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*** START OF THE PROJECT GUTENBERG EBOOK A NEW PIÑON MOUSE (PEROMYSCUS TRUEI) FROM DURANGO, MEXICO ***

A New Piñon Mouse (Peromyscus truei) from Durango, Mexico

 \mathbf{BY}

ROBERT B. FINLEY, JR.

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A New Piñon Mouse (Peromyscus truei) from Durango, Mexico

BY ROBERT B. FINLEY, JR.

The extensive collection of Mexican mammals made by Mr. J. R. Alcorn for the University of Kansas Museum of Natural History contains fourteen piñon mice from lava rocks eight miles northeast of the city of Durango, Mexico. These mice are all much darker than the piñon mice, *Peromyscus truei gentilis*, of adjoining areas in Durango and Zacatecas and show a superficial resemblance to the widespread *P. t. gratus* which occurs 450 miles to the southeast. Morphological differences from *P. t. gratus*, as well as geographic considerations (see remarks), make desirable the recognition of the lava-dwelling piñon mice from Durango as a distinct subspecies.

All specimens examined of subspecies compared with the series of piñon mice from northeast of Durango are in the University of Kansas Museum of Natural History. Capitalized color names and designators are of Maerz and Paul, A Dictionary of Color, McGraw Hill Book Co., New York, 1930.

I wish to acknowledge generous financial aid from the Kansas University Endowment Association which made possible the field work by Mr. Alcorn in Mexico.

This heretofore unknown subspecies is characterized below and may be known as:

Peromyscus truei erasmus subsp. nov.

Type.—Mus. Nat. Hist., Univ. Kansas, no. 34417, young adult female, skin and skull; from eight miles northeast of Durango, 6200 feet, Durango, Mexico; collected 16 August 1949 by J. R. Alcorn, original number 10255.

Range.—Known only from the type locality.

Diagnosis.—Upper parts dark brownish gray (Smoke Brown, 16 A 2, to Biskra, 16 A 12), darkest between ears; lower sides suffused with dull orange buff (13 H 9 to 12 H 9); dark eye ring and black spot at base of vibrissae conspicuous; ears 95 to 100 per cent as long as hind foot; bullae round, greatly inflated; interparietal large, anterior margin curved or slightly sinuous, not bulging strongly forward laterally; rostrum short; nasals broad; braincase high and full; incisive foramina slightly pointed anteriorly; molars small, as in *P. t. gentilis*.

Measurements.—Measurements of 3 males and mean and extreme measurements of 11 females, all from the type locality, are, respectively, as follows: total length, 192, 188 (incomplete), 196 (incomplete), 193 (188-209); length of tail, 102, 97 (broken), 97 (broken), 101 (94-114); length of hind foot, 22, 23, 23, 22.5 (22-23); length of ear, from notch, in flesh, 21, 22, 23, 21.5 (20-23); greatest length of skull, 27.4, 27.7, 27.9, 27.3 (26.5-28.3); basilar length, 20.2, 21.0, — (broken), 20.4 (19.6-21.2); greatest breadth of braincase, 12.8, 12.8, 13.3, 12.85 (12.4-13.4); least interorbital breadth, 4.4, 4.6, 4.6, 4.41 (4.2-4.6); length of nasals, 10.1, 10.3, 10.9, 10.3 (9.8-11.1); diastema, 6.6, 7.0, 7.1, 6.78 (6.3-7.2); length of incisive foramina, 5.6, 5.9, 6.0, 5.77 (5.5-6.0); length of palatal bridge, 3.8, 3.9, —, 3.96 (3.8-4.3); postpalatal length, 9.9, —, —, 9.7 (9.2-10.4); alveolar length of maxillary tooth-row, 4.1, 4.4, 4.2 (4.1-4.4). All measurements are in millimeters.

Measurements of the type.—Total length, 189; length of tail, 95; length of hind foot, 22; length of ear, from notch (in flesh), 21; greatest length of skull, 26.9; basilar length, 20.3; greatest breadth of braincase, 13.0; least interorbital breadth, 4.4; length of nasals, 10.1; diastema, 6.6; length of incisive foramina, 5.5; length of palatal bridge, 3.9; postpalatal length, 9.8; alveolar length of maxillary tooth-row, 4.2.

Comparisons.—From Peromyscus truei gentilis (specimens from 5 mi. N Durango, Durango; 4 mi. W Durango, Durango; and 8 mi. N & 1 mi. W Sombrerete, Zacatecas), the subspecies of the surrounding region, P. t. erasmus differs in markedly darker coloration, sides and face less brightly washed with orange buff, dark eye ring and spot at base of vibrissae more conspicuous, higher incidence and greater extent of buffy pectoral spot. External measurements do not differ significantly. No consistent cranial differences were found.

From *Peromyscus truei gratus* (specimens from Pedregal de los Reyes, Distrito Federal, México) to the southeast, *P. t. erasmus* differs in slightly darker dorsal color, more inflated bullae, and less sinuous (not bulging so much forward laterally) anterior margin of interparietal.

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From *Peromyscus truei gratus* (specimens from various localities in eastern Jalisco and western Michoacán) to the south, *P. t. erasmus* differs in slightly darker dorsal color, longer ears, and more inflated bullae.

From *Peromyscus truei truei* (specimens from 4 mi. N El Rito, Rio Arriba Co., New Mexico) to the northwest, *P. t. erasmus* differs in much darker color, shorter tail, shorter hairs on tail, smaller ears, shorter rostrum, wider nasals, and more pointed anterior ends of incisive foramina.

Remarks.—The tail of *P. t. erasmus* varies greatly in color, being either bicolor or unicolor, dark gray above and varying from white to dark gray below. The type has the tail dark gray above grading gradually on the sides to medium gray below. A buffy pectoral spot or band is present in about half of the adults examined, being most prominent in the type, which is also one of the darkest specimens in the series. The shape of the posterior edge of the bony palate is also variable, being convex, square, or concave; and the dorsal branches of the premaxillaries may terminate slightly anterior or slightly posterior to the posterior ends of the nasals. In the type the posterior palatal margin is concave and the dorsal branches of the premaxillaries almost reach the ends of the nasals. *Peromyscus truei gratus* from Distrito Federal also shows high variability in all these characters.

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Peromyscus truei erasmus is a dark race of the piñon mouse known from the west side of a rough area of dark lavas a few miles northeast of the city of Durango and closely surrounded by the light colored race, P. t. gentilis, known from outside the area of lava rocks. Specimens of erasmus from eight miles northeast of Durango are all conspicuously darker than 11 specimens of gentilis from five miles north of Durango and four miles west of Durango which are typical in color for gentilis. Although erasmus more nearly resembles in color gratus, in cranial characters and external measurements it shows closer relationship to gentilis.

Alcorn reported (verbal communication) that the type series of *erasmus* was collected on the west side of the Río de la Saucida in hills covered with broken lava rocks, cactus, and spiny shrubs. Some cottonwoods grow along the river, which is almost dry most of the time. East of the river is a flat plain or valley of adobelike soil a few miles wide beyond which extends a rough area of dark lavas. The approximate extent of the lava plain is indicated on World Aeronautical Chart, Lake Santiaguillo (521). The specimens of *gentilis* from five miles north of Durango and four miles west of Durango were collected on slopes of adobe soil covered with grasses, scattered junipers and low shrubs, this habitat being the lower eastern edge of the juniper-wooded slopes that rise westward to the Sierra Madre Occidental.

The available facts suggest that *P. t. erasmus* has evolved from *P. t. gentilis* by natural selection for concealing coloration on the dark lavas northeast of Durango, México. *P. t. erasmus* probably reaches its western limit close to the type locality.

Specimens examined.—Total 14, from the type locality.

Museum of Natural History, University of Kansas, Lawrence.

Transmitted January 21, 1952.

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*** END OF THE PROJECT GUTENBERG EBOOK A NEW PIÑON MOUSE (PEROMYSCUS TRUEI) FROM DURANGO, MEXICO ***

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