

Article XIII.—ON THE GENUS *PRESBYTIS* ESCH., AND ‘LE TARSIER’ BUFFON, WITH DESCRIPTIONS OF TWO NEW SPECIES OF *TARSIUS*.

BY D. G. ELLIOT, D. SC., F. R. S. E., etc.

For some considerable time mammalogists have employed the term *Presbytis* Esch., 1821, for the genus containing the ‘Langurs,’ as antedating F. Cuvier’s genus *Semnopithecus* of 1825. It seems, however, that there are two genera earlier than either of these, *Lasiopyga* Illiger, 1811, and *Pygathrix* E. Geoffroy, 1812. The first of these (*Lasiopyga* Ill. Prodr. Mamm. et Avium, 1811, p. 68) contained two species, *L. nemæus* Linn., and *L. nictitans* Linn., each however, belonging to a separate genus. Illiger did not select either of the species as the type of his genus, and therefore it was perfectly in accord with our code and customs, for E. Geoffroy to select for his new genus *Pygathrix* (Ann. Mus. Hist. Nat. Paris, XIX, 1812, p. 90) the first of Illiger’s species, *L. nemæus* Linn., as its type, thus leaving *L. nictitans* Linn. as the type of *Lasiopyga*, which is antedated by *Cercopithecus* Erxleben, and becomes its synonym.

Pygathrix, therefore, being apparently the earliest generic name proposed for the ‘Langurs,’ must be employed, and *Presbytis* becomes a synonym, having been proposed nine years afterwards.

Buffon in his *Histoire Naturelle* described a little animal, which he called ‘Le Tarsier’ and of which he gave an uncolored figure and the following description: “Le poil du Tarsier était une sorte de laine longue de six à sept lignes, fort douce, de couleur cendrée noirâtre sur la plus grande partie de sa longueur depuis la racine, et de couleur fauve-foncée à son extrémité, sur le dos, la croupe et le ventre, et plus claire sur le reste du corps: il n’y avait presque point de fauve sur la tête, elle était grise cendrée, principalement à l’endroit des joues, où il avait du poil long; le cendré paraissait aussi avec le fauve sur tout le corps, les pieds étaient nus.” Then follows a description of the teeth, thirty-two in number, with two incisors on each jaw! The tarsi are bare. This specimen was evidently a young animal as is shown by the blackish gray color of most of the pelage, the brown hue, which characterizes the adults of all the known Tarsier in varying depths from pale to dark brown, not having yet assumed the ascendancy. The fact of this specimen having had but two incisors in the upper jaw, either proves that it was immature, or else all other described Tarsier belong to a different genus, for the adults all have four incisors in the upper jaw. There

is one exception, the *T. bancanus* Horsfield from Java, which is stated to have had but two upper incisors, but as it is also described as having had but five teeth in the molar series on each side, it is evident the last molar had not yet appeared, and it had not obtained its full complement of teeth, otherwise it would represent still another generic form, as Buffon's Tarsier had the usual six teeth in the molar series, viz., three premolars and three molars on each side of both jaws. The question now arises what was this animal described by Buffon, and what species among the known Tarsier does it represent? So long as but one species was recognized, there was no difficulty in giving it a name, *Tarsius spectrum* of Storr & Pallas, founded upon Buffon's description and figure, but as soon as more species were known, the difficulty at once arose, as to which one of these represented the original 'Tarsier,' for Buffon gave no locality for his specimen.

The species with bare tarsi all come from the Philippine islands, consequently it must be one of those known, or one yet undiscovered. But Buffon's example was a young animal, and the young of all the bare-legged Tarsier are so much alike as to be indistinguishable if the locality whence they come is unknown. There are three forms in the Philippines which have received names, *philippensis*, *sanghirensis* and one about to be published by Mr. G. S. Miller, and it is impossible to say that "Le Tarsier" does, or does not, belong to one of these. We have no right to guess at its habitat and so arbitrarily fix one for it, and compel some recognized species, whose habitat is known, to have its name become a synonym. We only know that "Le Tarsier" belongs to the group with bare tarsi and nearly naked tail, but which species of the group it represents is not possible to state. As, therefore, there is no way to define, without doubt, the status of Buffon's "Le Tarsier," it must take its place among those forms that are indeterminate and *Tarsius spectrum* must be dropped from the list of recognized species. All other known species of *Tarsius*, from islands outside the Philippine Archipelago, have the tarsi haired to the ankles.

***Tarsius saltator* sp. nov.**

Type locality. Island of Billiton. Type No. 124992 U. S. Nat. Museum.

Gen. char. Tail bare save apical third which is sparsely haired, tarsi hairy to the ankles, foot haired to toes, mandible short, and ascending ramus comparatively narrow; teeth smaller than Bornean or Philippine examples.

Color. Forehead, sides of face and neck, upper lip and narrow collar from beneath ears passing above shoulders and across back between shoulders rusty; top of head and back of neck to back wood brown, hairs tipped with black and these tips cause the brown beneath them to appear darker than wood brown when looked at from above; middle of back buff; rumps ochraceous; thighs tawny ochraceous, darker than rump, outer side of arms and legs below knees ochraceous buff; inner

side of arms whitish buff; under parts of body and inner side of legs cream buff; base of fur slate-colored and this shows through on underparts almost becoming the dominant hue; throat and upper part of breast rust color. The throat is really bare in the type, but the fur on chin, sides of throat and breast at base of throat is rust color, and it is deemed probable that the rest of throat would be the same or very similar; hands and feet buff; fingers and toes reddish brown; tail at base covered with cream buff fur; hairs on apical third dark brown; bare portion of tail prout's brown grading into brownish black on skin, "dull reddish brown in life" (collector); ear furred at base, remainder bare dark burnt umber.

Measurements. Total length, 361; tail, 228; foot, 68 (collector). Skull: total length, 37; occipito-nasal length, 35; hensel, 23.3; intertemporal width, 23; zygomatic width, 26.5; palatal length, 13.9; width of palate between last molars, .9; median length of nasals, .48; length of upper molar series, 15.1; length of mandible, 24.1; length of lower molar series, 12.5.

The type is an adult female and is rather conspicuous for its rusty color and the paleness of the lower back and rump when contrasted with the rest of the upper parts. It is paler and the thighs redder than Bornean or Philippine examples and its furred tarsi at once separate it from the latter species, and its bare tail from the Celebes *P. fuscus*. From *T. bancanus* Horsfield from Java it differs in its rust color and lack of gray anywhere in its pelage, and in having the foot haired. Horsfield's description is not very full, but what he gives of the color of his specimen does not accord with the present type, but his specimen was immature and consequently it is impossible to say what color the adult would have, and I do not have any Javanese examples for comparison. As a rule the immature Tarsier is darker and more grayish than the adult. Horsfield's description of *T. bancanus* is also of an immature individual and he gives no skull measurements, so it will be necessary to have a specimen from Banka, Java, the type locality, to ascertain what it is.

Tarsius borneanus sp. nov.

Type locality. Sandak River, Borneo. Type No. 142242, U. S. Nat. Mus.

Gen. char. Tarsi haired to the ankle, foot to toes; apical third of tail haired, rest bare except at root; molar series larger than in *T. saltator*, palate longer.

Color. Forehead, top of head and sides of face rusty; middle of back, outer side of arms, and lower back grayish brown; rump smoke gray; outer side of legs slaty gray with a rusty patch below knee; inner side of arms whitish gray; of legs mouse gray; face ochraceous buff; throat and chest brownish, the slate gray of base of fur dominating the brown; rest of under parts slate gray; hairs tipped with whitish; tail whitish gray at root; bare portion reddish brown, paler beneath, haired part grayish brown darker at tip; feet reddish brown; hands and toes darker brown; ears blackish brown.

Measurements. Total length, 310; tail, 190; foot, 69 (collector). Skull, total length, 36.1; occipito-nasal length, 33.6; hensel, 22.1; intertemporal width, 23.1;

zygomatic width, 23.8; palatal length, 14.6; width of palate between last molars, .84; median length of nasals, .64; length of upper molar series, 12.3; length of mandible, 23.4; length of lower molar series, 12.5. Skull of an old adult: total length, 39.3; occipito-nasal length, 36.4; hensen, 26.1; intertemporal width, 28; zygomatic width, 28.4; palatal length, 14.3; width of palate between last molars, .93; median length of nasals, .58; length of upper molar series, 12.9; length of mandible, 27.5, length of lower molar series, 13.7. Skull only, no skin.

From *T. philippensis* this form can at once be distinguished by the hair covering the tarsi and foot; and from *T. saltator* by its larger molar teeth, wider and longer palate, narrower occipital region of the braincase. The type in color resembles closely an example of *T. philippensis* about the same age from Mindinao, Philippines, and probably therefore the adult would be darker than the Billiton Island specimens. It would seem that the Tarsier from the Philippine Islands are the only forms which have bare tarsi, as Horsfield's figure exhibits the tarsi haired to the heel of the foot, the latter and the toes only being bare.

I am indebted to my friend Mr. G. S. Miller, Jr., Curator of the Department of Mammals in the U. S. National Museum, who loaned me all the specimens of *Tarsius* in the Museum, and so enabled me to describe these new forms.