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TWO NEW POCKET MICE OF THE
SPINATUS GROUP AND ONE
OF THE LONGIMEMBRIS GROUP

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For several years the writer has known of a variation existing between specimens of *Perognathus spinatus* taken on the desert mountains in the vicinity of the Colorado River at Bard, Imperial County, California, and those taken on the desert slopes of the coast range to the westward. The study of an assemblage of specimens from the above mentioned regions and from a number of localities in Lower California, Mexico, now reveals the presence of two unnamed races, which are described herewith. The description is also given of a new *Perognathus longimembris* from Lower California.

***Perognathus spinatus rufescens*, subsp. nov.**

WESTERN SPINY POCKET MOUSE

Type.—From the mouth of Palm Canyon, Borego Valley, San Diego County, California; no. 7446, collection of the San Diego Society of Natural History; adult male; collected by Laurence M. Huey, November 10, 1929.

Characters.—As compared with *P. s. spinatus*, *rufescens* is smaller both in body and cranial measurements. In color it is decidedly lighter and inclines toward rufous rather than gray. In this respect its affiliation tends toward *P. s. peninsulae* of southern Lower California. Cranially, *rufescens* has the smallest skull of any of the forms mentioned in this paper. The brain cases of *spinatus* and *rufescens* are rounder than those of the peninsular races, and *rufescens* has the highest curve of all and therefore the roundest brain case. This character is plain when the skulls are viewed anteriorly. This convexity is also shown prominently in the interparietals of both *spinatus* and *rufescens*, though the interparietal of *rufescens* is much shorter and wider than that of *spinatus*.

Measurements.—*Type*: Total length, 180; tail, 103; hind foot, 20; ear, 5. *Skull (type)*: Greatest length, 23.7; width across bullae, 11.8; interorbital constriction, 6.3; nasals, 9.1; tooth row,—(last molars lost).

Range.—Desert slopes of the coast range mountains from the vicinity of Palm Springs, Riverside County, California, south to the Mexican boundary. No doubt this form extends southward in Lower California to the region of the Sierra San Pedro Martír, but specimens to verify this statement are not available.

Perognathus spinatus prietae, subsp. nov.

MID-PENINSULA SPINY POCKET MOUSE

Type.—From 25 miles north of Punta Prieta, Lower California, Mexico, lat. 29° 24' north, long. 114° 24' west; no. 8450, collection of the San Diego Society of Natural History; adult male; collected by Laurence M. Huey, October 26, 1930.

Characters.—As compared with *spinatus*, larger both in body and cranial measurements. In color it is much darker, with a gray cast as in *spinatus*, grizzled somewhat like *peninsulae* to the southward. Cranially, *prietae* is more nearly like *peninsulae* in several characters, though it has a rounder brain case, approaching that of *spinatus*. However, the interparietals are flat, as in *peninsulae*. Compared with *peninsulae* in color, *prietae* is grayish rather than brown and not so heavily grizzled.

Measurements.—*Type*: Total length, 194; tail, 112; hind foot, 21; ear, 5. *Skull (type)*: Greatest length, 25.2; width across bullae, 12.3; interorbital constriction, 5.9; nasals, 9.5; tooth row, 3.3.

Range.—Probably throughout suitable localities in central northern Lower California. Specimens are available from lat. 30° south to the type locality, lat. 29° 24'.

Remarks.—The accompanying table gives the average measurements of male specimens used in the preparation of this paper, and it will be seen that there is a size increase from north to south.

	Total Length	Tail	Hind Foot	Ear	Condylo- Basal Length	Width across Bullae	Inter- orbital Constr.	Nasals	Tooth Row
<i>P. s. rufescens</i> ¹	173.2	99.0	21.3	5.6	24.0	11.9	6.3	9.0	3.3
<i>P. s. spinatus</i> ²	184.8	106.4	22.2	5.0	24.4	12.2	6.2	9.2	3.5
<i>P. s. prietae</i> ³	188.0	109.0	21.0	5.0	25.0	12.2	6.2	9.2	3.6
<i>P. s. peninsulae</i> ⁴	195.2	111.7	21.3	5.1	25.5	12.3	6.5	9.9	3.4

It will also be noted, if Osgood's⁵ table of measurements is compared with the above, that the *peninsulae* from San José del Cabo shows a larger skull average

¹ 8 specimens from San Felipe Canyon, La Puerta and vicinity, San Diego County, California.

² 5 specimens from 3 miles north of Bard, Imperial County, California.

³ 6 specimens from Cataviña and Punta Prieta, Lower California, Mexico.

⁴ 12 specimens from San Ignacio, Lower California, Mexico.

⁵ North American Fauna, No. 18, 1900, p. 63.

than do the specimens from San Ignacio. His measurements of the skins are hardly comparable, owing to possible difference in methods.

Specimens examined.—*Perognathus spinatus rufescens*: Riverside County, California, 1 (Palm Springs); San Diego County, California, 12 (2 from mouth of Palm Canyon, Borego Valley; 3 from San Felipe Canyon; 6 from La Puerta Valley; 1 from Vallecito). *Perognathus spinatus spinatus*: Imperial County, California, 8 (3 miles north of Bard). *Perognathus spinatus prietae*: Lower California, Mexico, 14 (1 from San Agustín; 1 from Cataviña; 12 from 25 miles north of Punta Prieta). *Perognathus spinatus peninsulae*: Lower California, Mexico, 16 (15 from San Ignacio; 1 from Llano de San Bruno). Total, 51 specimens examined.

***Perognathus longimembris venustus*, subsp. nov.**

SAN AGUSTIN SILKY POCKET MOUSE

Type.—From San Agustín, Lower California, Mexico, lat. 30° north, long. 115° west; no. 8196, collection of the San Diego Society of Natural History; adult female; collected by Laurence M. Huey, October 4, 1930.

Characters.—As compared with *Perognathus longimembris aestivus*, much darker in color and has a decidedly bi-colored tail, the black tail-stripe running the full caudal length, terminating with a black tip. The pinna is also covered with black hairs. Cranially, *venustus* has a longer tooth row, and the frontals are slightly higher and rounder. This latter character does not seem to bear relation to age. The mastoid bullae are more rounded and do not extend as far posteriorly, while the auditory bullae are more attenuated and not as heavily inflated, basally.

The only character in which *venustus* approaches *Perognathus longimembris panamintinus* is in dorsal color. In this, *venustus* has a more grayish tinge to the buff than is the case with either *panamintinus* or *aestivus*.

Measurements.—*Type*: Total length, 130; tail, 78; hind foot, 19; ear, 5. *Skull (type)*: Greatest length, 21.8; width across bullae, 12.3; interorbital constriction, 5.0; nasals, 7.9; tooth row, 3.3.

Range.—Known only from the type locality, San Agustín, Lower California, Mexico, which is the southernmost point at which any form of *P. longimembris* has been taken.

Remarks.—It was with surprise that the writer saw the first specimen of this small Silky Pocket Mouse brought from the trap. Already the immediate region of San Agustín had produced representatives of the following groups of *Perognathus*: *baileyi*, *spinatus*, *fallax*, *arenarius* and *formosus*. With the new form added, a total of six species of *Perognathus* was shown to occur within a radius of one-half mile. This constitutes a number unprecedented in the writer's experience for one locality.

Specimens examined.—*Perognathus longimembris panamintinus*: Riverside County, California, 50 (Cabazon). *Perognathus longimembris aestivus*: Lower California, Mexico, 15 (Sangre de Cristo). *Perognathus longimembris venustus*: Lower California, Mexico, 3 (San Agustín).