

PROCEEDINGS
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TWO NEW CARNIVORES FROM THE MALAY
PENINSULA.

BY GERRIT S. MILLER, JR.

Among the mammals collected by Dr. W. L. Abbott on the Malay Peninsula and presented to the United States National Museum are the following carnivores, neither of which appears to have been hitherto described.

Arctogalidia major sp. nov.

Type.—Young adult male* (skin and skull), No. 83,510, United States National Museum. Collected in Trong, Lower Siam, September 3, 1896, by Dr. W. L. Abbott.

Characters.—A black-eared, heavily striped animal like the Bornean *Arctogalidia stigmatica*, but differing from this species as well as from the white-eared, indistinctly striped *A. leucotis* of the Malay Peninsula, in its larger size; basilar length of skull about 110 mm. instead of about 95-105 mm.

Color.—General color a light broccoli-brown, with a silvery gloss on back and a distinct wash of ochraceous-buff on sides of body and outer surface of legs, this wash particularly noticeable on neck. Underparts dull, grayish ochraceous-buff. Ears, feet, and terminal half of tail black. Muzzle and a distinct area behind and above ear black. Crown and cheeks a clear grizzled gray contrasting slightly with more yellowish neck. Dorsal stripes clear black and well defined, the lateral extending forward to dark area behind ear. Basal half of tail like back, but crossed by faint though evident blackish transverse bands nearly 10 mm. wide. Ten of these bands can be counted; they then become confused and crowded, merging quickly into black terminal area.

Skull and Teeth.—As compared with that of a slightly older male *Arctogalidia stigmatica* from near Sandakan, Borneo, the skull differs in its noticeably more robust form. Although only about 3.5 mm. more in greatest

* Permanent dentition in place but unworn; sutures of rostrum and braincase plainly visible.

length the skull of *Arctogalidia major* exceeds that of *A. stigmatica* by 3 mm. in greatest breadth of rostrum and by 5 mm. in mastoid breadth. The auditory bullae are relatively larger in the larger animal, their greatest length, including paroccipital process, 23.4 mm. instead of 19.6 mm. As compared with that of *Arctogalidia leucotis* the skull shows much the same differences, though even more noticeably (see cranial measurements). The teeth show no special peculiarities, though they appear to be relatively smaller than in *A. stigmatica*.

Measurements.—External measurements of type: Total length, 1245; head and body, 560; tail vertebrae, 685; hind foot, 97 (92). Skull: Greatest length, 118 (105)*; upper length, 107 (95); condylobasilar length, 114 (101.4); basilar length, 109 (96); palatilar length, 62.6 (58); breadth of palate between carnassials, 17 (15.4); breadth of posterior extension of palate, 12.2 (9); breadth of rostrum across roots of canines, 21.8 (19.4); constriction in front of postorbital processes, 21.6 (17); constriction behind postorbital processes, 17.2 (17); breadth of braincase above roots of zygomatics, 35, (36.2); mastoid breadth, 42.8 (37); mandible, 86.6 (80.4); maxillary toothrow exclusive of incisors, 41 (37); upper incisor row, 10 (8.6); mandibular toothrow exclusive of incisors, 45 (40).

Specimens examined.—One, the type.

Remarks.—This species appears to be a large continental representative of the widely distributed *Arctogalidia stigmatica* group. It is the largest known member of the genus, and the size of its skull is alone sufficient to distinguish it. From the other species occurring on the Malay Peninsula, *A. leucotis*, it is separable by color as well as by size, as the ears show no tendency to develop the conspicuous white patch on distal half, and the dorsal streaks retain their outline complete.

***Paradoxurus robustus* sp. nov.**

Type.—Adult female (skin and skull) No. 86,796, United States National Museum. Collected in Trong, Lower Siam, February 13, 1899, by Dr. W. L. Abbott.

Characters.—Like *Paradoxurus leucomystax* from the southern part of the Malay Peninsula, † but size not as great, and color not as dark.

Color.—Type: Upperparts a light dull buff, paler and clearer on sides, somewhat tinged with russet over middle of back, the hairs everywhere black-tipped, but the dark color very inconspicuous except on crown, neck, and shoulders, where it produces an evident clouding. Back without stripes or spots. Feet and ears blackish. Upper half of cheeks light buff, clearer and more yellow than that of body, fading into buffy gray on forehead and median line of muzzle. Sides of muzzle and lower half of cheeks to and including eyes dark hair-brown, slightly grizzled with grayish buff. Whiskers pale buff. Underparts and inner surface of legs dull buff, paler and less yellow than that of Ridgway, somewhat darkened by a wash of

* Measurements in parenthesis are those of a much older male *Arctogalidia leucotis* from Red Point, Tenasserim (No. 124,227).

† The type of *Paradoxurus leucomystax* formed part of the Raffles collection, and was therefore probably taken in this region or in western Sumatra.

hair-brown on chin and throat. Tail like body, but darkening to a uniform dull, blackish tip.

Skull and Teeth.—Except for the differences in measurements, and a tendency toward greater robustness, the skull and teeth essentially agree with those of *Paradoxurus leucomystax*.

Measurements.—External measurements of type: Head and body, 653; tail vertebrae, 602; hind foot, 100 (96). External measurements of an adult male (No. 124,279) from Telok Besar, Tenasserim: Head and body, 640; tail vertebrae, 565; hind foot, 99 (96). Skull of type: Greatest length, 126 (134)*; upper length, 116; condylobasilar length, 121 (133); basilar length, 116.4 (127); palatilar length, 57 (63); width of palate including molars, 41 (41.4); least width of palate between incisors and canines, 14 (16); interpterygoid space, 27 x 14 (26 x 14.6) breadth of rostrum across roots of canines, 24; zygomatic breadth, 69 (70); constriction in front of postorbital process, 25.4 (28.4); constriction behind postorbital process, 22.4 (22.4); breadth of braincase above roots of zygomata, 41.4 (38); mastoid breadth, 45 (46.8); occipital depth, 30.4 (31.4); mandible, 94 (104); maxillary toothrow exclusive of incisors, 44 (46); mandibular toothrow exclusive of incisors, 50 (51).

Specimens examined.—Four, two from Trong, Lower Siam, and two from Telok Besar, Tenasserim.

Remarks.—An immature male from Champang, Tenasserim (No. 124,021), is not as pale as the others from the same general region, and may, perhaps, represent the dark southern form. As it retains its milk dentition it is too young to be definitely named.

* Measurements in parenthesis are those of a young adult female (teeth slightly worn, nasals distinct except posteriorly) *P. leucomystax* from Perak, Brit. Mus. No. 6. 2. 4. 3.