

## ON A NEW RACE OF FLYING SQUIRREL FROM SIAM.

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***Petaurista annamensis barroni***, subsp. nov.

*Type.* Adult skin and skull (sex unknown). Author's No. 2085, CBK. Collected at Hup Bon near Sriracha, South-east Siam, 500 ft., Dec. 1915, by Mr. P. A. R. Barron.

*Characters.* Perhaps most nearly allied to *P. annamensis*, Thomas, from South Annam<sup>1</sup> but differing in having a well-defined blackish ring round the eyes, white throat, and tail black on its distal third only. Upper tooth-row notably longer.

From *P. taylori*, Thomas, of south Tenasserim<sup>2</sup> it is distinguished by the greater extent of whitish grizzle on the upper surface, edge of interfemoral membrane black near the feet only, and greater amount of black at the end of the tail which is speckled basally with whitish; also apparently (as compared with an Indian Museum specimen collected at Mergui by Dr. J. Anderson) by the somewhat lighter tone of red on the upper surface and parachute and rather larger size.

From *P. lylei*, Bonhote, of North Siam<sup>3</sup> it differs in the lesser degree and extent of white grizzling above, in the white throat, white-tipped ears, white-edged parachute and drabby tail: it further lacks the dark spots above and below the eye, while the membranes, limbs and under-body are darker. It is also rather smaller.

*Colour.* General colour above chestnut anteriorly, Sanford's brown posteriorly, the bases of the hairs deep purplish-grey, the trunk speckled with white to about the same degree as *P. candidulus*, Wroughton, this frosting extending in a modified way to the limbs and along the tail on to the interfemoral membrane: throughout, the majority of the white-ringed hairs have black tips. Head more grizzled than back but the black tips less distinct. Muzzle and cheeks

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<sup>1</sup> Journ. Bombay Nat. Hist. Soc. XXIV, p. 204 (1915).

<sup>2</sup> tom. cit. supra, p. 205.

<sup>3</sup> P.Z. S., 1900, p. 192, plate XVIII.

white, the hairs with drabby-grey bases: areas before and behind the eye brownish-white with dark grey bases. Eye broadly ringed with black. Tip of nose and whisker patches blackish-brown. Ears with proectote dull white, metectote black, the latter colour extending to the hairs behind their bases. Edges of parachute white; of calcanea black; of interfemoral membrane black near the feet. Fore and hind-feet black.

Under surface of body light ochraceous-salmon becoming cinnamon-rufous on parachute, the latter colour extending to the sides of the neck and to the upper side of the membrane in front. A spot on the chin black narrowly edged with ochraceous; throat white.

Hair of free portion of tail drab with grey bases, except the terminal third above and the extreme tip which are black.

*Skull and teeth.* The skull is very robust with large bullae and the zygomatic spine is very pronounced, there being a distance of only about 5 mm. between it and the tip of the postorbital process. The termination of the combined nasals is markedly  $\Lambda$  shaped; in a skull of *P. taylori* it is slightly convex and the nasals are less produced anteriorly. The latter skull is considerably smaller with relatively small bullae, but has broader palate, mesopterygoid fossa and zygomata. While the skull measurement of *P. barroni* are practically the same as those of *P. annamensis* the teeth are much larger—the maxillary tooth-row, exclusive of the small anterior premolar, being 17.0 against 15.2 millimetres.

*Measurements.* Skull: greatest length, 77 (75);<sup>4</sup> condylo-basilar length, 67.2 (66.6); palatilar length, 35.7 (34); diastema, 16 (15.6); upper tooth-row, 18.2 (17.2); p<sup>1</sup>-m<sup>3</sup>, 17 (16.2); greatest length of nasals, 24.6 (22.5); greatest breadth of nasals 14. (13.1); least interorbital breadth, 19 (15.3); breadth between tips of post-orbital processes 39 (37.3); zygomatic breadth 49 (49.4).

*Specimens examined.* The type and another example obtained on 26th March 1902 in the Nampat district, Monthon Pitsanulok, Central Siam, by Mr. H. B. G. Garrett and now in the Indian Museum, Calcutta.

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<sup>4</sup> Measurements in parentheses those of an adult *P. taylori* from Mergui in the collection of the Indian Museum, Calcutta: they are given here because the type specimen, the only one on record, is without a skull,

*Remarks.* This is a race of flying-squirrel having, like *P. annamensis* and *P. taylori*, the external side of the ear, *i.e.*, that nearest the crown of the head, clad in front (proectote) with short white hair, and posteriorly (metectote) with long black hairs.

From those three, *P. cinereus* and *P. candidulus* are distinguished by having no black hairs behind the ears, while in *P. lylei* and *P. l. venningi* the proectote is clad with rufous hairs. I should therefore group as follows:—

- . Ears variably rufous throughout...*cinereus* and *candidulus*<sup>5</sup>
- Ears rufous and black .....*lylei* and *l. venningi*
- Ears white and black.....*annamensis*, *taylori* and  
*a. barroni*

The skin from Pitsanulok is in good condition except that it lacks the tail. It only differs from the Hup Bon example in being of a little deeper shade and somewhat more widely grizzled above, but the latter feature is due to the fact that the pelage of the type is somewhat abraded across the shoulders and rump. The total length is recorded by the collector as 38 inches; the length of the tail as 21 inches. It is a female with three pairs of mammae. The skull is missing.

Mr. Barron has more recently sent me a young male of this squirrel which, it is most interesting to note, differs from the adult in that the back, instead of being hoary, is overlaid with black. The head and shoulders, upper side of limbs and membranes are as in the adult, but there are small red-brown patches above and below the dark eye-ring, and the membranes are edged with black externally to the white. The limbs and feet are more intensely and extensively black, and the black patches behind the ears are continued backwards to form an indistinct collar on the neck, behind which the whole of the body fur is black-tipped with the central portion of the hairs rufous-white. The black-tipped hairs are continued over the basal fourth of the tail which is next fulvous-white and then tawny with the last inch or so black above:

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<sup>5</sup> Four specimens of *cinereus* from Arakan examined seem to have the proectote rufous; and though Wroughton states that this area is white in *candidulus* (Journ. Bombay Nat. Hist. Soc.; XX (1911) p. 1022) this is not borne out by six examples from Assam in which it is also rufous.

on the lower side the colours are the same except that the tawny element extends narrowly along the middle line almost to the tip. The under surface of the membranes is practically naked: the body and limbs are the same as the type but the calcaneal region is more blackened. Head and body, 195; tail, 205; hindfoot, 49; ear, 14.5 mm. [No 2091]

Mr. Barron writes "I have found three nests of this squirrel and in each there was only one young. The nest was placed in the hollow of a tree about 35 to 40 feet above the ground in the ever-green forest near Sriracha, where the original adult was found."