PRELIMINARY DIAGNOSES OF NEW MAMMALS OF THE GENERA MEPHITIS, DORCELAPHUS, AND DICOTYLES, FROM THE MEXICAN BORDER OF THE UNITED STATES.

By Edgar A. Mearns, M. D., Assistant Surgeon, United States Army.

This is the sixth of a series of papers giving preliminary descriptions of the new mammals collected on the recent survey of the boundary between Mexico and the United States.¹ Detailed descriptions, with illustrations of the new forms, and comparisons with their allies will appear later, in the report on the collections made by the International Boundary Commission.

MEPHITIS MILLERI, new species.

MILLER'S HOODED SKUNK.

Type.—No. 58851, U.S.N.M. (Collection International Boundary Commission). Skin and skull. Adult male, from Fort Lowell (near Tucson), Arizona. Collected by Mr. F. X. Holzner, November 13, 1893. Original number, 1109.

Description of type.—In winter pelage. Body slender. Candal vertebrae longer than head and body. Nape with a hood of spreading elongated hair. Coat long and glossy, with copious fine underfur. Head with a parrow, longitudinal, white stripe above. Color glossy black, with a white area low down on the sides, extending from the ear to the tail, and tending to form a double stripe toward either extremity. Tail all white at base of hair; externally black above and all round subterminally; under side all white, except the subterminal black ring. End of tail with a copious tuft of white hair nearly 300 mm, in length. Feet and under parts, except tail, all black. Length to end candal vertebrae, 790 mm.; tail to end of vertebrae, 435; ear from crown, 18; length of hind foot, 73.

¹Proc. U. S. Nat. Mus., XVII, 1894, pp. 129-130; XVIII, 1895, pp. 443-447, 551-565; XIX, 1896, pp. 137-140; XX, pp. 457-461.

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Another specimen, No. $\frac{20777}{6609}$, U.S.N.M., male, from the eastern base of the Patagonia Mountains, in the Santa Cruz Valley, near monument No. 112, Mexican boundary line, taken November 18, 1892, by Mr. F. X. Holzner. Original number, 822, represents a very different but common phase of coloration in this skunk, and in M. macroura Lichtenstein. The upper surface is white, from the occiput to the middle of the back, and the rest of the dorsum, including the whole upper side of the tail, gravish black, beautifully veiled by long white hairs. In this specimen the white stripe on the upper side of the head is reduced to a trace, and in a few others it is wholly absent. The under surface. including the middle of the tail to near its extremity, is all black, except a white patch running backward from the neck to near the middle of the abdomen. There is no white striping low down on the sides. Some specimens have the light back, also the white side-stripes; others have the white dorsal area ending at the lumbar region, with or without white on the sides; and still other individuals are almost wholly black, even as to the tail except at the base of the hair. The two individuals particularly described above are of the common patterns. The species is variable.

The skull, although much larger and relatively narrow zygomatically, is closely similar to that of *Mephitis macrowra* Lichtenstein, of which this may prove to be a subspecies. Named in honor of Mr. Gerrit S. Miller, ir.

DORCELAPHUS CROOKI, new species.

CROOK'S BLACK-TAILED DEER.

Type.—No. $\frac{2.0.5}{3.5.7.5.2}$, U.S.N.M. (Collection International Boundary Commission). Adult female: shot by the author on the summit of the Dog Mountains, Grant County, New Mexico, June 9, 1892. Original number, 1873.

Description of type.—In the summer pelage. Color reddish fawn, darker from black annulations on the back, lightening to grayish cinnamon on the sides, and gravish drab on the neck. The legs are creambuff, except where new clay colored hair is coming in on the anterior border, the limbs being almost the last part to receive the summer coating. The coloring of the head is very similar to that of the mule deer in corresponding pelage. It has the horseshoe or arrow mark on the forehead, and other dark markings of the head to correspond; and the ears are relatively almost or quite as large, and as scantily coated with hair. The bushy hair around the metatarsal gland, which agrees in size and location with that of Dorcelaphus columbianus, is sooty at base, and white apically. The tail is colored much as in D. columbianus, but has a longer terminal switch; upper side and extremity of tail all black, lower side white mesially, and naked towards the base. The pelage of this deer is short and coarse in comparison with that of the white-tailed or Virginia deer, or the black-tailed deer of the Columbia River region;

and, as would naturally be expected, is not so red as that of the latter. This specimen contained a fætus the size of a cottontail rabbit. The measurements of the type, taken from the fresh specimen, are as follows: Total length, measured in a straight line, 1,440 mm.; tail vertebræ, 195 (to end of hairs, 304); ear above crown, 220; ear above noteh, 190; width following curve, 125; distance between eyes, 100; girth of chest, 790; distance from head of humerus to head of femur, 620; from tip of nose to eye, 155; to center of pupil, 175; to base of ear, 290; to tip of ear, 470; to occiput, 295; height of animal at shoulder, 650; fore limb from coracoid, 630; from olecranon, 540; length of manus, 300; hind limb from knee-joint, 620; length of pes, 400. Weight, evicerated and dry, 72 ponnds avoirdupois.

Cranial characters.—The skull has very nearly the same conformation as that of *D. columbianus*, the lachrymal fossa being deeper than in the Virginia deer, but shallower than in the mule deer. The same intermediate condition obtains with respect to the vomer, in the relationships of the nasal and premaxillary bones, in the form and size of the teeth; and, in short, the whole animal appears to be a compromise between the characteristics of the white-tailed and mule deer. Named in honor of Major-General George Crook, United States Army.

DICOTYLES ANGULATUS SONORIENSIS, new subspecies.

YAQUI PECCARY.

Type.—No. 20057, U.S.N.M. (Collection International Boundary Commission). Adult male, from San Bernardino River, Sonora, Mexico, near monument No. 77, Mexican boundary line. Collected by Doctor Edgar A. Mearns and Mr. F. X. Holzner, September 8, 1892. Original number, 2099.

Description of type.—Above, there is a mane of long, black-tipped bristles, extending from the crown to the naked gland on the rump, the longest bristle measuring 135 mm. in length. The rest of the upper surface is a pepper-and-salt mixture of commingled grayish-white, yellowish-white, and brownish black colors, the bristles being whitish, ringed and pointed with black. The flanks are whitest and the shoulders blackest. An incomplete and rather indistinct whitish collar extends across the side, behind the neck, and in front of the shoulder. The muzzle, cheeks, and space in front of the eye are brownish gray, annulated with darker. There is a brownish-white orbital area, and a brownish glandular stain below the front of the eye. The under jaw is yellowish, with a triangular blackish patch near the end of the chin. The ears have their outer surface and tip of inner surface coated with black bristles; concavity rugose, with five bands of long, buffy white hairs occupying the ridges. Legs mixed brownish white and brownish black, becoming solidly black about the hoofs, and with a light band encircling the fore leg above the accessory hoofs. Under surface of body with a blackish median area, the color fading to grayish on the axillary and inguinal regions. Snout livid plumbeous, flesh color around the nostrils. Hoofs plumbeous-black. Length, 920 mm.; tail vertebrae, 65; tail to end of hairs, 128; ear from crown, 115; ear from notch, 95; width of ear, 88; distance between eyes, 80; diameter of eye, 16; length of longest whisker, 80; from tip of snout to angle of mouth, 105; to eye, 160; to center of pupil, 175; to ear, 235; to tip of ear, 368; to occiput, 300; to end of outstretched hinder extremity, 1,250; height of animal at shoulder, 610; from head of humerus to end of hoof, 390; from olecranon process to end of hoof, 287; length of manus (measured in front), 132; height of animal at hips, 520; from great trochanter to end of hoof, 460; from knee-joint to end of hoofs, 308; length of hind foot, 200; distance from point of shoulder to great trochanter, 495; girth of chest, 580. Weight, 46 pounds avoirdupois.

The young are pale reddish brown, with a black vertebral stripe. The upper surface is sprinkled with black bristles, the lower surface plain and paler. The limbs are reddish brown, becoming blackish next to the hoofs.

This animal differs from the peccary of eastern Texas and north-eastern Mexico in being larger, with relatively larger ears and feet, and paler colors. The peccary of the Lower Rio Grande is blackish, while that of Sonora and Arizona is grayish, with a sharply contrasting, black dorsal stripe. The posterior molars are smaller and more simple in form than those of true *D. angulatus*.

DORCELAPHUS HEMIONUS EREMICUS, new subspecies.

BURRO DEER: DESERT MULE DEER.

The mule deer of the Western Desert Tract, like all mammals of that region, is remarkable for the extreme pallor of its coloration. An adult male (No. 63403, U.S.N.M), taken by Mr. W J McGee, in December, 1895, in the Sierra Seri, near the Gulf of California, in the most arid portion of Sonora, Mexico, is in full winter pelage. The coat is short and glossy. Coloration above very pale drab-gray, with a dark vertebral area, which begins as a narrow median stripe on the upper side of the neck, broadens and becomes fainter on the back, forms a blackish spot at the root of the tail, down which it descends for a short distance. The buttocks, inguinal and abdominal regions, and the middle of the tail all around are white. The axillæ and hollows of the thighs are entirely naked. The edges of the buttocks, posterior surface of limbs, and the feet are washed with pale, muddy cinnamon. chest is light sooty drab. Tail with a heavy brush or short switch of black hair at the end, the middle portion being white all around, the dusky color running down a short distance, on the upper side, from the blackish spot at its base. While the general effect is to produce a pale drab gray coloring of the upper surface, there is the usual pepper-andsalt commingling of colors, produced by light and dark annulation of the hairs, those in the vertebral area being pointed with brownish black. It appears to be a larger animal than the mule deer of the Eastern Desert Tract, and, unless the specimens brought home by our party are abnormal, its horns are heavier and more divergent, being remarkable for the great length of the beam before forking. In a youngish specimen from the Sonoyta Valley (No. 59910, U.S.N.M.), the distance from the burr to the first fork, following the curve of the beam, is 320 mm. The total expanse of this pair of horns is 620. They are doubly dichotomous throughout, having four points, besides a basal snag, on each horn. Another pair (No. 60855, U.S.N.M.) belonged to a fully adult animal, killed at Black Butte, on the Colorado Desert near the "volcanoes" or mud geysers, Lower California. This was one of six that were killed by Mr. Samuel Cameron, one of our guides, during the winter of 1893-94. The beam is unusually stout, and has an extent of 310 mm, before forking, and the horns have a total expanse of 775, The horns are also doubly dichotomous.