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OF THE
BIOLOGICAL SOCIETY OF WASHINGTONA NEW SUBSPECIES OF FUNNEL-EARED BAT
(*NATALUS MEXICANUS*) FROM EASTERN
MEXICO

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When *Natalus mexicanus* was named in 1902 by Gerrit S. Miller, Jr. (Proc. Acad. Nat. Sci. Philadelphia, p. 399), it was known to have an extensive geographic range in Mexico. Nevertheless, only a few individuals were available from any one of the several localities of known occurrence, and most of the specimens were preserved in alcohol. Consequently, it was impossible to learn much from this material about individual variation and it was difficult to learn much about geographic variation. Specimens recently obtained in large series and mostly prepared as conventional study skins with skulls, reveal that there are two well-marked color phases and also that there is geographic variation in color and in size of skull. In the dry region of Baja California (type locality of *N. mexicanus* at Santa Anita) and northwestern Mexico, bats of the species concerned are pale and have small skulls. In eastern Mexico the animals are constantly different in their darker coloration and they have large skulls. The dark-colored animal with the large skull appears to be an hitherto unrecognized subspecies which may be named and described as follows:

Natalus mexicanus saturatus new subspecies

Type.—Male, adult, skin with skull, no. 23815, Mus. Nat. Hist., Univ. Kansas; 3 kilometers east of San Andreas Tuxtla, 1000 feet elevation, Veracruz, Mexico; 10 January 1948; obtained by Walter W. Dalquest; original no. 8621.

Range.—Eastern Mexico from southern San Luis Potosí to Campeche; southern extent of range unknown.

Diagnosis.—Total length 99 (96-105) mm. with tail comprising half this length; skull with long (6.9 mm.) maxillary tooth-row; skull with almost vertical occiput and conspicuous sulcus at posterior border of parietals; color dark, pelage in red phase ranging from near (14 j) Amber Brown (capitalized color terms after Ridgway, Color Standards and Color Nomenclature, Washington, D. C., 1912) to between Burnt Sienna and Chestnut; in "gray" phase near (h) Clay Color.

Comparison.—From *Natalus mexicanus mexicanus* known to us by seven specimens from Baja California (6 from Las Cuevas, 23° 34' N, 109° 39' W and one from Santa Anita) and 49 from 4 miles north of Alamos, Sonora, topotypes of *Natalus mexicanus saturatus* differ as follows: maxillary tooth-row longer; color darker; in red phase, near

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(14 j) Amber Brown to between Burnt Sienna and Chestnut instead of Cinnamon Buff to between Yellow Ocher and Cadmium Yellow; in "gray" phase near (h) Clay Color instead of grayish to Avellaneous.

Remarks.—*Natalus mexicanus* has been recorded from Central America but by us no specimens have been examined from areas south of Mexico. Consequently we do not know the southern extent of the geographic range of the subspecies here newly named; we suppose that *N. m. saturatus* is the name applicable to *Natalus mexicanus* of Central America although the possibility is recognized that an unnamed subspecies occurs there.

Among specimens from the type locality of *N. m. saturatus*, the palest individual in the red phase is darker than the darkest individual in that phase from Baja California and Sonora. The one topotype of *N. m. saturatus* in the gray phase likewise is darker than any animals in the corresponding color phase from Baja California and Sonora. Intergradation is indicated by the intermediacy in color of a specimen in the United States National Museum from Mojaráchie, Chihuahua. In other features this specimen agrees with *N. m. mexicanus*. Seven specimens in the U. S. National Museum from Rosario, Sinaloa, and one from Itzatlan, Jalisco, are like *N. m. mexicanus* in length of tooth-row, length of skull, and contour of posterior part of roof of braincase. Only in color do they show some, but slight, approach to the darker *N. m. saturatus*. Finally, the specimen from eight kilometers northeast of Antiguo Morelos is slightly lighter than topotypes of *N. m. saturatus* and therein could be thought of as showing some approach to *N. m. mexicanus*. In other features, however, this specimen agrees with *N. m. saturatus*.

Natalus mexicanus saturatus, here newly named, is a strongly marked geographic race especially as regards color. It is noteworthy that of the 59 skins examined from the state of Veracruz (see below) only one (K. U. no. 17845) is in the gray phase; all the others are in the red phase.

Acknowledgment is made of assistance from the Kansas University Endowment Association with the field work which yielded the series of specimens from Sonora and from Veracruz. We are grateful to those persons in charge of the collections of the United States National Museum, the Biological Surveys Collection, and the Museum of Vertebrate Zoology for lending us comparative materials.

Measurements.—Average and extreme measurements, in millimeters, of ten adult females from the type locality, are as follows: Total length, 99(96-105); length of tail, 49.6(47-52); ear from notch, 15.1(13-16); greatest length of skull, 16.2(16.0-16.6); zygomatic breadth, 8.3(8.1-8.4); interorbital constriction, 3.2(3.1-3.2); breadth of braincase, 7.7(7.6-7.9); maxillary tooth-row (including canine, 6.9(6.7-7.0); breadth across last upper molars, 5.3(5.1-5.3).

Specimens examined (Unless otherwise indicated in the Univ. Kansas Mus. Nat. Hist.).—Total number, 93, distributed by localities as follows: *San Luis Potosí*: 8 km. NE Antiguo Morelos, 500 ft., 1. *Veracruz*: San Andreas Tuxtla, 1(U. S. Nat. Mus.); 3 km. E San Andreas Tuxtla, 88(including 10 skeletons and 20 alcoholics). *Campeche*: Apazote, 1(U. S. Nat. Mus.); La Tuxpena, 2(U. S. Nat. Mus.).

Museum of Natural History, University of Kansas, Lawrence, Kansas.
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