

Article XV.—DESCRIPTIONS OF THREE NEW FORMS
OF POCKET-MICE FROM THE MEXICAN BORDER
OF THE UNITED STATES.

By EDGAR A. MEARNS.

Perognathus pacificus, new species.

SAN DIEGO POCKET-MOUSE.

Type from the edge of the Pacific Ocean, at the last Mexican boundary monument (No. 258). No. 61,022, U. S. National Museum, skin and skull. Adult female, nursing young. Collected July 12, 1894, by Dr. Edgar A. Mearns. (Original number, 3787.)

General Characters.—Similar to *P. bimaculatus* Merriam, but slightly smaller, with less conspicuous post-auricular patches, more hairy tail, larger and more quadrate lower premolar, and widely separated audital bullæ.

Color.—Upper surface pale ochraceous drab, finely and thickly lined with black. Eyelid, spot at base of whiskers, and ear blackish, the latter without a white spot on its inferior margin. Orbital area (nose to ear) pale buff. Post-auricular spot and lateral line ochraceous buff. Feet and under surfaces white. Tail concolor, hoary at base and dusky at tip.

Measurements.—Average of three adults: length, 109 mm.; tail vertebrae, 53; ear from crown, 4.7; hind foot, 15.5. Skull, 19 by 11.2 mm.

Cranial and Dental Characters.—Skull small, highly arched and strongly declined anteriorly. Nasal bones and nasal premaxillaries ending about even posteriorly. Audital bullæ small, and widely separated anteriorly. Lower premolar quadrate, larger than last molar.

Remarks.—This very small Pocket-mouse was found only on a flat, often submerged by high ocean tides, at the mouth of the Tijuana River, where it appeared to be abundant. The Coast Range Mountains, to the eastward, are inhabited by a very different species, *Perognathus longimembris* (Coues), in the Sonoran Zone, and *P. l. alticolus* (Rhoads), in the Transition Zone.

***Perognathus longimembris bangsi*, new subspecies.**

BANGS'S POCKET-MOUSE.

Type from Palm Spring, Colorado Desert, southern California. No. 5304, collection of E. A. and O. Bangs. Skin and skull of adult female. Collected April 13, 1896, by Mr. E. C. Thurber. (Original number, 644.)

Geographical Range.—Tropical and Lower Sonoran Zones of the Western Desert Tract; known only from the Colorado Desert, California.

Color.—Above pallid, much as in the two species of *Dipodomys* inhabiting the same area; upper surface pale, slightly vinaceous buff, faintly and finely lined with black. Sides without a sharply-contrasting ochraceous stripe. Under parts and feet white. Tail white, faintly dusky in a narrow dorsal stripe, with the slightly penicillate extremity pale hair brown. Head without any distinctly dusky markings, except a narrow blackish edging to the eyelid. Ear scantily haired internally, white and buffy externally, with a plain white spot at base, above and below.

A specimen from White Water, California, also collected by Mr. Thurber, is slightly darker than those from Palm Springs.

Measurements.—Length, 138 mm.; tail vertebrae, 80; hind foot, 19. Skull, greatest length, 21; greatest breadth, 12.

Cranial and Dental Characters.—Skull closely resembling that of *Perognathus longimembris* (Coues); nasals ending posteriorly considerably in front of the pointed posterior extremities of the nasal branches of the premaxillary bones; mastoid and tympanic bullae greatly inflated, and projecting prominently behind the plane of the occiput.

Remarks.—This subspecies, which I have named in honor of Mr. Outram Bangs, the well-known mammalogist, differs from typical *P. longimembris* in its extremely pallid coloration. The upper surface lacks the decidedly dusky admixture of the latter, and also the sharply defined ochraceous lateral stripe.

***Perognathus (Chætodipus) eremicus*, new species.**

EASTERN DESERT POCKET-MOUSE.

Type from Fort Hancock, El Paso County, Texas. No. $\frac{21052}{38884}$, U. S. National Museum. Adult female. Collected June 27, 1893, by Dr. Edgar A. Mearns. (Original number, 2380.)

General Characters.—This Pocket-mouse belongs to the *Perognathus penicillatus* group, of which it is almost the smallest and palest member. The skull, though small, is peculiar in its heavy ossification, squarish configuration, and the large size of the teeth. Ears small. Pelage coarse, without spines or bristles.

Color.—Upper surface whitish drab tinged with fawn color, faintly lined with dusky; sides with a faint line of ecru-drab; feet and under surfaces, except extreme tip of tail, white; upper surface and tip of tail all round light hair brown; face without markings; whiskers colorless, or hair brown; claws colorless.

Measurements.—Average of six adults, four males and two females, from the type locality: length, 163 mm.; tail vertebræ, 83; tail to end of hairs, 96; ear from crown, 4.4; ear from anterior base, 9.1; length of head (nose to occiput), 27.2; length of hind foot, 22.1. Skull, 25 by 13.5 mm.

Cranial and Dental Characters.—Skull massive, broad and wide anteriorly across the zygomata. The premaxillaries are remarkably heavy, ending well behind the truncated posterior extremities of the nasals. The mastoid cells are flattened and divided by a prominent ridge; tympanic bullæ large, almost meeting anteriorly below the basisphenoid. Teeth large.

Comparisons.—*Perognathus penicillatus* Woodhouse is much larger than the present species, darker in color, with the basal two-thirds of the hair of “a lustrous tint of fresh cut lead” instead of pale grayish drab.

Perognathus obscurus Merriam is also larger and darker. It has relatively smaller teeth, a lighter skull with zygomatic arches less expanded anteriorly and lacking the prominent osseous ridge across the mastoid.

Perognathus (Chaetodipus) intermedius canescens Merriam is a closely related member of the *penicillatus* group. It differs from *P. eremicus* in being one of the largest instead of one of the smallest members of the group, and has the skull much narrower across the maxillary arms of the zygomata. The color is darker, the upper surface being “drab-gray, plentifully lined with dusky on median part of back and rump.” *Perognathus eremicus* requires no comparison with other members of the genus.

Remarks.—This species is based on six specimens from Fort Hancock and two from El Paso, Texas. About one hundred miles west of the latter place is the type locality of *Perognathus obscurus* Merriam. As no specimens of *Chætodipus* were obtained between these two points, it is impossible to decide as to the intergradation of these forms. Whether *Perognathus eremicus* intergrades with the Mexican form *canescens* likewise remains to be determined.