being taken by Natterer from a hawk which was carrying it off.

1854. Burmeister placed (pp. 205-209) spinosus Desmarest (a Euryzygomatomys?) in Mesomys.

Günther described (pp. 750-751) Echimys ferrugineus. 1876.

Trouessart followed (pp. 178-179) Burmeister's views 1881 (1880). concerning Mesomys. But spinosus and guiara (both Euryzygomatomys?) were the only full species recognized, brachyurus, laticeps, and rufa being shown as subspecies of the former. Ecaudatus, the type, was placed in the synonymy of brachyurus.

Pelzeln remarked (p. 63) on Mesomys ecaudatus. 1883.

Winge discussed (pp. 92-96) "Mesomys spinosus." 1888.

Allen and Chapman mentioned (p. 226) the tendency for 1893. the tail to be lost in "Echimus."

Ihering described (p. 171) Mesomys thomasi (an Echimys). 1897. 1898.

Goeldi reviewed (pp. 253-255) the history of Mesomys ecaudatus.

> He averred that he had rediscovered a tailless spiny rat up the Rio Capim (some 800 miles east of Borba), which resembled a Cavia and which he believed to be ecaudatus Wagner.

Troughant listed (p. 608) under Mesomys the following: ecaudatus, spinosus (a Euryzygomatomys?), brachyurus (a Euryzygomatomys), rufa (a Euryzygomatomys?), and quiara (possibly a Clyomys). Obscurus was put in "Loncheres" and ferrugineus in "Echimys."

> J. A. Allen discussed (pp. 262-264) Mesomys. In his new genus Proëchimys he included the species hispidus and ferrugineus (both Mesomys).

Goeldi resumed (pp. 170-179) his discussion of Mesomys. He was no longer certain (p. 172) of the identity of his tailless rat with ecaudatus, admitting (p. 177) that it was really a tailless "Loncheres."

Next he adduced a number of examples of "Loncheres" and "Echinomys" which had by accident lost their tails, concluding that members of the family as a whole tended to lose the tail easily and that the 5th

1898.

1899b.

1901.

caudal vertebra (citing J. A. Allen, in Allen and Chapman, 1893) was weak.

After giving (pp. 177–178) a key to the spiny rat genera, he proposed entirely removing from scientific nomenclature "the hypothetical *M. ecaudatus.*"

- 1905. Trouessart completely changed his arrangement of 1898, now placing (p. 503) Mesomys in the synonymy of Echimys. Didelphoïdes was listed as a synonym of Echimys armatus; hispidus and ferrugineus were put in Proëchimys.
- 1905a. Thomas claimed (pp. 590–591) to have identified definitely *Mesomys* Wagner. (He mentioned Trouessart's misunderstanding of Allen's 1899b paper on *Echimys* and *Loncheres*.)

He had examined Goeldi's spiny rats from Marajó (see Goeldi, 1901), and decided that they were generically identical with *Mesomys*. He referred *ferrugineus* Günther also to *Mesomys*.

He drew up a "description of the genus" based upon Goeldi's Marajó material: Foot short and broad; spines heavily developed; tail long, well-haired; cheek teeth rounded as in *Proëchimys*. Probably arboreal.

- 1911a. Thomas described (pp. 607–608) Mesomys stimulax. "General characters as in M. ecaudatus, from which I think 'Echimys ferrugineus' Günth. cannot be separated."
- 1914b. Osgood recorded (pp. 169–170) four specimens of *Mesomys* ecaudatus from near Yurimaguas, Peru.
- 1914. Ribeiro (pp. 42–43) discussed "spinosus Desmarest."

 1916c. Thomas wrote (p. 298) that he had examined the
 - Thomas wrote (p. 298) that he had examined the type skull of *Echimys hispidus*, and found it "a *Mesomys*, apparently quite similar to *M. ecaudatus*, Wagn. As a result, the early and suitable name *hispidus* will happily replace the unfortunate term *ecaudatus*."

Again, writing (p. 298) of didelphoïdes, "There is no evidence to show that didelphoïdes even belonged to the restricted genus Nelomys." (Probably meaning the hairy tailed Echimys of this paper.)

1924b. Thomas described (pp. 535-536) Mesomys ferrugineus spicatus.

1926e. Thomas described (pp. 348-349) Mesomys leniceps, "an upland representative of the Amazonian M. ferrugineus."

REMARKS

Doubt as to the identity of the type ecaudatus has maintained great confusion through the years as to just what constituted the genus Mesomys. In recent years Thomas and Osgood seem to have reached a correct conclusion in referring to Mesomys, small, densely spinous, buff-brown-bellied rats with short, rather broad feet, slightly tufted tails and Proëchimys-like, rounded molars. Wagner's two descriptions (1845a, 1850) of M. ecaudatus agree perfectly with a small series of animals in the A. M. N. H. from scattered localities in Amazonia both east and west of the type locality. I took this animal on the upper Orinoco at the foot of Mt. Duida, but apparently it has not been reported yet from the llano region of Venezuela. The minimum east-west range of Mesomys is from the Tocantins to eastern Peru and Ecuador.

GENOTYPE

Mesomys Wagner

Type by monotypy: Mesomys ecaudatus Wagner

LIST OF NAMED FORMS WITH TYPE LOCALITIES

Mesomys Wagner

didelphoïdes (Desmarest)

hispidus (Desmarest)
obscura (Wagner)
ecaudatus Wagner
stimulax Thomas
ferrugineus ferrugineus (Günther)
ferrugineus spicatus Thomas

leniceps Thomas

Acquired by Paris Museum during
French military occupation of
Lisbon. Probably from Brazil
South America
"collected by Spix in Brazil"
Borba, mouth of Rio Madeira, Brazil
Cametá, Lower Tocantins, Brazil
Chamicuros, Rio Huallaga, Peru
Tushemo, near Masisea, Rio Ucayali,
Peru. 1,000 feet
Yambrasbamba, Amazonas, Peru.
6.500 feet

LONCHOTHRIX Thomas

TAXONOMIC HISTORY

1920c. Thomas erected (pp. 113-115) Lonchothrix, with type the new species Lonchothrix emiliae. "Skull closely similar to that of Mesomys."

REMARKS

Almost nothing is known of this newly discovered genus. It appears, like *Echimys*, to be arboreal. The American Museum of Natural History possesses a large topotypical series from the Rio Tapajoz and a couple of specimens from the Rio Madeira.

GENOTYPE

Lonchothrix Thomas

Type by original designation and monotypy: Lonchothrix emiliae Thomas

Species and Type Locality

Lonchothrix Thomas emiliae Thomas

Villa Braga, left bank Rio Tapajoz, just above first rapids, Brazil

Isothrix Wagner

TAXONOMIC HISTORY

1845a. Wagner erected (pp. 145–146) the genus *Isothrix*, with three new species, *bistriata*, *pachyura*, and *pagurus*. No type was designated.

1848. Waterhouse united (pp. 327–330) Nelomys pictus Pictet (an Echimys) with the type species of Isothrix of Wagner, making Isothrix proper a subgenus of Loncheres.

1850. Wagner discussed (pp. 286–293) his genus *Isothrix* in greater detail, and rediagnosed it. Species dealt with were *pagurus*, *bistriatus*, and *pachyurus* (renamed *crassicaudus*).

1852. Deville erected (pp. 353-361, Pl. xvi) Lasiuromys for his new species villosus. This genus is clearly identical with Isothrix.

1855. Gervais published (p. 109, Pl. xvII) a new colored figure of Lasiuromys villosus.

1876. Günther remarked upon (pp. 744–745, fig. 5) "Lasiuromys villosus."

1881 (1880). Trouessart made (p. 178) Isothrix a subgenus of Loncheres.

In its synonymy he put Lasiomys Burmeister (=Sigmodon). Species included were caniceps (a Diplomys), bistriata, pagura, picta (an Echimys), and villosus.

1883.

Pelzeln remarked (pp. 60–62) upon *Isothrix pachyura*, bistriata, and pagurus.

1899a.

J. A. Allen described (pp. 197–198) Isothrix rufodorsalis, compared with "Lasiuromys villosus" of Günther. (Rufodorsalis is probably a Diplomys.)

1899c.

Thomas described (pp. 382-383) Loncheres (Isothrix) bistriatus orinoci, thus treating Isothrix as a subgenus.

1905.

Trouessart still considered (p. 504) Lasiomys (a Sigmodon), synonymous with Isothrix and listed L. hirsutus Burmeister as a species of Isothrix.

Isothrix was held to be a subgenus of Echimys.

1912a.

Thomas recorded (pp. 88–89) the rediscovery (on the Rio Tapajoz, 300 miles east of type locality) of *Isothrix pagurus*.

1914. 1916. J. A. Allen compared (p. 388) *Isothrix* with *Thrinacodus*. Goldman fixed (p. 125) the type of *Isothrix* as *Isothrix*

bistriata Wagner.

He considered that the allied Panamanian species, Loncheres labilis Bangs, and Isothrix darlingi Goldman, both now in Diplomys, could be correlated with the genus Phyllomys Lund.

1916c.

Thomas would employ (p. 295) Isothrix, full genus, with type bistriata, "and with other included species villosa (which perhaps=bistriata), orinoci, picta (an Echimys), and pagura [I. pachyura Wagn., renamed later I. crassicaudus, was said to be probably the same as Lund's Nelomys antricola, which is a Cercomys]." Thomas thus apparently subscribed to the view that pachyura was a Cercomys and not an Isothrix.

1920f.

Thomas described (pp. 277–278) Isothrix bistriata negrensis, nearest to I. b. orinoci. He outlined the range of Isothrix bistriata.

1924b.

Thomas described (pp. 534–535) *Isothrix villosa molliae*, thus recognizing *villosa* (Deville) as a good species.

1928b.

Thomas reduced (p. 291) Isothrix villosa milliae to the synonymy of villosa and suggested that villosa "will prove to grade into the Rio Negro bistriata, of which it would form an Upper-Amazonian subspecies."

REMARKS

This genus appears to me to be a fairly sharply defined group of rodents. It extends through Amazonia from Peru to Pará. Through most of this region its north and south limits are undetermined, but it passes through the gap between the Guiana mountains and the Andes and is represented in the southern llanos of Venezuela by *Isothrix bistriatus orinoci*.

Northwest of the Andes in Colombia two species, darlingi and rufodorsalis, have been referred to *Isothrix*, but both are probably better considered as *Diplomys*.

GENOTYPE

Isothrix Wagner

Type by subsequent designation (Goldman, 1916): Isothrix bistriata Wagner

LIST OF NAMED FORMS WITH TYPE LOCALITIES

Isothrix Wagner

bistriatus bistriatus Wagner bistriatus orinoci Thomas bistriatus negrensis Thomas

pachyura Wagner pagurus Wagner villosus villosus (Deville)

villosa molliae Thomas

Rio Guapore, Brazil

Maipures, Upper Orinoco, Venezuela Acajutuba, Lower Rio Negro, near

its mouth, Brazil

Cuyaba, Matto Grosso, Brazil Borba, Rio Madeira, Brazil

Mission de Sarayacu, Rio Urubamba,

Peru

caniceps Günther. Loncheres labilis Bangs and Isothrix darlingi Goldman were suggested as also allied.

Tushemo, near Masisea, Rio Ucayali, Peru. 1,000 feet

DIPLOMYS Thomas

TAXONOMIC HISTORY

1876.	Günther described (pp. 745-747) Loncheres caniceps.			
1881 (1880).	Trouessart placed (p. 178) caniceps in Loncheres (Isothrix).			
1899a.	J. A. Allen described (pp. 197-198) Isothrix rufodorsalis,			
	and compared it with villosus (Günther) (an Isothrix).			
1901.	Bangs described (pp. 638–640) Loncheres labilis.			
1905.	Trouessart put (p. 504) caniceps and labilis in Echimys			
	(Isothrix).			
1913a.	Goldman described (pp. 12–13) Isothrix darlingi.			
1916b.	Thomas erected (p. 240) Diplomys with type Loncheres			

1916c. Thomas referred again (p. 296) to *Diplomys caniceps*, with allied species *labilis* and *darlingi*, adducing further reason for distinguishing *Diplomys* from *Nelomys* and giving a new diagnosis of *Diplomys*.

"It thus appears that the ranges of the genera of the present group are to a great extent separate, Nelomys being south Brazilian, Echimys and Isothrix occurring in Amazonia, and the countries to the northwards, while Diplomys is alone found in Colombia and Panama."

REMARKS

At present I regard *Diplomys* as an offshoot of *Isothrix*, restricted, as so many other mammalian groups are, to the Isthmian region and to Colombia north and west of the Andes.

GENOTYPE

Diplomys Thomas

Type by original designation: Loncheres caniceps Günther

LIST OF NAMED FORMS WITH TYPE LOCALITIES

Diplomus Thomas

caniceps (Günther) labilis (Bangs)

darlingi (Goldman)

rufodorsalis (J. A. Allen)

Medellin, Colombia

San Miguel Island, Panama

Marraganti (near Real de Santa Maria), Rio Tuyra, eastern

Panama

Onaca, Santa Marta District, Colombia

ECHIMYS Cuvier

TAXONOMIC HISTORY

1760. Buffon's earliest article on the Lerot (VIII, p. 183) contained no allusion to any spiny rat.

17—. Allamand, in the Amsterdam edition of Buffon, added (Suppl. IV, p. 164, Pl. LXVII) to the article on the Lerot an account of the Lerot a Queue Dorée (original description upon which chrysurus Zimmermann was based). I have not seen this edition.

1780. Zimmermann described (pp. 352–353) Myoxus chrysurus, which he founded upon the account of Allamand (type of Loncheres Illiger, 1811).

1785. Boddaert recorded (p. 127) Hystrix chrysuros.

1817.

- 1789. Buffon cited (Suppl. VII, pp. 283–288) Allamand's account.

 1809. G. F. Cuvier employed (p. 394) the technical generic name *Echimys*. This was apparently the earliest use of the name, which was composed of the "lerot a queue dorée" and of the "rat épineux de d'Azara" (a *Euryzygomatomys*?).
- 1811. Illiger erected (p. 90) the generic name Loncheres, including under it Loncheres paleacea (then a nomen nudum. The name should date from Lichtenstein, 1820) and Loncheres "chrysuros Lin. Gmel." [sic]. I have been unable to locate any mention of this species in either of the 1888 or 1889 editions of Linnaeus by Gmelin.
- 1812. G. F. Cuvier, under "les Echimis," discussed (pp. 283–285) the lerot a queue dorée and the "ratépineux" of Azara (a *Euryzygomatomys*?) and figured their teeth (Pl. xix, figs. 14 and 15).
- Desmarest (pp. 54-60) employed the technical generic term *Echimys*, with *Loncheres* Illiger a synonym. He attributed the name *Echimys* to Étienne Geoffroy St. Hilaire. The phrase "Le lerot a queue dorée en est le type" is clearly a designation of the type of *Echimys*.

He gave the LEROT A QUEUE DORÉE the new name cristatus, placing the older chrysuros [sic] of Zimmermann in synonymy.

Desmarest, crediting the names to Étienne Geoffroy St. Hilaire, went on to describe in addition: E. dactylinus (a Dactylomys); E. spinosus (a Euryzygomatomys); E. hispidus (a Mesomys); E. didelphoïdes (a Mesomys); E. cayennensis (a Proëchimys); and E. setosus (a Proëchimys).

- G. L. C. F. D. Cuvier, under "Les Echimys (*Echimys* Geoff.) Loncheres Illiger" (I, pp. 194–195) listed chrysuros [sic] and rat épineux of Azara. His idea of *Echimys* thus included at least *Echimys* and *Euryyzgomatomys*.
- 1820. Lichtenstein, writing under the heading *Loncheres* (pp. 187–196), drew up a description of *paleacea*, the *nomen* nudum of Illiger, 1811 (congeneric with chrysurus).

1830.

1832.

1837.

1840.

He re-diagnosed *chrysuros* [sic], claiming that he had seen a specimen in Amsterdam.

Finally, he entered upon a long discussion of the group of spiny rats as a whole.

1820. Kuhl, under *Loncheres*, wrote (p. 72) a brief diagnosis of paleacea (has this priority over paleacea Lichtenstein?) and anomala (a Heteromys).

1822. Fleming listed (II, p. 191) under *Echimys* the single species "*Hystrix chrysurus*." See "Remarks."

1822a. Desmarest recapitulated (pp. 290–293) under *Echimys* the data on "cristatus" (=chrysurus).

Lichtenstein wrote of and figured (Pl. xxxv and text)
"Mus hispidus." This rat Isidore Geoffroy St.
Hilaire declared misidentified and renamed armatus
(1838a and b). Lichtenstein's plate shows a heavyspined arboreal Echimys.

G. F. Cuvier discussed (pp. 450-451) and figured (Pl. xvIII, fig. 2) the dentition of "Echimys didelphoïdes" (a Mesomys). The teeth figured are not those of a Mesomys, but rather, judging from the transverse ridges, those of a true Echimys.

G. F. Cuvier reported a memoir (ms.?) by Jourdan (pp. 370–371), in which the genus *Nelomys* with new species *Nelomys blainvillei* was erected. It was shown that *cristatus* (=*chrysurus*) was congeneric with *blainvillei* and it was proposed to make *cayennensis* (a *Proëchimys*) "type" of "*Echimys*." Cuvier pointed out the vagueness of the definition of *Nelomys*.

1838a and b. Isidore Geoffroy St. Hilaire, in the excerpt of his review of spiny rats (pp. 122–127), recognized two genera *Echimys* and *Nelomys* (see full report, 1840).

For *Echimys dactylinus*, Geoffroy erected the new genus *Dactylomys*.

"Nelomys" semivillosus was described as new and the "hispidus" the Lichtenstein (1830) was renamed armatus.

I. Geoffroy St. Hilaire published (pp. 1-57) his full work upon the spiny rats, extracts of which had appeared in 1838. He stated *Echimys* to be a contraction of

¹A second, shorter report of the above work appeared in Revue Zoologique, 1838b, I, pp. 99-101.

Echinomys, going on then to review former work upon the group—particularly the unpublished labors of his father, Etienne Geoffroy St. Hilaire.

Aside from *Dactylomys*, he placed the described spiny rats in two genera "*Echimys*" and "*Nelomys*," as follows:

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"Echimys"
setosus (a Proëchimys)
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cayennensis (a Proëchimys) spinosus (a Euryzygomatomys) hispidus (a Mesomys) albispinus (a Proëchimys) muosuros (a Proechimys)

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"Nelomys"
cristatus (=chrysurus) (an
Echimys)
paleaceus (an Echimys)
blainvillei (an Echimys)
didelphoïdes (a Mesomys)
armatus (an Echimys)
semivillosus (an Echimys)
```

Thus his conception of "Echimys" comprised essentially the Proëchimys-toothed genera, Proëchimys, Euryzygomatomys, and Mesomys, whereas in "Nelomys" he placed the more or less lophodont species of true Echimys plus one Mesomys (didelphoïdes). Probably the allocation of didelphoïdes was due to transposition of skulls, an Echimys skull being associated with a Mesomys skin. (See Cuvier, 1832, and under Mesomys see Cuvier, 1832, and Geoffroy, 1840.) So, with the exception of didelphoïdes, his "Nelomys" was equal to true Echimys.

In making this change he was probably influenced by the views of Cuvier (Jourdan), 1838a and b, on Nelomys paleaceus and Echimys cristatus. With the above two species and their allies assigned to "Nelomys" the remaining species (mainly Proëchimys) were lumped together in "Echimys."

He concluded that the relative hairiness or nakedness of the tail was of slight taxonomic value, but rather thought that differences in dentition and the length of the tarsus should be considered. On these latter characters he would separate his "Echimys" from "Nelomys." In the former the tarsus was long and rather slender; in the latter broad and short.

Wagner discussed (pp. 191–210) spiny rats at considerable length. He described *Loncheres obscura*, a spinous, scandent form near armatus.

1840.

Lund discussed (pp. 241-247) the genera of spiny rats. 1841. He erected (p. 243) the genus Phyllomys (Pl. xxi, figs. 12, 13) and recognized "Echimys," "Loncheres." and "Nelomys."

> He described (p. 245) Loncheres elegans (a Proëchimys) and (pp. 242, 246, Pls. xxII and xXIII) Nelomys antricola (a Cercomys).

> According to Waterhouse (1848) his Phyllomys equaled Loncheres Illiger (i.e., true Echimys); his "Echimys" equaled Dactylomys; and his "Loncheres" equaled "Echimys" of I. Geoffroy (i. e., Proëchimus + Euryzygomatomys + Mesomys, essentially).

> Thus the only one of Lund's genera pertinent to the genus *Echimys* is *Phyllomys*, a synonym of Echimus.

Pictet, after discussing (pp. 143-156) age characters, etc., 1841. of cavennensis (a Proëchimus), redescribed (pp. 156-159) a fully adult Echimys hispidus (a Mesomys).

Rüppell listed (p. 175) Loncheres unicolor, a nomen nudum.¹ 1842 (1845). 1842. Wagner described (pp. 360-361) briefly Loncheres macrura, L. nigrispina, and L. unicolor.

> Wagner, writing under *Loncheres*, considered (III, p. 330) Loncheres and Nelomys identical, but "Echinomys" distinct. Loncheres was classified into two divisions: tail hairy, and tail scaly. In "tail hairy" were placed paleacea; cristata, with chrysuros [sic] in synonymy; and blainvillei. In "tail scaly" appeared armata, obscura, and semivillosa. In a footnote (p. 336) he pointed out that he considered didelphoïdes (a Mesomys) closely related to armata.

Pictet described (pp. 203–206, Pl. I, II) Nelomys pictus, which judging from the figures of the teeth, was allied to chrysurus and paleacea.

> His Echimys inermis (pp. 207–210, Pl. III) was apparently a Cercomus.

Tschudi wrote (pp. 174-175) of Echinomys leptosoma (a Proëchimys).

1843.

1843a.

1845.

¹Wagner's allusion to "p. 31" (Archiv f. Naturg., 1842, I, p. 361) refers apparently to a separately paged reprint of Ruppell's article. *Unicolor* appears on the thirty-first page of the first Abtheilung which refers to "Säugethiere und deren Skelette."

1845a. Wagner described (p. 146) Loncheres grandis. He was doubtful of the generic allocation, but considered grandis near cristata.

1848.

Waterhouse recognized (pp. 312-351), apart from Cercomys, Dactylomys, and Carterodon, three main genera, with various subdivisions, which he termed Loncheres, Mesomys, and Echimys. In the first genus he placed "Loncheres proper," including cristata and allies, armata, obscura, semivillosa, grandis, macrura, nigrispina, and unicolor. Thus he kept the cristata group with the armata group. With those he combined "Isothrix" picta, bistriata (a true Isothrix), The second genus, Mesomys, was limited to The third genus, "Echimys" comprised ecaudatus.cayennensis, setosus, albispinosus [sic], hispidus, brachyurus, inermis, and antricola, i. e., mainly species of Proëchimus.

He commented (p. 330) upon Lund's (1841) genera as follows:

Phyllomys Lund = Loncheres Illiger
Echimys Lund = Dactylomys Geoffroy
Loncheres Lund = Echimys Geoffroy

He proposed the specific name *braziliensis*¹ for the animal characterized generically by Lund as *Phyllomys*.

1849. Reinh

Reinhardt discussed (pp. 110-115) Echimys, Loncheres, Phyllomys, and Echinomys. (Not seen by me.)

1850.

Wagner, under Loncheres (pp. 295–301), included two groups: one with hairy tails containing grandis, nigrispina, and unicolor; the second with naked tails, including macrura and armata.

1854.

Burmeister considered (pp. 193–199) the species cristatus and armatus and their allies under "Loncheres."

1860.

Tomes described (pp. 265–268) "Echimys" semispinosus (a Proëchimys).

1872b.

Hensel described (pp. 49-54) Phyllomys dasythrix.

1875.

Peters recorded (pp. 119-120) an additional specimen of "Nelomys pictus Pictet," considering it near Isothrix.

¹This name is currently attributed to Lund, but I cannot find that he used any specific name at all in his genus *Phyllomys*.

1893.

1876. Günther described (pp. 745–747) and figured Loncheres caniceps (a Diplomys); (pp. 747–748) Echimys dimidiatus (a Proëchimys); (pp. 748–750) Echimys brevicauda (a Proëchimys); and (pp. 750–751) Echimys ferrugineus (allied to hispidus and a Mesomys).

1879b. Jentink described (pp. 97–98) Echimys macrourus (a Proëchimys).

1881 (1880). Trouessart, in "Echimys Geoff. et F. Cuv., 1809," subgenus Echimys listed (pp. 176–178) no true Echimys. These (cristatus, with subspecies paleacea; blainvillei; armatus; dasythrix; semivillosa; macrura) were placed in Loncheres (Loncheres). Picta was put in Loncheres (Isothrix). Under blainvillei, he placed grandis, nigrispina, and unicolor as subspecies, and under armatus, brasiliensis, and didelphoïdes (a Mesomys). Obscura was listed as a subspecies of semivillosa and brasiliensis [sic] was placed in the synonymy of armatus.

1883. Pelzeln wrote (pp. 63–65) of Loncheres grandis, nigrispina, macrura, and armata.

He wrote (pp. 66-67) also of *Echimys cayennensis* (a *Proëchimys*).

1884. True recorded (pp. 550-551) the presence of a short-footed, strong-spined "Loncheres armatus" on the island of Martinique.

1887. Jentink wrote (p. 225) of *Echimys brevicauda* (a *Pro-*. *ëchimys*).

1888a. Thomas described (p. 326) Loncheres guianae, a stout-footed, strong-spined animal. He compared it with pagurus (an Isothrix).

1888. Winge discussed (pp. 80–84) "Loncheres armatus," a true Echimys as shown by his figure of the teeth.

Allen and Chapman recorded (pp. 220–227) "Loncheres guianae," and described Loncheres castaneus and Echimys trinitatis (subsequently made genotype of Proëchimys).

1895. Thomas, discussing (pp. 189–193) the names used by Gloger, 1842, in Gemein. 'Hand und Helfsbuch der Natur.,' p. 100, showed that *Enchomys* Gloger = *Echimys* Desmarest, 1817.

1899b.

- 1896. Thomas described (pp. 312–313) Echinomys centralis (a Proëchimys).
- 1897. Allen and Chapman synonymized (p. 22) their "Loncheres castaneus" with "L. guianae."
- 1897. Ihering described (p. 171) "Mesomys" thomasi.
- 1897c. Thomas described (pp. 550–551) Echimys gymnurus (a Hoplomys).
- 1898a. Thomas described (pp. 244–245) Echimys chrysaeolus (a Proëchimys).
- 1898. Trouessart made (pp. 604–606) few generic alterations in his list of 1881. However, grandis, nigrispina, unicolor, and obscura were given full specific rank. Brasiliensis was retained in the synonymy of armatus.
- 1899a. J. A. Allen described (pp. 198–201) Echimys mincae, Echimys urichi, and Echimys canicollis (all three Proëchimys).
- 1899a. Thomas described (p. 153) Loncheres punctatus, "may prove . . . allied to semivillosus."
- 1899b. Thomas described (pp. 282–283) Echimys decumanus, allied to semispinosus (a Proëchimys).
- 1899c. Thomas described (pp. 381–382) Echimys cherriei, compared with trinitatis (a Proëchimys).
 - J. A. Allen, after discussing the taxonomic history of *Echimys* and *Loncheres* (pp. 257–264), reached conclusions which may be summarized as follows: *Echimys* Cuvier was based upon *chrysurus* and *spinosus*. *Chrysurus* was type of *Loncheres*. Therefore, by elimination, *spinosus* became type of *Echimys*. In his opinion, then, *Loncheres* should be used to denote the generic group now being treated under the term *Echimys*.

Nelomys, its type being congeneric with chrysurus, was a pure synonym of Loncheres. Phyllomys was also held (p. 262) to be a synonym of Loncheres. Mesomys, "currently treated as congeneric with E. spinosus," was probably a pure synonym of Echimys (the Echimys of Allen).

Finally, Allen proposed the generic name *Proëchimys*, with type *trinitatis*, to contain the following additional species: *cayennensis*, *hispidus* (a *Mesomys*), setosus, albispinus, dimidiatus, ferrugineus (a Mesomys), semispinosus, centralis, chrysaeolus, decumanus, gymnurus (a Hoplomys), trinitatis, canicollis, urichi, mincae, and cherriei.

1901.

Bangs described (pp. 638–640) Loncheres labilis, a spineless stiff-haired form "related to L. caniceps Günther." It is diurnal and arboreal (a Diplomys).

1901.

Goeldi proposed (pp. 178–179) the generic name *Euryzy-gomatomys* for *Echimys spinosus* of Rengger. See Allen, 1899b.

1902b.

Thomas, under "Loncheres nigrispina Wagner," remarked (pp. 59-64) on a rat from the Serra do Mar, Paraná, Brazil, considering the belly color variable. "It is possible that Hensel's Phyllomys dasythrix and Lund's Phyllomys brasiliensis are also both specifically identical with the Paraná form."

1905.

Trouessart now listed (pp. 503-506) the entire series of species, chrysurus, blainvillei, guianae, dasythrix, etc., which he had formerly (1881) placed in Loncheres, in Echimys (Echimys), Loncheres was suppressed altogether. Thomasi appeared under Euryzygomatomys.

1909.

Thomas described (pp. 239–240) Loncheres medius, "intermediate between L. thomasi and L. dasythrix." He stated that thomasi "was first described as a Mesomys... but was later on erroneously referred by its founder to L. nigrispina."

"From all these three Wagner's L. nigrispina would appear to be distinguished. . . . "

He described (pp. 240–242) Echimys laticeps (now type of Clyomys), which was compared with spinosus Desmarest (a Euryzygomatomys). He pointed out that laticeps, had been used by Lund, but only as a nomen nudum.

1911.

J. A. Allen described (pp. 251–252) Loncheres carrikeri, compared with punctatus.

1913a.

Goldman described (pp. 12–13) *Isothrix darlingi* compared with *labilis* and *caniceps* (all *Diplomys*).

1914b.

Hollister described (pp. 143–144) Loncheres flavidus, "an insular form of Loncheres punctatus."

1916a.

Thomas called attention (pp. 71-72) to what he considered was the earliest generic name for Azara's RAT ÉPINEUX (now Euryzygomatomys), i. e., Rattus spinosus Fischer (1814).

He stated that Allen (1899b) had fixed the type of *Echimys* as *spinosus* Desmarest on the ground of elimination, but attempted to show earlier selection by Fleming (1822) of *chrysurus* as type of *Echimys*.

Consequently for the genus typified by Azara's Espinoso, Thomas wished to use *Rattus* Fischer, 1814, which antedated *Euryzygomatomys* Goeldi, 1901.

1916a.

J. A. Allen, replying (pp. 205–206) to Thomas (1916a), showed conclusively that Rattus, which dated back to Rattus Fischer, 1803 (employed for R. decumanus), was not available as the generic name of the "RAT ÉPINEUX."

Referring back to his own earlier paper (Allen, 1899b), he objected to the "selection" of *Hystrix chrysurus* by Fleming, 1822, on the grounds that Illiger, by taking *chrysurus*, one of the two species (the Lerot a queue doreé and Ratépineux) upon which *Echimys* Cuvier was originally based, as type of *Loncheres* (paleacea, nomen nudum, could be ignored), had left in *Echimys* only *spinosus*, which "automatically, under modern codes of nomenclature, became irrevocably its type." See my "Remarks."

1916.

Goldman, writing of Echimyidae with "soft or bristly (not spiny) pelage" (pp. 125–126), considered the Central American Loncheres labilis Bangs and Isothrix darlingi Goldman referable to Phyllomys Lund.

He recognized four species under *Phyllomys:* armatus (I. Geoffroy), with synonyms *hispidus* Lichtenstein and *brasiliensis* "Lund"; caniceps (Günther); labilis (Bangs); and darlingi (Goldman).

1916b.

Thomas, replying (p. 240) to Goldman (1916) pointed out that *Phyllomys* was antedated by *Nelomys*.

He erected *Diplomys*, with type *caniceps* Günther, suggesting that *labilis* and *darlingi* should be included with it.

"Other species of true Nelomys are brasiliensis, thomasi, medius, and dasythrix."

"Mr. Goldman unites brasiliensis with armatus Geof., but the latter is the Guiana red-checked species, a true *Echimys*, and my *Loncheres guianae* is no doubt synonymous with it."

He now admitted (p. 240) that *Rattus* was unavailable generically for *spinosus*, and remarked, "this animal will have to bear the burden of *Euryzygomatomys*. . . ." (Goeldi, 1901).

Thomas, again referring to Goldman's paper (1916), stated (pp. 294–297) that "Phyllomys" and "Loncheres" of Goldman were respectively Nelomys and Echimys.

He discussed (p. 295) "the type species of *Echimys*, *E. chrysurus*, Zimm."; "the closely allied but smaller . . . *E. paleaceus*, Licht."; and "the 'toro' of the Lower Amazons, *Echimys grandis*, Wagner" (all with hairy tails).

Also under Echimys he remarked upon the scalytailed forms as follows: guianae Thomas = E. armatus Geoffroy, of which castaneus Allen is also a synonym. The species semivillosus, punctatus, and carrikeri, were not allocated.

Writing (pp. 295–296) under *Nelomys*, he drew attention to the "four simple transverse laminae of the upper molars. . . . "

"All the species of the genus are spiny, for it now proves that the non-spinous species deserve generic separation from true *Nelomys*."

The specific names didelphoïdes, obscurus, and unicolor were not certainly identified (p. 297), but might all be equal to brasiliensis Lund. "There is no evidence to show that didelphoïdes even belonged to the restricted genus Nelomys" (p. 298).

Nigrispina, thomasi, and medius were alluded to under Nelomys.

Thomas described as new (p. 297) Nelomys lamarum, allied to dasythrix.

In view of the fact that the type of *Nelomys* (blainvillei) is congeneric with chrysurus, which Thomas held to be type of *Echimys*, and thus *Nelo-*

1916c.

1928c.

mys is a synonym of *Echimys*, the meaning of his writings (p. 298) about "the restricted genus *Nelomys*" is rather obscure.

1921. Anthony described (pp. 5-6) Echimys longirostris, compared with "armatus (= quianae = castaneus)."

1921e. Thomas described (p. 450) Echimys occasius, compared with armatus.

Knowing for a fact that Söderström of Quito obtained Almost all of his material from Indians, I take the liberty here of questioning the correctness of the locality given—Gualea, on the western slope of the Andes—for a true *Echimys*.

1928b. Thomas described (pp. 291–292) Echimys rhipidurus, compared with armatus and grandis.

He doubted the distinctness from armatus of longirostris Anthony.

Thomas described (pp. 409-410) *Echimys saturnus*, allied to *chrysurus* and compared with *grandis*.

REMARKS

Upon reviewing the early terminological history of the Echimyidae, it becomes abundantly clear that authorities of the day belonged to what may be termed French and German "schools." Neither school appears to have been much concerned with the work of the other, nor had international concepts regarding nomenclature advanced beyond the formative stage. Add to the above a certain amount of patriotic bias (the Napoleonic campaigns were only recently a thing of the past), and one sees readily why the respective proponents of *Echimys* and *Loncheres* steered as a rule such widely separated courses. Advocates of Echimys were the Cuviers (1809, 1812, 1817, 1832, 1837); Desmarest (1817, 1822a); I. Geoffroy (1838a and b, 1840). Supporters of Loncheres included Illiger (1811); Lichtenstein (1820, 1830); Kuhl (1820); Fischer (1829); Wagner (1840, 1842, 1843, 1845a, 1850); Burmeister (1854, 1879). The only other nationalities coming into the early echimyid picture are Swiss and Danish: of the former, Pictet (1841, 1843a) and Tschudi (1845). Pictet followed more or less the French school, but Tschudi collaborated largely with Lichtenstein. The Danes-Lund (1841, 1845), and Reinhardt (1849), aside from certain individual notions, threw in their lot with the Loncheres sympathizers. English, and American naturalists, excepting Waterhouse (1848), came

on the scene in an important way later. Depending upon which camp you adhered to, so *Loncheres* or *Echimys* was the accepted (but very ill-defined) generic term.

Modern standards of nomenclature, it is to be hoped, ignore all international policies, and we have now only to follow, if we can, the "Rules" and "Opinions" of the International Commission on Zoological Nomenclature. Per se *Echimys* Cuvier antedates *Loncheres*. The type of the latter, *chrysurus*, is beyond dispute.

So far as I can discover, the type of *Echimys* Cuvier, 1809, has never been correctly designated. Cuvier's genus contained the two species, lerot a queue dorée and rat épineux, respectively, named by Desmarest (1817) *cristatus* and *spinosus*. The former, however, had earlier been named by Zimmermann (1780) *Myoxus chrysurus*.

Echimys Desmarest (1817), although it included spinosus and cristatus (this last designated by Desmarest type of his genus), contained also five other species belonging to various modern genera. Consequently his genus and Cuvier's, although both were nominally based upon the ms. Echimys of Étienne Geoffroy St. Hilaire, had different limits and cannot now be considered strictly identical. Echimys Desmarest had cristatus named as its type; for Echimys Cuvier no type was designated by its author. It remains to review those arguments which have been advanced by various authors in their attempts to show designation of Cuvier's Echimys.

1.—J. A. Allen (1899b and 1916a) held that erection of *Loncheres* Illiger, 1811, with type *chrysurus=cristatus* automatically constituted designation of *spinosus*, the single remaining species in *Echimys* Cuvier, type of that genus. This view was maintained in 1899 on the basis of elimination, and in 1916 on the basis of division of a genus into two parts of full generic rank.

The "elimination" method is NOT one of those permitted under 'Article 30' of the International Rules on Zoological Nomenclature.

'Opinion 6' ("Rules," Int. Comm. Zool. Nomencl.), contrary to Dr. Allen's views of 1916a, does not apply to the present case. 'Opinion 6' reads: "When a later author divides the genus A, species Ab and Ac, leaving genus A, only species Ab, and genus C, monotypic, with species Cc, the second author is to be construed as having fixed the type of the genus A." In the present case A = Echimys Cuvier, 1809; C = Loncheres Illiger, 1911; $b = RAT \ EPINEUX \ Azara$, 1801 (spinosus Desmarest, 1817); $c = LEROT \ A \ QUEUE \ DORÉE \ (chrysurus \ Zimmermann, 1780 = cristatus \ Desmarest, 1817).$

Illiger did not divide *Echimys*, leaving *Echimys* only the RAT ÉPINEUX and *Loncheres*, monotypic, with species lerot a queue dorée. He did not even mention either the genus *Echimys* or the species rat épineux. As suggested by Isidore Geoffroy (1840, p. 3), Illiger probably had no knowledge of *Echimys* of Geoffroy père, and of Cuvier. He merely proposed *Loncheres* for two animals which it seemed to him required generic distinction (*paleacea*, *nomen nudum*, and "*Hystrix*" *chrysurus*). Compare this with Thomas's separation of *Myoprocta* from *Dasyprocta* to which 'Opinion 6' does apply.

In consequence of the foregoing I feel that I must differ from Allen and state that Illiger cannot be "construed as having fixed the type" of *Echimys*.

- 2.—Thomas (1916a) tried to show designation by Fleming (1822). Fleming in a few instances, e.g., Simia (p. 173), actually designated a type. In the case of Echimys (p. 191) he merely listed a name Hystrix chrysurus. Under 'Article 30' of the Int. Comm. Zool. Nomencl., "Rules," which calls for rigid construing of the words "select a type," Fleming's words cannot be taken as constituting selection. Precedent for this may be noted in 'Opinions 68 and 69,' where two others of Fleming's names are ruled on.
- 3.—Palmer (1904, p. 248), probably on the basis of "En restreignant ce nom aux éspèces analogues par leur organisation a l'Echimys setosus . . . " (I. Geoffroy St. Hilaire, 1840, p. 30), designated setosus Desmarest the type of Echimys Isidore Geoffroy St. Hilaire (1838a and b and 1840). The Echimys of this author was very different in scope from that of either Desmarest or of Cuvier. It was nearly equivalent to Proëchimys Allen, but contained spinosus, one of the two Cuverian species, and hispidus (a Mesomys). Chrysurus=cristatus, the other species of Cuvier, was placed by I. Geoffroy in his "Nelomys," Echimys Isidore Geoffroy, corresponding as it does to Proëchimys, should probably be considered as a homonym,—a generic term preoccupied by Echimys Cuvier. In consequence, it has no bearing upon Echimys Cuvier.

Summarizing, Allen did not designate the type of *Echimys* Cuvier. He did try unsuccessfully to show that Illiger had fixed the type. Neither Thomas nor Palmer fixed the type, nor, so far as I can discover, has anyone else. I therefore designate as the type species of *Echimys* Cuvier, 1809, the LEROT A QUEUE DORÉE (=Myoxus chrysurus Zimmermann, 1780, = *Echimys cristatus* Desmarest, 1817).

In consequence, Loncheres Illiger, also with type chrysurus, becomes a pure synonym of Echimys; and Euryzygomatomys Goeldi, 1901, be-

comes available for *spinosus* Rengger (its type). Regarding this last, there remains, however, a further question whether *spinosus* Rengger equals *spinosus* Desmarest. If *spinosus* Rengger is not equal to *spinosus* Desmarest it is a homonym and must be dropped. If it is equal, then the type of *Euryzygomatomys* becomes equal to *spinosus* Desmarest.

Although I have not seen a number of the east Brazilian species, I suspect that *Echimys* will be found to be separable into two definite groups: the one containing very large species with hairy tails, examples *chrysurus*, *blainvillei*, and *grandis*; the other including smaller scalytailed species such as *armatus*, *punctatus*, *carrikeri*, *flavidus*, *semivillosus*. These groups seem to a limited extent to be mutually exclusive geographically. The naked-tailed division extends from the Amazon north to the Caribbean Sea, but also for an undetermined distance into eastern Brazil. The hairy-tailed group occupies mainly the country south and east of the eastern quarter of the Amazon, sending an offshoot (*chrysurus*) along the coast into the Guianas.

GENOTYPE

Echimys Cuvier, 1809

Type by subsequent designation (see discussion above): Myoxus chrysurus Zimmermann, 1780

LIST OF NAMED FORMS WITH TYPE LOCALITIES

Echimys Cuvier

Hairy-tailed group

chrysurus (Zimmermann)
Synonym: cristatus (Desmarest)

paleacea (Lichtenstein)

blainvillei (Cuvier)

pictus (Pictet)
lamarum (Thomas)
grandis (Wagner)

braziliensis (Waterhouse)

(Specific name given to the Phyllo-

mys of Lund)

dasythrix (Hensel) rhipidurus Thomas saturnus Thomas Surinam

Province of Pará, Brazil

Small Island, near Bahia, on coast

of Brazil Bahia, Brazil

Lamarão, Bahia, Brazil

Managueri, Upper Rio Amazon,

Brazil

Lagoa Santa, Minas Geraes, Brazil

Rio Grande do Sul, Brazil Pebas, Rio Marañón, Peru

Rio Napo, Province del Oriente,

Ecuador. 3,300 feet

1832.

Naked-tailed group

Venezuela, Colombia, Guiana, Trinidad, etc.

semivillosus (I. Geoffroy)
punctatus (Thomas)
carrikeri (Allen)
flavidus (Hollister)
armatus I. Geoffroy

guianae (Thomas)

Synonym: castaneus Allen and Chapman

longirostris Anthony

Amazonia

obscura (Wagner)
macrura (Wagner)
?unicolor (Wagner)

Southern Brazil

nigrispina (Wagner) thomasi (Ihering)

medius (Thomas)

Western Ecuador (Erroneous?)
occasius Thomas

DACTYLOMYS Geoffroy

New Grenada (Colombia)
Caicara, Rio Orinoco, Venezuela
San Esteban, near Venezuela
El Valle, Margarita Island, Venezuela
Cayenne (according to Lichtenstein
who called it "hispidus")

British Guiana

Princestown, Trinidad Kartabo, British Guiana

"collected by Spix in Brazil" Borba, mouth of Rio Madeira, Brazil

Brazil

Ypanema, São Paulo, Brazil Island of São Sebastiao, near Bahia, Brazil

Roça Nova, Serra do Mar, Parana, Brazil. 1,000 meters

Gualea, west of Mt. Pichincha. Ecuador. 4,000 feet

TAXONOMIC HISTORY

1817. Desmarest, under the generic term *Echimys* (pp. 54–60) described *Echimys dactylinus*.

1825. G. F. Cuvier discussed (pp. 185–186) the dentition of

G. F. Cuvier discussed (pp. 185–186) the dentition of dactylinus.

G. F. Cuvier discussed (pp. 450–451) and figured (Pl. xvIII, fig. 3; Pl. xIX, figs. 5 and 6) the skull and teeth of dactylinus.

1838a. Isidore Geoffroy St. Hilaire erected (p. 126–127) Dacty-lomys for Echimys dactylinus Desmarest, 1817. He preferred to employ for it instead the specific name typus.

1840. Geoffroy St. Hilaire in his paper on the spiny rodents (pp. 1–57) discussed (pp. 8, 27–29) Dactylomys dactylinus (synonym typus).

1843. Wagner employed (III, pp. 347–349) typus for dactylinus.

1845a. Wagner described (pp. 146–147) Dactylomys amblyonyx (a Kannabateomys).

1848. Waterhouse discussed (pp. 310–312) D. typus (=dacty-linus) and amblyonyx.

1850. Wagner dealt (pp. 301–305) at length with Dactylomys, species typus (= dactylinus) and amblyonyx (a Kannabateomys).

1852. Deville discussed (pp. 351–353) the genus *Dactylomys*.

1854. Burmeister wrote (pp. 189–191) of *Dactylomys* and the species *amblyonyx*. He treated *Dactylomys* and *Cercomys* as members of the Capromyidae.

1867. Hensel wrote (p. 21) of Dactylomys.

1872a. Hensel published (pp. 80–81) on the biology of *Dactylomys*.

1872b. Hensel wrote (pp. 54-55) of Dactylomys amblyonyx.

1883. Pelzeln wrote (pp. 65–66) of Dactylomys typus (=dacty-linus) and of D. amblyonyx.

1887. Jentink discussed (pp. 224–225) "Dactylomys typus."

1888. Winge wrote (p. 70) of Dactylomys amblyonyx.

1889. Cope shortly discussed (p. 136) Dactylomys amblyonyx.

1889. Goeldi wrote (pp. 225–233) a quite extensive paper on Dactylomys. He wrote his own experiences with D. amblyonyx.

1891. Jentink gave (pp. 105–110) a detailed description of the teeth of dactylinus and amblyonyx and separated amblyonyx under the new generic name Kannabateomys.

1900a. J. A. Allen described (pp. 220–222) Dactylomys peruanus (a Lachnomys).

1912a. Thomas described (pp. 87–88) Dactylomys dactylinus canescens. He proposed restriction of true dactylinus to the upper Amazon (Rio Napo, especially).

1914. J. A. Allen compared (p. 389) Dactylomys with Thrinacodus.

1916c. Thomas separated (pp. 298–299) D. peruanus Allen from other Dactylomys under the new generic name Lachnomys.

He compared Dactylomys with Thrinacodus.

1920. Anthony described (pp. 82–84) Dactylomys boliviensis. 1921a. Lönnberg described (pp. 38–40) Dactylomys dactylinus

Lönnberg described (pp. 38-40) Dactylomys dactylinus modestus.

GENOTYPE

Dactylomys Geoffroy

Type by original designation: Dactylomys typus Geoffroy, (= Echimys dactylinus Desmarest,

LIST OF NAMED FORMS WITH TYPE LOCALITIES

Dactylomys Geoffroy

dactylinus dactylinus (Desmarest,

No locality in original description

Synonym: typus Geoffroy, 1838

Brazil? Itacoatiara, below Manáos, "Middle

dactylinus canescens Thomas

Amazons," Brazil

dactylinus modestus Lönnberg

Banks of Rio Curaray, Prov. del Oriente, Ecuador. 1,000 feet

boliviensis Anthony

Mission San Antonio, Rio Chimore, Prov. Cochabamba, Bolivia. 1,300 feet

KANNABATEOMYS Jentink

TAXONOMIC HISTORY

$1845a_{\bullet}$	Wagner described (pp. 146-147) Dactylomys amblyonyx.				
1848.	Waterhouse treated (p. 312) Dactylomys amblyonyx.				
1850.	Wagner again wrote (pp. 304-305) of Dactylomys				
	ambly on yx.				
1854.	Burmeister discussed (pp. 190–191) Dactylomys amblyonyx.				
1867.	Hensel wrote (p. 21) of Dactylomys amblyonyx (biology).				
1872a.	Hensel discussed (pp. 80-81) the biology of Dactylomys				
	ambly on yx.				
1872b.	Hensel again wrote (pp. 54-55) of Dactylomys amblyonyx.				
1883.	Pelzeln discussed (pp. 65–66) Dactylomys amblyonyx.				
1888.	Winge shortly mentioned (p. 70) Dactylomys amblyonyx.				
1889.	Cope remarked briefly (p. 136) on Dactylomys amblyonyx.				
1889.	Goeldi wrote (pp. 231–233) of his own experience with				
	$Dactylomys\ amblyonyx.$				
1891.	Jentink, after giving an analysis of Dactylomys dentition,				
	erected (p. 109) Kannabateomys for Dactylomys				
	ambly on yx.				
1903d.	Thomas described (pp. 489–490) Kannabateomys ambly-				

GENOTYPE

onyx pallidior.

Kannabateomys Jentink

Type by original designation and monotypy: Dactylomys amblyonyx Wagner

LIST OF NAMED FORMS WITH TYPE LOCALITIES

Kannabateomus Geoffroy

ambluonux ambluonux (Wagner) amblyonyx pallidior Thomas

Ypanema, Prov. of São Paulo, Brazil Sapucay, Paraguay

LACHNOMYS Thomas

TAXONOMIC HISTORY

1900a. 1916c.

J. A. Allen described (pp. 220–222) Dactylomys peruanus. Thomas erected (pp. 298-299) Lachnomys, with type Dactylomys peruanus Allen.

GENOTYPE

Lachnomys Thomas

Type by original designation and monotypy: Dactylomys peruanus Allen

SPECIES AND TYPE LOCALITY

Lachnomys Thomas peruanus (Allen)

Juliaca, Peru. 6,000 feet

THRINACODUS Günther

TAXONOMIC HISTORY

1879.

Günther erected (pp. 144-145, Pl. x) Thrinacodus, with single species albicauda. The animal was clearly a juvenile.

1914.

J. A. Allen described (pp. 387–389) Thrinacodus apolinari. He pointed out the relationships of Thrinacodus to Kannabateomys, Isothrix, and Dactylomys.

1916c.

Thomas discussed (pp. 299-300) Thrinacodus and Dactylomus. He described Thrinacodus edax.

GENOTYPE

Thrinacodus Günther

Type by original designation and monotypy: Thrinacodus albicauda Günther

LIST OF NAMED FORMS WITH TYPE LOCALITIES

Thrinacodus Günther

albicauda Günther

apolinari J. A. Allen

Near Medellin, Colombia

Tomeque, Bogotá district, Colombia.

6,500 feet

edax Thomas

Sierra de Mérida, Venezuela. 2,800

meters

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