### PROCEEDINGS

OF THE

# BIOLOGICAL SOCIETY OF WASHINGTON

#### DESCRIPTIONS OF TWO NEW RACCOONS.

BY GERRIT S. MILLER, JR.

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The United States National Museum contains specimens of two species of *Procyon* which appear not to have been hitherto described.

#### Procyon pumilus sp. nov.

Type.—Young adult (rostral sutures open, those of braincase closed; teeth slightly but evidently worn), skin and skull, No. 171,983, U. S. National Museum. Collected at Ancon, Panama, by Dr. Allan H. Jennings.

Diagnosis.—Resembling Procyon pygmwus Merriam of Cozumel Island, Yucatan, but size somewhat less diminutive, color less yellowish, teeth relatively less reduced, and nasal bones not distinctly widened posteriorly.

Color.—Upper parts and sides a clear grizzled gray without evident yellowish tinge, the underfur drab, darkening appreciably at ends of hairs, the longer hairs with black tip and a subterminal annulation of buffy white; the whitish element in excess on neck, shoulders and sides, the black along middle of back, especially across lumbar region, where it tends to produce a median line; crown like sides but more finely grizzled and with light element a clearer white; face markings normal, but black band broader than in P. pygmæus and light area above eyes correspondingly reduced; tail dull buff in strong contrast with gray body, the seven black rings well defined, about half as wide as the light interspaces; underparts drab mixed with the whitish of the longer hairs, but without black except for the broad dark interramial band; fore legs like sides but strongly tinged with drab; hind legs similar but becoming blackish on inner side above heel.

Skull.—The skull differs from that of *Procyon pygmwus* in its slightly less reduced size, in the form of the audital bullæ and apparently also in the outline of the nasal bones. Audital bullæ with meatal region distinctly more tubular than in either *P. pygmwus* or *P. hernandezii*, the difference apparently due to reduction in the area of inflated portion. Nasal bones

searcely widened posteriorly and showing no tendency toward the broadly rounded form of the terminal region characteristic of *P. pygmæus*. General form of skull decidedly wider than in *P. hernandezii*, a peculiarity equally noticeable in the relatively greater zygomatic breadth and in the more inflated anterior portion of braincase.

Teeth.—Though showing no special peculiarities of form the teeth are readily distinguishable from those of  $Procyon\ hernandezii$  by their much smaller size, and from those  $P.\ pyymwns$  by their less reduced condition, this character especially noticeable in  $pm^4$ .

Measurements.—External measurements of type (from skin): head and body, 430; tail, 235; hind foot, 97 (93). Skull of type and of a second specimen of the same age, the measurements of the latter in parenthesis: condylobasal length, 401 (96.6); zygomatic breadth, 63.6 (67.0); interorbital constriction, 20.4 (49.0); breadth of braincase, 46.6 (43.0); nasal (median), 25.2 (27.6); mandible, 75 (72.4). For dental measurements see table.

Measurements of the skulls of *P. pygmvus*, the type, a young male with sutures on upper part of braincase open (basal suture closed), and a female of same age as type of *pumilus*: condylobasal length, 92.8 (91.8); zygomatic breadth, 58.6 (60.2); interorbital constriction, 19.6 (19.8); breadth of braincase, 43.0 (43.2); nasal (median), 23.2 (22.2); mandible, 69.2 (66.8).

Measurements of a skull of *P. hernandezii* from Colima, Mexico, same age as type of *P. pumilus*: condylobasal length, 145.4; zygomatic breadth, 76.2; interorbital constriction, 24.2; breadth of braincase, 50.4; nasal (median), 31.2; mandible, 84.4.

Specimens examined.—The type, from Panama, and a skull collected by Lieutenant Couch and labeled Matamoras (No. 1388).

Remarks.—In all essential features the Couch specimen agrees so closely with the skull of the type that there can be scarcely any question as to their identity, at least as compared with the large Procyon hernandezii and the small-toothed P. pygmæus. It may, perhaps, be reasonably doubted whether this individual was actually killed at Matamoras, but its presence in Couch's collection appears to be a clear indication that the species ranges far to the north of Panama.

## Procyon minor sp. nov.

Type.—Young male, (permanent dentition in place but basal suture open), skin and skull No.  $\frac{3.544.7}{1.544.7}$  U. S. National Museum. Collected at Ponite-à-Pitre, Guadeloupe, Lesser Antilles, by L. Guesde. Received from the l'Herminier museum.

Diagnosis.—Size and general appearance as in the other small members of the genus (P. maynardi, P. pygmæus, P. pumilus); skull with posterior extension of palate so widened that its least breadth is decidedly greater than distance from last molar to anterior border of mesopterygoid fossa.

Color.—The skin is not in good condition, having apparently been subjected to the action of some kind of preservative fluid. The color

indicates no special peculiarities; back rather uniformly clouded with black, the light element of the grizzle buffy white with an evident yellowish tinge on neck; face markings normal, the light area above eye well developed; whitish terminal area on ear large and conspicuous; tail not noticeably more yellowish than back, the black rings narrow but well defined; underparts dark wood brown thinly overlaid by the whitish longer hairs; interramial dark area narrow and ill defined.

Skull.—The skull is too young to furnish a satisfactory basis for comparison. It differs conspicuously, however, from that of other members of the genus in the unusual breadth of the posterior extension of the palate. The least width of this is 16.4 mm., the distance in median line from level of posterior edge of last molar to anterior border of mesopterygoid fossa (disregarding median spine or notch) is 12 mm. In a specimen of P, hernandezii of exactly the same age these measurements are respectively 15.2 and 13.8. The same narrow form is also shown by a young P, pygmeus. Andital bulke with meatal portion not evidently tubular. Mandible excessively slender, its depth at front of  $pm_4$  contained nearly 10 times in length to extremity of angular process, while in the P, hernandezii of same age it is contained only about  $7\frac{1}{2}$  times in the same length.

Teeth.—In general the teeth resemble those of Procyonmaynardi, the small premolars showing the same tendency to be widely placed as compared with the more crowded condition in other members of the group. The cusps of all the teeth tend to be higher and narrower than in P. maynardi, and the cingula of the three large upper cheek teeth are better developed.

Measurements.—External measurements of type (from skin): head and body, 440; tail, 185; hind foot, 85 (81). Skull: condylobasal length, 94.6; zygomatic breadth, 55.4; interorbital constriction, 17.8; breadth of braincase, 44.8; nasal (median), 27.2; mandible, 70.4. For dental measurements see table.

Specimen examined.—The type.

Remarks.—Although represented by a single rather unsatisfactory specimen this animal shows such marked characters that I have no hesitation in regarding it as a distinct species.

Table of Dental Measurements.

Second lower molar (erown).	$7.6 \times 5.0$	$8.0 \times 5.0$	$8.2 \times 5.0$	$9.0 \times 6.0$	8.4 x 5.4	9.4 x 5.4	$9.0 \times 5.2$	$10.0 \times 6.4$	$9.8 \times 6.0$	
First lower molar (erown),	8.2 x 5.0	8.2 x 5.2	8,4 x 5,2	$10.0 \times 6.4$	10.0 x 6.0	9.0 x 5.4	9.0 x 5.4	11.2 x 6.8	10.4 x 6.4	
Posterior lower pre- molar (crown),	6.0 x 4.0	6.2 x 4.2	6.0 x 4.0	$7.4 \times 5.0$	7.0 x 4.6	6.6 x 4.8	7.0 x 4.6	S.S x 6.2	8.2 x 5.4	
Three large lower (crowns).		31	?!	26.2	24.6	5. 4. 8.	25.0	50.05 5.05	27.6	
Lower toothrow exchi- sive of meisors,	40.4	40.0	· .	45.0	43.6	51.5	+.+.	51.6	50.0	
First upper molar	7.0 x 8.2	7.0 x 8.2	7.5 × 5.5	9.2 x 9.8	8.6 x 9.2	7.8 x 9.0	7.8 x 8.6	$9.6 \times 10.8$	$9.0 \times 10.6$	
Posterior upper pre- molar (ctown),	6.2 x 7.0	6,4 x 7.2	6.2 x 7.0	8.0 x 9.0	8.0 x 9.2	7.0 x 8.0	7.4 x 8.0	9.8 x 10.4 s	8.6 x 9.6	
Тртее затве пррет спесктеей (стоила).	17.6	18.0	18.0	51 51	20.6	20.0	20.0	24.S	53.0	
Upper toothrow exchusives,	35.4	15.4		39.4	39.2	38.6	:	45.4	43.6	_
Name.	Procyon pygmæus. Vozumel. Type	" Cozumel, Female	" Cozumel, Young male,	Procyon pumilus. Yucatan. Type	" "Matamoras"	Procyon maynardi. Bahamas, Adult male	Procyon minor. Guadeloupe. Type	Procyon hernandezii. Colima	" Colima	
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