

**Article XXXIX.**—THE STATUS OF *CALLITHRIX LUGENS* (HUMBOLDT) AND *CALLITHRIX AMICTUS* E. GEOFFROY.

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In the 'Annals and Magazine of Natural History' for March, 1914, p. 345, Mr. Oldfield Thomas states that *C. lugens* E. Geoffroy and *C. amictus* E. Geoffroy and *Simia lugens* Humboldt, together with *Saguinus vidua* Lesson are all black bellied species, and are one and the same, but presents no proofs to sustain the position he takes. In determining a species we are generally obliged to rely upon the description given by its author or on his type if existing, and lacking the latter, upon some specimen coming from the type locality if that is known. But should none such specimens be available, and the original description be so brief and unsatisfactory as to make it impossible to decide what the animal really looks like, it is then placed among the undeterminable forms.

In the 'Annals du Museum,' Vol. XIX, 1812, p. 114, E. Geoffroy describes these two monkeys as follows:

"3. Veuve. *Callithrix lugens* (Humboldt).

"Pelage noirâtre; gorge et mains antérieures blanches: queue à peine plus longue que le corps."

This species was described by Humboldt as given below.

"4. C. à fraise. *Callithrix amictus*.

"Pelage brun-noirâtre; un demi-collier blanc; mains de devant jaunes: queue plus longue d'un quart que le corps."

It will at once be noticed that in both descriptions the color of the arms, legs, feet, tail and underparts of the body are not given, and in no other of his publications does E. Geoffroy give any further information of these species. He undoubtedly believed he had two distinct animals before him, and he diagnosed them so as to emphasize their distinctness. However his *lugens* is taken from Humboldt and is blackish, has only a white throat, hands white, and tail nearly as long as the body; while *amictus* is blackish brown, a white half collar, yellow hands, and a tail longer than the body. If *lugens* had a white collar it is inconceivable that neither Humboldt nor E. Geoffroy should not have mentioned it. I could not find the type of *lugens* in the Paris Museum, nor any specimens bearing that name, and I have no recollection of seeing one in any collection. It differs from *amictus* in being without a white collar, having white hands, a tail that is shorter and without the brown hue of the pelage.

The *Simia lugens* Humboldt is described in the Synoptical List as follows: "*Simia lugens, atra facie albo-maculata, gula nivea, manibus anterioribus albis, posterioribus nigris.*"

It will here be also noticed no mention is made of the color of the underparts, but earlier in the volume is a more detailed description; he gives this as "*Corpus, cauda, crura et brachia nigra,*" and in the French description he states "*elle a le poil doux, lustré, d'un beau noir et un peu relevé. Ce pelage est d'une teinte uniforme sur le corps entier de l'exception de la face du col et des mains de devant.*"

Here we have an entirely black monkey with a snowy throat and hands white, an animal not represented in any collection at the present time.

Humboldt probably did not know *C. amictus* for he gives only a brief latin description in his Synoptical List evidently founded on the French one of E. Geoffroy, and makes no mention of the species elsewhere in the volume.

*C. amictus* is a very rare animal in collections. I do not think that I have seen half a dozen examples in the Museums of England and the Continent. It was generally considered by the earlier writers, who probably had never seen a specimen at that time, as *C. torquatus*, and it may be said that if an example of *amictus* has lost the hair on the under side of the body it is not easy to distinguish one from the other. There was one adult specimen in the British Museum, but not in good condition, and it was not until I saw the alleged type in the Paris Museum that I was satisfied that *C. torquatus* and *C. amictus* were distinct. E. Geoffroy states that *amictus* has "*mains de devant jaunes,*" but all the specimens that I saw had white hands. Certainly the hands of the so-called type in the Paris Museum were white, and I do not remember seeing any examples with yellow hands as given by E. Geoffroy. If, therefore, this should affect its specific standing, then the animal now recognized as *amictus* would have to take a new name, and we would be obliged to wait for the appearance of a yellow-handed *amictus*.

Mr. Thomas has brought forward a problem incapable of any satisfactory solution. There are no specimens extant to prove what exactly were the species the two authors described. We have been obliged to drop many from our lists as indeterminable, and *C. lugens* E. Geoffroy and *S. lugens* Humboldt had better go with them. It may have been an error to place *lugens* among the synonyms of *C. torquatus*. It would have been a greater error to state that it was the same as *amictus* (there being no proof whatever to sustain the assertion), and make that name a synonym of *lugens*. It is easy for one to assume anything that occurs to him, but an assumption without facts to support it, is, to say the least, a most unstable foundation upon which to establish a species. Towards the close of his remarks Mr. Thomas assumes that his new species *Callicebus lucifer*, the chief character

of which is a "chestnut rufous tail," is probably the same as Spix's *amictus*, in spite of the fact that Spix's figure shows a black tail, and in his Latin description he writes "caudae sublonge brunneo-nigris," and in the French one "la queue d'un noir luisant." It may be well to state that Lesson's description of his *vidua* is not an original one, but merely founded upon that of Humboldt's *lugens*, and therefore whatever Humboldt's species is (at present unknown), the *vidua* Lesson would be its synonym.

