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*** START OF THE PROJECT GUTENBERG EBOOK A NEW SPECIES OF POCKET GOPHER
(GENUS PAPPOGEOMYS) FROM JALISCO, MÉXICO ***

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A New Species of Pocket Gopher (Genus *Pappogeomys*) From Jalisco, México

[Pg 359]

BY

ROBERT J. RUSSELL

J. R. Alcorn collected a number of pocket gophers of the genus *Pappogeomys* in the states of Jalisco, Nayarit, and Colima. The bulk of this material was obtained in 1949 and 1950. Full treatment of these interesting pocket gophers will be given by the author in a future publication.

Among the *Pappogeomys* collected by Alcorn were three specimens from the high Sierra del Tigre, an isolated range not previously sampled for pocket gophers. The Sierra del Tigre is situated in southern Jalisco and western Michoacán, and, like most of the mountainous terrain in this region of México, is volcanic in origin. To the south the Sierra del Tigre descends abruptly to lower elevations of the arid coastal plains, uninhabited by gophers of this genus. The small pocket gopher occurring in the Sierra del Tigre seems to be an undescribed species of the genus *Pappogeomys* which may be known as

***Pappogeomys alcorni* new species**

Type.—Adult female, skull and skin; No. 39806, University of Kansas, Museum of Natural History; 4 mi. W Mazamitla, 6600 ft., Jalisco, México; October 18, 1950; obtained by J. R. Alcorn, original number 12835.

Distribution.—Known only from the Sierra del Tigre, and probably occurs only at higher elevations within the geographic limits of this isolated range of mountains.

Diagnosis.—Size medium for genus (see measurements); tail naked, short relative to length of head and body; hind foot short; hairs of upper parts and underparts Plumbeous basally and Orange-Cinnamon apically (capitalized color terms after Ridgway, Color Standards and Color Nomenclature, Washington, D. C., 1912); large nasal patch Cinnamon-Buff in two specimens, but Pale Pinkish-Buff in holotype; white throat spot small and inconspicuous, throat mostly bright Cinnamon-Buff; auricular patch pure Plumbeous, hairs lacking cinnamon-colored tips; tarsi with Cinnamon-Buff hairs; dentition as in *P. bulleri* except that enamel plate of posterior wall of M1 reduced to a vestige present only on inner fourth, outer three-fourths of posterior wall of M1 without trace of enamel; zygomata slender, bowed outward; jugal long, widely separating maxillary and squamosal arms of zygoma; skull deep (measured from a point on the frontal to a point on the palate directly below and between the maxillary teeth); rostrum narrow and short; nasals broadly truncate posteriorly, and not decurved anteriorly; narrow across mastoid processes of squamosals; anterior palatine foramina small and rounded in outline, not slitlike.

Comparisons.—Compared with *Pappogeomys bulleri*, the only other named species of the genus, *P. alcorni* differs, as follows: Nasal patch cinnamon or buffy instead of white; enamel plate of posterior wall of M1 reduced to inner fourth rather than developed completely across posterior wall of tooth; nasals broadly truncate posteriorly instead of narrow and emarginate; anterior palatine foramina short and round instead of long and slitlike.

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Measurements.—The type and an adult female topotype (in parentheses) measure, as follows: Total length, 210 (210); length of tail, 61 (63); length of hind foot, 29 (28); condylobasal length, 38.0 (36.9); basilar length, 32.8 (31.9); breadth across zygomata, 24.2 (24.8); palato-frontal depth, 15.0 (14.8); palatal length, 24.7 (24.1); length of nasals, 12.7 (12.8); breadth of braincase, 18.1 (17.5); breadth across mastoid processes of squamosals, 21.5 (21.4); breadth of rostrum, 8.4 (8.1); length of rostrum, 16.9 (16.3); alveolar length of maxillary tooth-row, 9.3 (8.8); breadth across angular processes of rami, 26.1 (26.2).

Specimens examined.—Three, all from Jalisco, as follows: 4 mi. W Mazamitla, 2; 3 mi. WSW Mazamitla, 1.

Remarks.—The features which distinguish *Pappogeomys alcorni* seem to be beyond the range of variation in *Pappogeomys bulleri*. In view of the absolute quality of the differences between *P. alcorni* and *P. bulleri*, it seems best to regard the former as a species, rather than as a subspecies of *P. bulleri*. Moreover, it seems unlikely that actual intergradation of the two species can occur, since the broad, low valleys between the higher terrain, where pocket gophers of this genus are found, do not offer suitable habitat for *Pappogeomys*.

In every example of *P. bulleri* that I have seen (more than 100 specimens, representing all of the

named subspecies) the anterior palatine foramina are long and slitlike and the nasals are always narrow and emarginate posteriorly, whereas in *P. alcorni* the anterior palatine foramina are short and round and the nasals broad and squarely truncate posteriorly. The conspicuous nasal patch of *P. alcorni* is large and bright cinnamon or buffy, and, although the nasal patch may be large in some subspecies of *P. bulleri*, in each specimen possessing the patch the hairs are whitish with little or no trace of pigmentation.

One of the most interesting features of *P. alcorni* is the reduction of enamel on the posterior wall of the first upper molar. In *P. alcorni* the enamel present is thick, but it occurs only on the inner one-fourth of the posterior wall of the tooth. The enamel is always complete in *P. bulleri*; but in some old individuals it becomes thin with wear, and at a casual glance may appear to be partly or entirely absent. Close examination under magnification reveals, however, in every specimen of *P. bulleri*, a fine line of enamel completely across the posterior wall. It seems that the posterior enamel plate of M1 is disappearing in both *P. bulleri* and *P. alcorni*. In both species the enamel on the posterior wall of M1 does not extend down the crown so far as the level of the alveolus, whereas the anterior plate of enamel on M1, for example, extends well below the alveolus of the tooth. Even though disappearance of the posterior enamel seems to be a trend in both species, it has proceeded farther in *P. alcorni* than in *P. bulleri*. Examination of the posterior wall of M1 in *P. alcorni* disclosed only the vestige of enamel on the inner side of the tooth, and no enamel, not even a thin plate, was present on the remainder of the posterior wall of the tooth.

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The name *alcorni* is proposed as a token of appreciation to Joseph Raymond Alcorn, whose collecting has greatly enriched our knowledge of the mammals of México.

Transmitted August 30, 1956.

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*** END OF THE PROJECT GUTENBERG EBOOK A NEW SPECIES OF POCKET GOPHER
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