

The type, U.S.N.M. no. 469149, has 9.2 whorls and measures: Length, 8.8 mm; greater diameter, 3.8 mm; lesser diameter, 3.3 mm. The rest bear the number 469150.

Its almost flattened whorls, brilliant translucent wax color with pinkish early whorls, heavy distantly spaced, axial, ribs and peculiar radula formula easily distinguish it from all the known species of *Oncomelania*.

MAMMALOGY.—*Two new pocket gophers of the genus Heterogeomys from Mexico.*¹ E. A. GOLDMAN, Bureau of Biological Survey.

In connection with a group alignment of the forms of the genus *Heterogeomys* by E. W. Nelson and the writer four new subspecies were described (Proc. Biol. Soc. Washington, vol. 42, pp. 147–152, March 30, 1929). A more critical examination and further consideration of material available have resulted in the segregation of two additional forms, as follows:

***Heterogeomys hispidus tehuatepecus*, subsp. nov.**

Tehuantepec Pocket Gopher

Type.—From mountains 12 miles northwest of Santo Domingo and about 60 miles north of Tehuantepec City, Oaxaca, Mexico (altitude 1,600 feet). No. 73434, ♂ adult, skin and skull, U. S. National Museum (Biological Survey collection); collected by Nelson and Goldman, June 18, 1895. Original number 8092.

Distribution.—Known only from the type locality in the mountains near the top of the continental divide on the southern side of the Isthmus of Tehuantepec.

General characters.—Most closely resembling *Heterogeomys hispidus hispidus* from near Jalapa, Vera Cruz; size similar, but color lighter, near "mars brown" instead of "seal brown" (Ridgway, 1912); differing also in cranial details, including more highly arched rostrum. Similar in general to *Heterogeomys hispidus isthmicus* of Gulf coast plain on northern side of Isthmus of Tehuantepec, but color somewhat darker, near "mars brown" instead of "chestnut brown"; skull differing most notably in less deeply sinuous lambdoid crest. Similar in general size to *Heterogeomys hispidus chiapensis* of high mountains of central Chiapas, but color light, near "mars brown" instead of "seal brown"; pelage coarser and thinner; skull heavier and quite different in detail.

Color.—*Type* (acquiring fresh pelage): Head and anterior upper parts "mars brown" in fresh pelage, becoming "chestnut brown" in worn pelage on posterior part of back, flanks, and limbs; under parts thinly haired, "cinnamon brown"; feet scantily covered with brownish hairs; tail nearly naked near base, becoming entirely bare near tip, the dried skin dark brown.

Skull.—Most closely resembling that of *hispidus*, but nasals more highly arched, less flattened posteriorly; frontal region less depressed anteriorly; jugal narrower, more evenly rounded anteriorly at union with maxilla; auditory bullae less inflated, not usually projecting below plane of lower

¹ Received January 27, 1939.

surface of basioccipital (usually projecting below this plane in *hispidus*); molariform toothrows shorter. Very similar in general form to that of *isthmicus*, but lambdoid crest much less deeply sinuous, a slight concavity representing the abrupt crescentic median deflection forward present in *isthmicus* as viewed from above; nasals less flattened, rising more prominently above level of premaxillae; maxillary arm of zygoma lighter, encroaching less deeply on premaxillae which are correspondingly broader posteriorly; dentition about the same. Compared with that of *chiapensis* the skull is similar in general size, but heavier in structure; rostrum broader; interorbital region narrower, the frontal surface less even, more concave near median line and rising higher anteriorly; maxillary arm of zygoma encroaching farther on premaxillae which are correspondingly reduced in width posteriorly; auditory bullae larger; palatopterygoids broader; dentition heavier.

Measurements.—*Type*: Total length, 332 mm; tail, 102; hind foot, 48. Two adult female topotypes, respectively: 348, 306; 94, 81; 51, 41. *Skull* (type [♂] and an adult female topotype, respectively): Occipitonasal length, 61.7, 61.4; zygomatic breadth, 39.2, 40.8; breadth across squamosals (over mastoids), 38.2, 39.6; interorbital constriction, 10.7, 10.8; length of nasals, 23.9, 24.2; maxillary toothrow (alveoli), 13, 13.3; width of upper incisors (cutting edge), 8.5, 8.7.

Remarks.—The resemblance of *tehuantepecus* to typical *hispidus* suggests that there may be some connection between the two through the mountains of the interior, but intergradation is also probable with the near geographic neighbor *isthmicus* of the Gulf coastal plains. In the genus *Heterogeomys*, as in other pocket gophers, the males are usually larger than the females, but in the present form an adult female slightly exceeds the type, a male of about the same age.

Specimens examined.—Eight, all from the type locality.

***Heterogeomys hispidus teapensis*, subsp. nov.**

Tabasco Pocket Gopher

Type.—From Teapa, Tabasco, Mexico. No. 100035, ♀ adult, skin and skull, U. S. National Museum (Biological Survey collection); collected by Nelson and Goldman, March 23, 1900. Original number 14056.

Distribution.—Lowlands and lower mountain slopes in southern Tabasco.

General characters.—A large subspecies, similar to *Heterogeomys hispidus chiapensis* of high mountains of central Chiapas, but color light, near "mars brown" instead of "seal brown"; pelage coarser and thinner; skull more elongated. Similar to *Heterogeomys hispidus isthmicus* of coastal plain in Vera Cruz on north side of Isthmus of Tehuantepec, but color somewhat darker, the upper parts near "mars brown" instead of "chestnut brown"; skull longer, with lambdoid crest less deeply sinuous. Somewhat like *Heterogeomys hispidus yucatanensis* of the Yucatan peninsula, but larger and slightly darker; skull with more elongated rostrum.

Color.—*Type* (acquiring fresh pelage): Upper parts in general near "mars brown"; under parts and limbs nearly naked, the scattered hairs light brownish; tail bare, the dried skin brownish.

Skull.—Similar to that of *chiapensis* but longer, with narrower zygomata; rostrum and nasals longer; dentition heavier, the incisors decidedly broader.

Differing from that of *yucatenensis* in decidedly larger size, greater elongation of rostrum, and much heavier dentition. Compared with that of *isthmicus* the skull is longer, the lengthening mainly in rostrum; zygomatics actually as well as relatively narrower; nasals longer; lambdoid crest less deeply sinuous; dentition similar.

Measurements.—*Type*: Total length, 338 mm; tail, 91; hind foot, 48.5. An adult female topotype: 334; 90; 46. *Skull* (type [♀] and an adult female topotype, respectively): Occipitonasal length, 61.3, 59; zygomatic breadth, 36, 37; breadth across squamosals (over mastoids), 36.3, 36; interorbital constriction, 10.3, 10.8; length of nasals, 24.8, 24; maxillary toothrow (alveoli), 15, 13.4; width of upper incisors (cutting edge), 8.5, 8.3.

Remarks.—Specimens from low elevations in Tabasco were referred by Nelson and the writer (Proc. Biol. Soc. Washington, vol. 42, p. 152, March 30, 1929) to *chiapensis* of the high mountains of central Chiapas, although some differences were pointed out. More critical examination seems to warrant their segregation as a geographic race.

Specimens examined.—Total number, five, all from Tabasco, as follows: Montecristo, 2; Teapa (type locality), 3.

ORNITHOLOGY.—*Two new races of birds from the Indo-Chinese sub-region.*¹ H. G. DEIGNAN, U. S. National Museum. (Communicated by H. FRIEDMANN.)

A recent visit by the writer to the American Museum of Natural History and the Academy of Natural Sciences of Philadelphia has shown that two more Siamese birds must be granted subspecific recognition. For the loan of their material, thanks are hereby expressed to the authorities of the institutions named.

***Cyanops incognita euroa*, subsp. nov.** +

Type.—Adult male, U. S. National Museum no. 337073; collected at Khao Sa-bap, Chantabun province, S.E. Siam, 28 April, 1937, by H. G. Deignan.

Subspecific characters.—Adults of the new form are readily distinguishable from adults of typical *incognita* (Tenasserim) by the greater size of the red patch on the hind-crown (covering at least twice as large an area as in *incognita*), and by the paler turquoise-blue of the throat. Seventeen adults of *euroa* have been compared with four adults of *incognita*.

Range.—South-eastern Siam, Cambodia, Laos, and Tongking.

***Napothera crispifrons calcicola*, subsp. nov.** +

Type.—Adult male, U. S. National Museum no. 332024; collected at Hin Lap, East Siam, 8 December, 1931, by Dr. Hugh M. Smith.

Subspecific characters.—From *N. cr. annamensis*, distinguished at once by complete absence of slaty color, above and below. From typical *crispifrons*, it may be known by its having the broad shaft-streaks of the throat

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Goldman, Edward Alphonso. 1939. "Two new pocket gophers of the genus *Heterogeomys* from Mexico." *Journal of the Washington Academy of Sciences* 29, 175–177.

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