THE TAXONOMIC HISTORY OF THE SOUTH AND CENTRAL AMERICAN CRICETID RODENTS OF THE GENUS ORYZOMYS.—PART 1: SUBGENUS ORYZOMYS

By G. H. H. Tate

In this résumé, the fourth of my series on the Cricetidae, which I have had to divide into two parts because of its length, I have introduced, on account of the increased complexity of the material and the large number of described forms, a slight change of arrangement in the summaries of species. With the idea of bringing together those names which may at length be proved synonyms or members of only a few well-marked species, I have grouped the species of the larger subgenera approximately under the generalized phytogeographical regions (shown on map, p. 13) within which their type localities fall instead of listing them as in earlier papers in the chronological order of their descriptions. In the case of the Oryzomys of Central America however, I have used the “groups” of Goldman (1918).

The allocations made in this paper and hereafter of the old names of Wagner, the Pictets, Lund, and others, are based upon careful reperusal of their work and are purely provisional, being intended merely to suggest probable generic or subgeneric affinities.

Species from north of the Mexican border are not considered.

HISTORICAL STATEMENT

ORYZOMYS Baird

Subgenus ORYZOMYS Baird

1801. Azara described (p. 82) RAT SECOND OU RAT A GROSSE TÊTE, (p. 86) RAT TROISIÈME OU RAT ANGOUYA, and (p. 98) RAT SIXIÈME OU RAT A TARSE NOIR (an Oligoryzomys?).

1802. Azara further described (p. 87) RAT A GROSSE TÊTE (under the name COLA IGUAL AL CUERPO), (p. 89) ANGUIA, and (p. 91) RAT A TARSE NOIR (under the name COLILARGO) (an Oligoryzomys?).

1The subgenus Oryzomys only has been included in Part 1. Oligoryzomys, Thallicomys, and Melanomys are treated in Part 2. The bibliography for both parts appears at the end of Part 2.

2A copy of the newly published ‘A Manual of Neotropical Sigmodon Rodents,’ by Nils Gyldenstolpe (Kungl. Svenska Vetenskapsakad. Handlingar, (3) XI. No. 3, pp. 1–194 and plates, 1932) has just been received. This work should be consulted for each cricetid genus. It reached my hands too late to receive treatment under the generic headings.
1819. Desmarest applied names to the rats of Azara’s French edition: (p. 62) *Mus angouya* (n. sp.) to his *angouya*; (p. 63) *Mus cephalotes* (n. sp.) to his *rat a grosse tète*; and (p. 64) *Mus nigripes* to his *rat a tarse noir* (an *Oligoryzomys* ?).

1820. Desmarest erroneously synonymized (p. 305) *angouya* with the *rat du Brésil* (*Holochilus brasiensis* (Desmarest)).

1830. Rengger remarked upon (p. 229) “angouya” and described (p. 232) *Mus longitarsus* (n. sp.) (an *Oligoryzomys* ?).

1832. Bennett described (p. 2) *Mus longicaudatus* (n. sp.) (an *Oligoryzomys* ?).

1835. Bennett described (p. 191) *Mus megallanicus* (n. sp.) (an *Oligoryzomys* ?).

1837. Waterhouse described (p. 19) *Mus flavescens* (n. sp.) (an *Oligoryzomys* ?).

1839. Waterhouse remarked further upon (p. 46) *flavescens* (an *Oligoryzomys*). He described (p. 65) *Mus galapagoensis* (n. sp.). With his erection (p. 75) of *Hesperomys*, a blanket genus, the above species as well as most other American Cricetidae became included therein.

1841. Lund gave brief and scattered notes upon a number of species of Cricetidae, the only ones of which belonging clearly to *Oryzomys* were *Mus vulpinus* (n. sp.), preoccupied by *Mus vulpinus* Brants, 1827 (a *Holochilus*), and re-named by Schinz, 1845, *vulpinoides*; and *Mus laticeps* (n. sp.), a rather short-tailed form (pp. 279–280). Lund’s description of “*Mus longicaudatus*” suggests *Oligoryzomys*. *Expulsus* Lund was placed by Trouessart, 1898, in *Oryzomys*, but later removed by Thomas to *Hesperomys*.

1842. Wagner described (p. 362) *Hesperomys subflavus* (n. sp.), which description strongly suggests the genus *Delomys* Thomas (see *Delomys*, 1917). He described also (p. 361) *Hesperomys arviculoides* and *H. orobinus* (both *Zygodontomys* ?). They were placed by Trouessart in *Oryzomys*; but after reading carefully Wagner’s amplified description in the ‘Säugethiere Supplement’ I cannot endorse that opinion.

1843. Wagner placed (p. 517) *galapagoensis* in *Hesperomys* (Habrothrix).

1844. Pictet and Pictet wrote of (p. 61) “*angouya*,” which they had received from Bahia. Their figure (Pl. xv) is unquestionable.

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1A German translation of parts of Lund’s work may be found in *Isis*, 1843, XXXVI, pp. 738–760.
ably that of an Oryzomys, but it is uncertain whether their specimen was identical with angouya Desmarest. They described (p. 64) Mus cinnamomeus (n. sp.) and figured it (Pis. xix and xxiii, fig. 5). This animal again strongly suggests one of the shorter-tailed Oryzomys. They also described (p. 67) Mus maculipes (n. sp.) an Õecomys-like (?) animal with very white underparts.

1845. Wagner described (p. 147) Hesperomys concolor (n. sp.), Hesperomys eliurus (n. sp.), Hesperomys pygmæus (n. sp.) (the last two Oligoryzomys), and Hesperomys brachyurus (n. sp.) (a Zygodontomys ?). The last he thought probably identical to lastiurus (Lund) (a Zygodontomys ?).

1845. Schinz described (p. 193) Mus vulpinoides (n. sp.), based upon the Mus vulpinus of Lund (1841).

1848. Peale described (p. 51) Mus peruvianus, n. sp. (an Oligoryzomys ?).

1850. Wagner further described (p. 309) pygmæus (an Oligoryzomys), (p. 311) concolor, and (p. 313) brachyurus (a Zygodontomys).

1854. Burmeister discussed (p. 171) laticeps and (p. 173) eliurus (an Oligoryzomys) under Hesperomys (Calomys) and in an appendix (p. 185) remarked upon species contained in recent works by Lund, Wagner, and Pictet.

1855. Burmeister (1854), reviewing the status of “Hesperomys,” discussed briefly (p. 7) anguya Azara, laticeps (referring subflavus and cephalotes to it), longicaudatus, eliurus, and flavescens (the three last Oligoryzomys).

1859. Baird, giving a careful diagnosis, erected (pp. 457-458) Oryzomys new subgenus of Hesperomys with type and (then) only species Hesperomys palustris (Harlan). Oryzomys as now understood is much broader than Baird originally allowed.

1860. De Saussure, discussing the Cricetidae of Mexico, described (pp. 98, 102-103) Hesperomys fulvescens (n. sp.) (an Oligoryzomys).

1860b. Tomes described (p. 254) Hesperomys albigularis, n. sp.

1872. Hensel described (p. 36) Hesperomys ratticeps, n. sp. He gave (p. 37) added information about flavescens (an Oligoryzomys) and described (p. 42) dorsalis (a Delomys). He wrote concerning “darwinii Waterhouse” which later was described by Leche as a new subspecies of laticeps.

1874. Coues re-characterized (p. 183) the subgenus Oryzomys.

1876. Alston described Hesperomys couesi, n. sp. (see Thomas, 1893).
1877. Coues further delineated (p. 111) the genus *Oryzomys*.

1880. Alston, in his synopsis of the Central American species of *Hesperomys*, placed (p. 143) *couesi* in the subgenus *Oryzomys*.

1881. Thomas described (p. 4) *Hesperomys* (*Calomys*) *copperi*, n. sp. (an *Oligoryzomys*).

1882. Thomas, reporting Stolzmann’s large collection from Peru (pp. 102–105), clearly used *Calomys* in the subgeneric sense for those animals which today are classed in *Oryzomys*, i.e., “laticeps,” “albigularis,” “longicaudatus” (an *Oligoryzomys* re-named *stolzmanni* in 1894), and also *spinosus*, n. sp. (later made the type of *Neacomys*).

1883. Pelzeln, writing of Natterer’s specimens, gave additional data on *eliurus*, *pygmæus* (both *Oligoryzomys*), and *concolor*.

1884. Thomas, reporting Jelski’s collection from Peru, revised (p. 448) the subgenera of *Hesperomys*. Prior to this, most *Oryzomys* had been placed in *Calomys* Waterhouse.¹ He now included with the type, *palustris*: *angouya*, *albigularis*, *galapagoensis*, *longicaudatus* (an *Oligoryzomys*), and *spinosus* (a *Neacomys*)—“... nearly 30 in all.”

He described *Hesperomys* (*Oryzomys*) *laticepsnitidus*, n. subsp.

1886. Leche commented (p. 692) upon *ratticeps*. He described (p. 693) *H. laticeps intermedia*, n. var., based upon “darwinii” of Hensel, 1872, and discussed *saltator* (not described by Winge until 1887).

1886. Thomas reached the (probably erroneous) conclusion (pp. 421–422) that *pyrrhorhinus* Wied (a *Rhipidomys*) was really an *Oryzomys*.

1887. Winge compared (p. 46) *laticeps* with “longicaudatus” (an *Oligoryzomys*) and described (p. 48) *Calomys saltator*, new name (referred to by Leche, 1886, and Thomas, 1901). He treated (p. 51) *laticeps* exhaustively. His *tener* (p. 15) was placed in *Oryzomys* by Trouessart (1898) and later removed by Thomas to *Hesperomys*.

1890. Coues raised (p. 4164) *Oryzomys* to generic rank—“An American genus . . . ”

1891a. J. A. Allen described (p. 214) *Hesperomys* (*Oryzomys*) *alfaroi*, n. sp.

1891b. J. A. Allen, describing (p. 289) *Oryzomys aquaticus*, n. sp., in-
dicated (p. 294) his preference that *Oryzomys* should be
treated as a full genus.

1891c. J. A. Allen described (p. 193) *Oryzomys talamancae*, n. sp.

1892. J. A. Allen described (p. 48) *Oryzomys bauri*, n. sp.

1893. Goeldi wrote of *ratticeps* under *Hesperomys*, omitting subgeneric
distinction.

1893. Thomas remarked upon (p. 403) the composite nature of *couesi*
and selected the type. He restricted the species and proposed
(p. 403) *Oryzomys fulgens*, n. sp., and (p. 404) *Oryzomys*
*melanotis*, n. sp.

1893. Ihering listed under subgenus *Oryzomys*: *dorsalis* (a *Delomys*),
*latticeps*, and *pyrrhorhinus* (a *Rhipidomys*). He placed
*ratticeps* under subgenus *Calomys*.

1893. Allen and Chapman described (p. 212) *Oryzomys speciosus*, n. sp.,
(p. 213) *Oryzomys trinitatis*, n. sp., (p. 214) *Oryzomys velu-
*tinus*, n. sp., and (p. 215) *Oryzomys brevicauda*, n. sp. (The
last was removed in 1897 to *Zygodontomys*).

1893. J. A. Allen described (p. 239) *Oryzomys costaricensis*, n. sp. (an
*Oligoryzomys*).

1894. Thomas, after temporarily rejecting (p. 350) *Thomasomys*
Coues as only doubtfully worthy of retention, described the
following mice under the general name *Oryzomys*: (p. 349)
*kalinowskii*, n. sp. (a *Thomasomys*); (p. 350) *incanus*, n. sp.
(an *Inomys*); (p. 351) *meridensis*, n. sp.; (p. 351) *flavicans*,
n. sp.; (p. 352) *ferrugineus*, n. sp. (a *Phaenomys*); (p. 354)
xanthelouis, n. sp.; (p. 355) *phaeopus*, n. sp. (a *Melanomys*);
(p. 356) *phaeopus* obscuroir, n. subsp. (a *Melanomys*); (p.
357) *stolzmanni*, n. sp. (an *Oligoryzomys*); (p. 358)
*gracilis*, n. sp.; (p. 358) *microtinus*, n. sp. (moved to
*Zygodontomys* in 1898); and (p. 359) *Oryzomys ? (sic)
venustus*, n. sp. (a *Hesperomys*).

1895. J. A. Allen described (p. 329) *Oryzomys cherriei*, n. sp. (in 1897
made type of *Zygodontomys*).

1895a. Thomas recorded (p. 57) “*gracilis*” from Managua, Costa Rica.
He described (p. 58) *Oryzomys princeps*, n. sp. (a *Thomas-
omys*), suggesting its possible affinity with *Rhipidomys*;
(p. 59) *Oryzomys childi*, n. sp. (synonym of *meridensis* accord-
ing to Bangs, 1900), and (p. 59) *Oryzomys laniger*, n. sp. (a
*Thomasomys*).

1895b. Thomas described (p. 368) *Oryzomys instans*, n. sp. (a *Chilomys*).
1896. Thomas described (p. 305) *Oryzomys niveipes*, n. sp. (a *Thomasomys*), and *Oryzomys?* (sic) *lugens*, n. sp. (in 1898 made type of *Aepomys* n. g.).

1897. Allen and Chapman described (p. 19) *Oryzomys delicatus*, n. sp. (an *Oligoryzomys*).

1897a. J. A. Allen commented upon (p. 36) the type of *talamance* and described (p. 37) *Oryzomys chrysomelas*, n. sp. (a *Melanomys*). He made *cherriei* type of *Zygodontomys*, n. g., and included with it *brevicauda*.

1897b. J. A. Allen described (p. 52) *Oryzomys mexicanus*, n. sp., based upon material which in 1890 he had referred to *couesi*. He now considered it distinct from the *couesi* group and near *aquaticus*.

He described also (p. 53) *Oryzomys bulleri*, n. sp.

1897c. J. A. Allen described (p. 117) *Oryzomys baroni*, n. sp.

1897d. J. A. Allen commented (p. 205) upon a series of "*Oryzomys melanotis* Thomas" (in 1898 re-named *chapmani*). He described *Oryzomys jalape*, n. sp.

1897b. Thomas described (p. 494) *Oryzomys goeldi*, n. sp. He removed *instans* from *Oryzomys*, making it type of *Chilomys*, n. g.

1897c. Thomas described (p. 548) *Oryzomys peninsule*, n. sp.

1898. Bangs described (p. 164) *Oryzomys flavicans illectus*, n. subsp.

1898a. Thomas described (p. 177) *Oryzomys antillarum*, n. sp., (p. 178).

*Oryzomys victus*, n. sp. (an *Oligoryzomys*), and (p. 179) *Oryzomys chapmani*, n. sp., based upon the "*melanotis*" of Allen (1897, p. 205).

1898b. Thomas described (p. 454) *Oryzomys vestitus*, n. sp. (a *Thomasomys*).

1898c. Thomas described (p. 267) *Oryzomys dryas*, n. sp., based upon a skin from Pallatanga, Ecuador, referred by him in 1894 to *minutus*, (p. 268) *Oryzomys dryas humilior*, n. subsp. (both *Thallomyscus*), and (p. 268) *Oryzomys flavicans subluteus*, n. subsp.

1898. Merriam described (p. 15) *Oryzomys nelsoni*, n. sp.

1898. Trouessart listed (p. 523–529) the following species under *Oryzomys* which have since been removed: *aureus* (a *Thomasomys*), *orobinus* Wagner (a *Zygodontomys*), *brachyurus* Wagner (a *Zygodontomys*), *arviculoides* Wagner (a *Zygodontomys*), *peruvianus* Peale (see also Cassin, 1858) (an *Oligoryzomys*), *tener* Winge (a *Hesperomys*), *expulsus* Lund
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(a Hesperomys), "musculipes," a misprint for maculipes Pictet (an Ecomys ?), spinosus (a Neacomys), venustus (a Hesperomys), microtinus (corrected to Zygodontomys, appendix, p. 1327), cherriei (a Zygodontomys), brevicauda (a Zygodontomys), princeps (a Thomasomys), ferrugineus (a Phenomys).1

1899. Bangs described (p. 9) Oryzomys navus, n. sp. (an Oligoryzomys).

1899. J. A. Allen described the following Oryzomys: Akodon columbianus, n. sp. (removed in 1904 to Oryzomys (Melanomys)); (p. 204) maculiventer, n. sp.; (p. 206) trichurus, n. sp.; (p. 207) sanctamartae, n. sp. (a Zygodontomys); (p. 208) mollipilosus, n. sp.; (p. 209) magdalenæ, n. sp.; (p. 210) villosus, n. sp.; (p. 210) palmarius, n. sp.; (p. 211) tenuicauda, n. sp.; (p. 212) modestus, n. sp.; and (p. 212) fulriventer, n. sp.

1899a. Thomas described (p. 152) Oryzomys bæops, n. sp. (a Thomasomys).

1899b. Thomas described (p. 280) Oryzomys indefessus, n. sp. (a Nesoryzomys).

1899c. Thomas described (p. 379) Oryzomys auriventer, n. sp.

1900. Bangs declared (p. 93) childi a synonym of meridensis and recorded "laticeps" from Santa Marta (see Allen, 1904a). He was inclined to believe (p. 94) that Allen's trichurus was a Rhipidomys.

He erected (p. 94) Oligoryzomys, n. subg. of Oryzomys with type Oryzomys navus Bangs to contain the "pygmy oryzomy," and included dryas humilior in the subgenus.

He erected (p. 96) a second subdivision, Erioryzomys, n. subg., with type Oryzomys monochromos, n. sp. Erioryzomys was practically equivalent to Thomasomys.

The following is a list of the species described previous to Bang's paper, which seem to me (see remarks in Part 2, p. 3) to belong either in Oligoryzomys or Thallomycus.

nigripes eliurus costaricensis
longitarus pygmaeus delicatus
longicaudatus peruvianus stolzmanni
magellanicus minutus victus
flavescens fulvescens dryas (Thallomycus)
 destructor copperi dryas humilior (Thallomycus)
melanostoma

1900. J. A. Allen described (p. 225) Oryzomys keaysi, n. sp., and Oryzomys obtusirostris, n. sp.

1Note: dorsalis and d. obscura were listed (p. 537) under Akodon.
1900a. Thomas described (p. 272) *Oryzomys sylvaticus*, n. sp., and (p. 273) *Oryzomys balneator*, n. sp., whose nearest ally he stated to be *beoeps* (a Thomasomys).

1900b. Thomas described (p. 354) *Oryzomys prætor*, n. sp. (a Thomasomys), remarking upon the Thomasomys group of rats.

1901a. Merriam described (p. 103) *Oryzomys cozumelæ*, n. sp. (This description of July 19 apparently antedates that given in Proc. Wash. Acad. Sci., III, p. 280, dated July 26.)


He divided the North and Central American species of *Oryzomys* into four main groups: *palustris-mexicanus* group, *chapmani* group, *melanotis* group, and *fulvescens* group. (This last was equal to *Oligoryzomys*.)

1901b. Thomas described (p. 251) *Oryzomys tectus*, n. sp., and (p. 252) *Oryzomys panamensis*, n. sp.

1901c. Thomas, writing of *subflavus* Wagner (a *Delomys* ?), considered (p. 528) that "laticeps" of Winge, "vulpinus" Lund, and *vulpinoides* Schinz (new name for the latter) were synonyms of *subflavus*.

He described (p. 528) *Oryzomys lamia*, n. sp., and stated (p. 530) that *saltator* Winge represented the original *O. laticeps* Lund.

He also described (p. 536) *Oryzomys bolivæ*, n. sp., comparing it with "intermedius" (Leche).

1902. Bangs described (p. 34) *Oryzomys devius*, n. sp.
   He listed (p. 37) *chrysomelas* Allen (a *Melanomys*) under *Zygodontomys*.
1902a. Thomas remarked (p. 60) upon *dorsalis obscura* Leche (a *Delomys*).
1902b. Thomas described (p. 129) *Oryzomys levipes*, n. sp., and (p. 130) *Oryzomys yunganus*, n. sp.
1902c. Thomas described (p. 247) *Oryzomys phœopus olivinus*, n. subsp. (a *Melanomys*), and (p. 248) proposed separating *Melanomys*, n. subg. with type *O. phœopus*.

The following species, described previous to Thomas's paper (1902), are now considered by authors to belong in *Melanomys*.

- *caliginosus*
- *phœopus phœopus*
- *phœopus obscurior*
- *chrysomelas*
- *columbianus*

1902. Robinson and Lyon described (p. 142) *Oryzomys medius*, n. sp.
1903. Elliot described (p. 145) *Oryzomys molestus*, n. sp.
1903. Thomas again advised (pp. 40–41) the separation of *Melanomys* from *Oryzomys*.
1904. Elliot described (p. 266) *Oryzomys jalape apatelius*, n. subsp.
1904. Thomas described (p. 142) *Oryzomys oniscus*, n. sp.
1904a. J. A. Allen described (p. 327) *Oryzomys klagesi*, n. sp. He stated (p. 439) that *maculiventer* Allen = *meridensis* Thomas (see also Bangs, 1900), and that *mollipilosus* Allen = "laticeps" Bangs.
1904. Heller, after listing *Oryzomys galapagoensis* and *O. bauri*, erected (p. 241) *Nesoryzomys*, n. g. He removed *indefessus* Thomas to *Nesoryzomys*.
1905. J. A. Allen, after listing the several subgenera in the synonymy of *Oryzomys*, briefly outlined (p. 46) the genus.
1905. Trouessart recognized (pp. 415–423) the subgenera *Oryzomys*, *Melanomys*, *Oligoryzomys*, and *Erioryzomys*. The last contained only *monochromos* and *laniger*, but a footnote suggesting inclusion of *bœops*, *niveipes*, *vestitus*, *villosus*, etc. Thus *Erioryzomys* was practically a synonym of *Thomasomys*. Under *Oryzomys*, Trouessart listed, in addition to the long series of names which may now be taken as rightly belonging there, the following: (p. 419) *aureus* Tomes (a *Thomasomys*); *stolzmanni* (an *Oligoryzomys*); *indefessus* (a *Nesoryzomys*);
(p. 420) orobinus, brachyurus (both Zygodontomys); (p. 421) tener and venustus (both Hesperomys, sensu stricto).

"Anguya Azara" was written (p. 420) for angouya Desmar est. Flavescens was made a subspecies of longicaudatus. Philippi, shown by Wolfschohn (1910) to be a synonym of longicaudatus (an Oligoryzomys), was allowed (p. 421) specific rank. Vulpinoideas was made a synonym of subflavus Wagner. A whole series of the Mus species of Philippi was stated in a footnote (p. 421) to be probably Oryzomys. Trouessart removed (p. 408) pyrrhonotus, kalinowskii, incanus (an Inomys), and paramorum from Oryzomys and placed them with the original cinereus and taczanowskii of Coues in Thomasomys.1

1906. Thomas, in addition to the species listed by Trouessart (1905, p. 408), removed (p. 443) princeps, aureus, bœops, niveipes, ferrugineus (a Phaenomys), dorsalis and sublineatus (both Delomys) from Oryzomys to Thomasomys.

1908. J. A. Allen described (p. 655) Oryzomys alfaroii incertus, n. subsp., Oryzomys ochraceus, n. sp. (shown by Goldman 1916 to be a Nectomys), and Oryzomys carrikeri, n. sp.

1910. Thomas described (p. 186) Oryzomys macconnelli, n. sp.

1910. J. A. Allen thought (p. 98) richmondi Merriam "very near to, if not the same as" couesi Thomas and synonymized alfaroii incertus Allen with alfaroii. He described (p. 99) Oryzomys richardsoni, n. sp.

1911. Goldman described (p. 5) Oryzomys idoneus, n. sp. (a Melanomys), Oryzomys frontalis, n. sp., Oryzomys bombycinus, n. sp., and Oryzomys gatunensis, n. sp.

1912. Osgood described (p. 49) Oryzomys griseolus, n. sp. (an Oligoryzomys).

1912. J. A. Allen described (p. 83) Oryzomys palmiræ, n. sp., and Oryzomys pectoralis, n. sp.

1913. Goldman described (p. 5) Oryzomys pirrensis, n. sp.

1913b. J. A. Allen, when revising (pp. 533–555) the group Melanomys, treated it (p. 535) as a full genus, recognizing fourteen forms. He emphasized (p. 534) its distinctness from Zygodontomys.


1Additional Note: Hesperomys dorsalis obscura Leche, 1886, was held to be preoccupied by Mus Abrotarix) obscurus Waterhouse, 1837 (an Akodon) and dorsalis lechei was proposed in its stead.
1913. Osgood described (p. 97) *Oryzomys polius*, n. sp. He remarked (p. 98) that *O. baroni* appeared to be only a slightly differentiated subspecies of *xantheolus*.

1914. Thomas described (p. 241) *Oryzomys albicularis maraex*, n. subsp., and (p. 242) *Oryzomys caracolus*, n. sp.

1914b. Osgood suggested (p. 157) that *baroni* was perhaps indistinguishable from *xantheolus*, but actually only reduced it to the subspecies *xantheolus baroni*.

1915. J. A. Allen re-named *incertus* Allen, 1913 (preoccupied by *alfaroi incertus* Allen, 1908), *mureliax*.


1916a. Goldman stated (p. 127) that *ochraceus* Allen (1908) was not an *Oryzomys* but a *Nectomys*.

1916a. J. A. Allen described (p. 85) *Oryzomys barbacoas*, n. sp.

1917a. Thomas erected (p. 1) *Microryzomys*, new subgenus of *Oryzomys*, with type *Oryzomys minutus* Tomes and described (p. 1) *Oryzomys (Microryzomys) aurillus*, n. sp.

1918. Goldman published 'The Rice Rats of North America.' In his revision, instead of the four groups of Merriam (1901), he used three subgenera, *Oryzomys*, *Oligoryzomys*, and *Melanomys* (reduced again to subgeneric rank—see Allen 1913), the first of which he divided into eight groups. A number of forms were reduced to synonymy or subspecific rank (see list of species).

He described (p. 51) *Oryzomys melanotis colimensis*, n. subsp.

1921a. Thomas described (p. 177) *Oryzomys wavrini*, n. sp.

1921b. Thomas described (p. 449) *Oryzomys barbacoas ochrinus*, n. subsp.

1921c. Thomas described (p. 356) *Oryzomys intercutus*, n. sp.

1921d. Thomas remarked (p. 228) further upon *Oryzomys (Microryzomys) aurillus*.

1924. Miller divided (pp. 352–364) *Oryzomys* into the subgenera *Oryzomys*, *Oligoryzomys* and *Melanomys*. He followed Goldman (1918) quite closely.

1924. Thomas wrote (p. 143) briefly on *Oryzomys ratticeps* and described *Oryzomys ratticeps tropicus*, n. subsp., and *Oryzomys ratticeps paraganus*, n. subsp.
1924. Anthony described (p. 7) *Oryzomys balneator hesperus*, n. subsp.

1925. Thomas described (p. 577) *Oryzomys legatus*, n. sp.

1926. Anthony described (p. 4) *Oryzomys auriventer nimbosus*, n. subsp.

1927b. Thomas listed (pp. 548–549) his choice of lectotypes and lectoparatypes in the British Museum for the following forms:

<table>
<thead>
<tr>
<th>Lectotypes</th>
<th>Lectoparatypes</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>couesi</em> male</td>
<td>75.2.26.15</td>
<td>60.2.11.8 and</td>
</tr>
<tr>
<td>Coban, Guatemala</td>
<td>79.6.20.3</td>
<td>1893</td>
</tr>
</tbody>
</table>

| *nitidus* male | 85.4.1.41 | Specimen figured |
| Amable Maria, Peru |

1927c. Thomas agreed (p. 599) with Osgood (1914) that *baroni* should be synonymized with *xantheolus*.

1932. Murie (1932) described (p. 1) *Oryzomys couesi pinicola*, n. subsp.

1932. Harris described (p. 5) *Oryzomys aphrastus*, n. sp.

**PRESENT STATUS OF ORYZOMYS AND ITS SUBGENERA**

Genus *Oryzomys* Baird

Subgenus *Oryzomys* Baird

Subgenus *Oligoryzomys* Bangs (= *Micoryzomys* Thomas)

Subgenus *Thallomyscus* Thomas

Subgenus *Melanomys* Thomas

Type by original designation:

*Mus palustris* Harlan

*Oryzomys navus* Bangs

*Oryzomys dryas* Thomas

*Oryzomys phaeopus* Thomas

**LIST OF NAMED FORMS WITH TYPE LOCALITIES**

As stated at the beginning of this paper, the larger subgenera have been classed under generalized phytogeographical provinces, illustrated in the accompanying map and defined below. That the areas are often of highly complex nature and intergrade freely is admitted. However, it is believed that each region expresses a certain broad homogeneity of fauna and flora.

In constructing the map, works on plant geography by Strasburger, Hardy and others, on ornithology by Chapman, and other general reports have been consulted.

**PHYTOGEOGRAPHICAL PROVINCES**

1.—Central America north of Lake Nicaragua. The line of transition in this region has been pointed out by Harshberger, 1911, 'Die Vegetation der Erde,'
Fig. 1. Map to show phytogeographical areas of Central and South America. For definitions see text, pp. 12-14.
AMERICAN MUSEUM NOVITATES [No. 579]

XIII, p. 668. I have not yet worked upon the subdivisions of this area and provisionally treat it as a unit.

2.—From Lake Nicaragua, south and east through Panama to the Caribbean and Pacific coastal strips,—eastward to La Guaira, Venezuela, and southward to Ecuador. The region includes the Andean slopes as high approximately as 6000 feet.

3.—The Andes north of Chile from 6000 feet¹ up to paramo.

4.—Costal arid region from southern Ecuador to northern Chile.

5.—Central and eastern Venezuela with Trinidad and other nearby islands.

6.—Amazonia, from Guiana and Pará, including Guiana Mountains, to the Andes from Colombia to Bolivia, up to 6000 feet.

7.—The “caatinga” region of Ceará to the savannas of Matto Grosso and the northern chaco, including northern Jujuy.

8.—The moist subtropics and temperate of southern Brazil and eastern Paraguay.

9.—The pampas of Uruguay and Argentina (delta of Parana River included).

10.—The upper slopes of the Andes south of Bolivia. Above 5000–6000 feet.

11.—The “mediterranean” lowlands of the Chilean central provinces.

12.—Arid Patagonian area and arid foothills west and south of San Luis, Argentina.

13.—Temperate rain forests from Valdivia, Chile to Fuegia.

14.—Galapagos Islands.

Oryzomys (Oryzomys)

In listing the Central American forms of this subgenus I have followed Goldman’s revision of the North American (and Jamaican) species, with the exception of his Panamanian groups bombycinus, devius; and tectus. The species of these three groups I have included in my phyto-geographical region No. 2.

It will be seen that the subgenus appears to be absent only from regions 9 to 13.

Central American region based upon Goldman (includes region 1)

<table>
<thead>
<tr>
<th>Species</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>couesi couesi (Alston)</td>
<td>Coban, Guatemala</td>
</tr>
<tr>
<td>teapensis Merriam²</td>
<td>Teapa, Tabasco, Mexico</td>
</tr>
<tr>
<td>goldmani Merriam²</td>
<td>Coatzacoalcos, Vera Cruz, Mexico</td>
</tr>
<tr>
<td>jalapxe Allen²</td>
<td>Jalapa, Mexico</td>
</tr>
<tr>
<td>jalapxe rufinus Merriam²</td>
<td>Catemaco, Vera Cruz, Mexico</td>
</tr>
<tr>
<td>jalapxe apatelius Elliot²</td>
<td>San Carlos, Vera Cruz, Mexico</td>
</tr>
<tr>
<td>richardsoni Allen²</td>
<td>Peña Blanca, Atlantic coast forests, Nicaragua, 1500 ft.</td>
</tr>
<tr>
<td>couesi richmondi Merriam</td>
<td>Escondido River, Nicaragua</td>
</tr>
<tr>
<td>couesi zygomaticus Merriam</td>
<td>Nenton, Guatemala</td>
</tr>
<tr>
<td>couesi mexicanus Allen</td>
<td>Hacienda San Marcos, Jalisco, Mexico</td>
</tr>
<tr>
<td>bulleri Allen³</td>
<td>Valle de Banderas, Terro Tepic, Jalisco, Mexico</td>
</tr>
<tr>
<td>rufus Merriam³</td>
<td>Santiago, Tepic, Mexico</td>
</tr>
</tbody>
</table>

¹Not rigidly adhered to. Species from about 6000 feet are placed in highland or lowland group according to their seeming affinities.

²Synonymized by Goldman with couesi couesi (Alston).

³Synonymized by Goldman with couesi mexicanus Allen.
<table>
<thead>
<tr>
<th>Species</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>couesi aztecs Merriam</td>
<td>Yautepec, Morelos, Mexico</td>
</tr>
<tr>
<td>couesi crinitus Merriam</td>
<td>Tlalpam, Federal District, Mexico</td>
</tr>
<tr>
<td>couesi regillus Goldman</td>
<td>Los Reyes, Michoacan, Mexico</td>
</tr>
<tr>
<td>couesi albivent Merriam</td>
<td>Ameca, Jalisco, Mexico</td>
</tr>
<tr>
<td>couesi pinicola Merri</td>
<td>Twelve miles south of El Cayo, British Honduras</td>
</tr>
<tr>
<td>molestus Elliot¹</td>
<td>Ocotlan, Jalisco, Mexico</td>
</tr>
<tr>
<td>couesi peragrus Merriam</td>
<td>Rio Verde, San Luis Potosi, Mexico</td>
</tr>
<tr>
<td>fulgens Thomas</td>
<td>&quot;Mexico&quot;</td>
</tr>
<tr>
<td>gatunensis Goldman</td>
<td>Gatun, Canal Zone, Panama</td>
</tr>
<tr>
<td>cozumela Merriam</td>
<td>Cozumel Island, Mexico</td>
</tr>
<tr>
<td>antillarum Thomas</td>
<td>Jamaica</td>
</tr>
<tr>
<td>peninsulae Thomas</td>
<td>Santa Anita, Lower California, Mexico</td>
</tr>
<tr>
<td>nelsoni Merriam</td>
<td>Maria Madre Island, Mexico</td>
</tr>
<tr>
<td>melanotis melanotis Thomas</td>
<td>Mineral San Sebastian, Jalisco, Mexico</td>
</tr>
<tr>
<td>melanotis colimensis Goldman</td>
<td>Armeria, Colima, Mexico</td>
</tr>
<tr>
<td>rostratus rostratus Merriam</td>
<td>Metaltuyuca, Puebla, Mexico</td>
</tr>
<tr>
<td>rostratus megadon Merriam</td>
<td>Teapa, Tabasco, Mexico</td>
</tr>
<tr>
<td>rostratus yucatanensis Merriam</td>
<td>Chichen Itza, Yucatan, Mexico</td>
</tr>
<tr>
<td>alfaro alfaro (Allen)</td>
<td>San Carlos, Costa Rica</td>
</tr>
<tr>
<td>alfaro incertus Allen²</td>
<td>Rio Grande, south of Tuma, Nicaragua</td>
</tr>
<tr>
<td>alfaro dariensis Goldman</td>
<td>Cana, Panama, 2000 ft.</td>
</tr>
<tr>
<td>alfaro angusticeps Merriam</td>
<td>Volcan Santa Maria, Guatemala</td>
</tr>
<tr>
<td>alfaro rhabdops Merriam</td>
<td>Calel, Guatemala</td>
</tr>
<tr>
<td>alfaro caudatus Merriam</td>
<td>Comaltepec, Oaxaca, Mexico</td>
</tr>
<tr>
<td>alfaro palatinus Merriam</td>
<td>Teapa, Tabasco, Mexico</td>
</tr>
<tr>
<td>alfaro saturator Merriam</td>
<td>Tumbala, Chiapas, Mexico</td>
</tr>
<tr>
<td>alfaro chapmani Thomas</td>
<td>Jalapa, Vera Cruz, Mexico</td>
</tr>
<tr>
<td>alfaro dilutior Merriam</td>
<td>Huauchinango, Puebla, Mexico</td>
</tr>
<tr>
<td>guerrerensis Goldman</td>
<td>Omilteme, Guerrer, Mexico</td>
</tr>
<tr>
<td>hylocetes Merriam</td>
<td>Chicharras, Chiapas, Mexico</td>
</tr>
<tr>
<td>talamanca Allen</td>
<td>Talamanca, Costa Rica</td>
</tr>
<tr>
<td>panamensis Thomas³</td>
<td>Open savanna, City of Panama, Panama</td>
</tr>
<tr>
<td>carrikeri Allen⁶</td>
<td>Rio Sicsola, Talamanca, Costa Rica</td>
</tr>
<tr>
<td>aphрастus Harris</td>
<td>Joquin de Dota, Pacific slope of mountains south of Cartago, Costa Rica</td>
</tr>
</tbody>
</table>

Region 2 (north and south of the Andes, and Panama)

<table>
<thead>
<tr>
<th>Species</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>flavicans flavicans Thomas</td>
<td>Mérida, Venezuela</td>
</tr>
<tr>
<td>flavicans illectus Bangs</td>
<td>Pueblo Vişío, Santa Marta Mts., Colombia</td>
</tr>
<tr>
<td>flavicans subluteus Thomas</td>
<td>Western Cundinamarca, Colombia</td>
</tr>
<tr>
<td>gracilis Thomas</td>
<td>Concordia, Medellin, Colombia</td>
</tr>
<tr>
<td>trichurus Allen</td>
<td>El Libano plantation, near Bonda</td>
</tr>
</tbody>
</table>

¹Synonymised by Goldman with couesi albivent Merriam.
²Synonymised by Goldman with alfaro alfaro (Allen).
³Synonymised by Goldman with talamanca Allen.
mollipilosus Allen

sylvaticus Thomas

magdalene Allen

villosus Allen

tectus tectus Thomas

tectus frontalis Goldman

bolivar Allen

castaneus Allen

rivularis Allen

devius Bangs

medius Robinson and Lyon

bombycinus bombycinus Goldman

bombycinus alleni Goldman

palmire Allen

pirrensis Goldman

caracolus Thomas

barbacoas barbacoas Allen

barbacoas ochrinus Thomas

intectus Thomas

Region 3 (Andes above 6000 ft.)

albigularis albigularis (Tomes) "taken en camino on my return from Pallatanga." Ecuador.

albigularis marox Thomas

meridensis Thomas¹

childi Thomas¹

maculiventser Allen²

auriventer auriventer Thomas

auriventer nimbosus Anthony

Santa Marta district, Colombia, 500 ft.

Valparaiso, Santa Marta district, Colombia, 4500 ft.

Santa Rosa, Southern Ecuador

Minca, Santa Marta district, Colombia, 2000 ft.

Valparaiso, Santa Marta district, Colombia, 4500 ft.

Bogava, Chiriqui, Panama

Corozal, Canal Zone, Panama

Porvenir, Bolivar, Ecuador

St. Javier, northwestern Ecuador

Río Verde, northern Ecuador, 3200 ft.

Boquete, Panama

San Julian, eight miles east of La Guaira, Venezuela

Cerro Azul, Chagres R., Panama, 2500 ft.

Tuis, 35 miles east of Cartago, Costa Rica

Mira Flores, east of Palmira, eastern slope of central Andes, Colombia, 6200 ft.

Río Limon, Mt. Pirri, eastern Panama, 4500 ft.

Galiparé, Cerro de Avila, near Caracas, Venezuela

Barbacoas, southwestern Colombia, 75 ft.

"West of Quito," Ecuador

Santa Elena, Medellin, Colombia

¹Bangs 1900 declared childi a synonym of meridensis.

²Stated by Allen (1904a) to be a synonym of meridensis.
### Region 4 (Pacific coastal strip)

- **keaysi** Allen
  - Juliaca, Peru, 6000 ft.
- **obtusirostris** Allen
  - Juliaca, Peru, 6000 ft.
- **pectoralis** Allen
  - Coast of western Andes, 40 miles west of Popayan, Cauca, Colombia, 10,340 ft.
- **balneator balneator** Thomas
  - Mirador, 20 miles east of Baños, eastern Ecuador
- **balneator hesperus** Anthony
  - El Chiral, western Andes, Prov. El Oro, Ecuador, 5350 ft.
- **baroni** Allen
  - Malea, Cajabamba, Peru, 8000 ft.

### Region 5 (central Venezuela to Trinidad)

- **speciosus** Allen and Chapman
  - Princetown, Trinidad
- **trinitatis** Allen and Chapman
  - Princetown, Trinidad
- **velutinus** Allen and Chapman
  - Princetown, Trinidad
- **palmarius** Allen
  - Quebrada Seca, Prov. Sucre, Venezuela
- **tenuicauda** Allen
  - Los Palmales, Venezuela
- **modestus** Allen
  - Campo Alegre, Venezuela, 5000 ft.
- **fulviventer** Allen
  - Quebrada Seca, Prov. Sucre, Venezuela
- **klagesi** Allen
  - El Llagual, Venezuela
- **helvolus** Allen
  - Villa Vicencio, 50 miles southeast of Bogotá, Colombia, 1600 ft.
- **o'connelli** Allen
  - Buenavista, 50 miles southeast of Bogotá, Colombia, 4500 ft.
- **vicencianus** Allen
  - Villa Vicencio, 50 miles southeast of Bogotá, Colombia, 1500 ft.

### Region 6 (Amazonia)

- **concolor** (Wagner)
  - R. Curicuriari, Rio Negro, northwestern Brazil
- **nitidus nitidus** (Thomas)
  - Junin and Amable Maria, Peru
- **goeldi** Thomas
  - Itaitúba, Tapajoz R., Brazil
- **bolivia** Thomas
  - Mapiri, upper Beni R., Bolivia, 800 m.
- **perenensis** Allen
  - Perén, Dept. Junin, Peru, 800 m.
- **levipes** Thomas
  - Limbane, Dept. Puno, Peru
- **yunganus** Thomas
  - Charuplaya, Securé River, just north of 16° S., Bolivia, 1350 m.
- **macconnelli** Thomas
  - R. Supinaam, lower R., Essequibo, British Guiana
- **murelive** Allen 1915 (new name for **incertus** Allen, 1913)
  - La Murelia, R. Bodoquera, Caquetá, Colombia, 600 ft.

---

1Baroni is probably synonymous with **zantheolus**.
polius Osgood

legatus Thomas

Region 7 (Ceará to Matto Grosso)

cephalotes (Desmarest)

laticeps laticeps (Lund)
vulpinoides (Schinz)
saltator (Winge)
oniscus Thomas
wavrini Thomas

ratticeps paraganus Thomas
lamia Thomas

Region 8 (south Brazil)

angouya (Desmarest)

cinnamomeus (Pictet and Pictet)
ratticeps ratticeps (Hensel)
latticeps intermedia (Leche)
ratticeps tropicius Thomas

Region 14 (Galapagos)

galapagoensis (Waterhouse)
bauri Allen

Tambo Carrizal, east of Balsas, Marañón R., Peru, 5000 ft.
Carapari, southern Bolivia, 1000 m.

Saint-Ignace Gouazou, 34% leagues S. ¼ S. E. of Asuncion, Paraguay
Lagoa Santa, Brazil
Lagoa Santa, Brazil
Lagoa Santa, Brazil
São Lourenço, near Pernambuco, Brazil
Jesematathla, west of Concepcion, northern Chaco of Paraguay
Sapucay, Paraguay
Rio Jordao, Minas Geraes, Brazil

Wild and mountainous country of village of Atira, 50 leagues from San Ignace Gouazou, Paraguay
Bahia, Brazil
Woods. Rio Grande do Sul, Brazil
Brazil (probably Rio Grande do Sul)
Piquete, São Paulo, Brazil

Chatham Island, Galapagos Archipelago
Barrington Island, Galapagos Islands