

ERRATUM

ADDENDA AND CORRIGENDA TO MARSH, L. K. (2014). A TAXONOMIC REVISION OF THE SAKI MONKEYS, *PITHECIA* DESMAREST, 1804, *NEOTROPICAL PRIMATES* 21(1): 1–168.Laura K. Marsh^{1‡}, Andrew C. Kitchener², and Colin P. Groves³¹ Director, Global Conservation Institute, Santa Fe New Mexico, USA, E-mail: <lkmarsh@global-conservation.org>.² Principal Curator of Vertebrates, Department of Natural Sciences, National Museums Scotland, Chambers Street, Edinburgh, EH1 1JF, UK, E-mail: <a.kitchener@nms.ac.uk>³ School of Archaeology & Anthropology, Australian National University, Canberra, Australia, E-mail: <Colin.Groves@anu.edu.au>

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With the recent publication of *Neotropical Primates* 21(1): 1–168, we discovered the need to correct some taxonomic typos and errors, and wanted to address some taxonomic issues raised by a number of readers, as follows:

Page 12:

Royal Scottish Museum (RSM) should read National Museums of Scotland (NMS) (and throughout).

Page 15: *P. pithecia* synonymy

On *Pithecia rufibarbata*. Some discussion was raised about the synonymy for *Pithecia pithecia*, in particular regarding *P. rufibarbata*. A choice was made by Marsh, and corroborated by Groves, for the synonymy of *P. pithecia* that, since Hershkovitz (1987) had published an extended version (pp. 418–421), it was unnecessary to list all possible previous synonyms. If anyone requires the full list, they can refer to Hershkovitz (1987) directly, but with reference also to Marsh (2014).

The name *Pithecia rufibarbata* was attributed to a juvenile female from Suriname according to Hershkovitz (1987). However, Marsh did not see this holotype specimen in the Naturalis collection in Leiden, although all of Temminck's sakis were probably accounted for. Even though they have older labels, at some point in the past all of the mounted sakis in Leiden were renamed "*Pithecia nocturna*." One of the juvenile male mounts was noted as being determined in 1867. The juvenile male holotype for *P. ochrocephala* from the voyage of Temminck (RMNH 39097) is also labeled *P. nocturna*. Therefore, previous determinations as *rufibarbata* appear to have been replaced by *nocturna* for animals from Suriname. Kuhl (1820) described both *rufibarbata* and *ochrocephala* for the same specimens from Suriname (cf. Marsh 2014, Hershkovitz 1987).

Pithecia rufibarbata was apparently named twice in 1820 (J. P. Michel, pers. comm.). It will be difficult, if not impossible, however, to establish precise or relative publication dates to be certain of priority. This is of little consequence because both uses of *Pithecia rufibarba[ta]* are accredited to Kuhl based on specimens now in Naturalis, Leiden, so that both versions of the names are objective synonyms of each other, with nearly identical spelling (one a noun, the other an adjective). Kuhl appears to have adopted the name used

in Temminck's collection, while Desmarest clearly considered Kuhl to be the original author of the name:

Pithecia rufibarbata "Mus. Temminckii" Kuhl, 1820 – *Beitr. Zool. vergl. Anat.*: 44 "*Pithecia rufibarbata* Mus. Temminckii. In Surinama. [...] In Museo Temminckiano."

Pithecia rufibarba "Kuhl" Desmarest, 1820 – *Mammalogie* 1: 90 "*pithecia rufibarba*. (Espèce nouvelle, non figurée.) *Pithecia rufibarba*, Kuhl. [...] Patrie. Surinam. (Museum de M. Temmink.)"

This suggests that Kuhl published before Desmarest, although he could have seen it in manuscript form. Similar comments apply to *Pithecia ochrocephala*, but in this case the names are identical:

Pithecia ochrocephala "Mus. Temminckii" Kuhl, 1820 – *Beitr. Zool. vergl. Anat.*: 44 "*Pithecia ochrocephala*. Mus. Temminckii. In Cayana. [...] In Museo Temminckiano."

Pithecia ochrocephala "Kuhl" Desmarest, 1820 – *Mammalogie* 1: 90 "*pithecia ochrocephala*. (Espèce nouvelle, non figurée.) *Pithecia ochrocephala*, Kuhl. [...] Patrie. Cayenne. (Museum de M. Temmink.)"

Page 15: *P. pithecia* synonymy

Marsh (2014) designated a neotype on page 15 for *Simia pithecia* Linnaeus, 1766, but, as indicated by J. P. Michels (pers. comm.), this was not done explicitly although the intention was clear from the text caption for Figure 5 (page 19). The current edition of the Code requires that a taxonomic necessity for designation of a neotype be stated, with Article 75.2 stating quite harshly that a neotype designation is otherwise invalid, but see Article 75.3 for the requirements (J. P. Michels, pers. comm.). Therefore, to clarify the situation, the neotype for *Simia pithecia* Linnaeus, (1766) is MNHN 452, mounted adult male skin from Cayenne, French Guiana, in the Muséum National d'Histoire Naturelle, Paris. A neotype is required

because of the long-standing confusion with the closely-related *Pithecia chrysocephala*, which has often been regarded as conspecific, and because the holotype of *Simia pithecia* Linnaeus, 1766, no longer exists.

Page 21: *P. chrysocephala* synonymy

Marsh (2014; 21) also designated a neotype for *Pithecia chrysocephala*, again not in strict accordance with the Code (J. P. Michels, pers. comm.). To clarify the situation, the neotype for *Pithecia chrysocephala* I. Geoffroy St-Hilaire, 1850, is RMNH 1845(a), a mounted adult male skin with skull inside from “Manacapuru, Amazonas, Brazil” in the collection of Naturalis, Leiden. This neotype replaces the missing cotypes in the Muséum National d’Histoire Naturelle, Paris, one of which was represented in plate XXIX of I. Geoffroy Saint-Hilaire (1850). A neotype is required because of the long-standing confusion with the closely-related *Pithecia pithecia*, which has often been regarded as conspecific.

Parentheses were placed erroneously around the author name at the top of the page. It should read: “*Pithecia chrysocephala* I. Geoffroy Saint-Hilaire, 1850.”

Page 27: *P. hirsuta* types

It was pointed out by J. P. Michels (pers. comm.), that “*Pithecia hirsuta* was described by Spix (1823) based on three syntypes in the *Zoologische Staatssammlung*, München. Marsh (2014; 27) designated an adult male mounted skin (ZSM 19) as holotype. However, this should be designated as a lectotype for *Pithecia hirsuta*, with ZSM 14 and ZSM 15 as paratypes.”

Spix (1823) used the ZSM No. 19 mounted specimen as the model for his holotype designation for *P. hirsuta* in his publication as Plate IX. However, through time and curation it remained a syntype on the label. Thus, we concur with Marsh (2014) that this specimen should remain as holotype. Thus, the other two specimens should be labeled as paratypes.

Groves adds background on the matter: Hershkovitz’s statement that there was a syntype in Leiden is evidently based upon Jentink, F. A., 1892, *Museum d’Histoire Naturelle des Pays-Bas. Tome XI. Catalogue Systématique des Mammifères (Singes, Carnivores, Ruminants, Pachydermes, Sirènes et Cétacés*. Leiden: E. J. Brill. On p.49, under the heading “*Pithecia monacha* E. G. St. Hilaire”, he says, against specimen a:

“Mâle adulte monté, un des types du *Pithecia hirsuta* Spix. Tabatinga, rive septentrionale du Solimoëns, près des confins du Pérou. Des collections de M. Spix. Schlegel, Cat.No 1. [Adult male mounted, one of the types of *Pithecia hirsuta* Spix. Tabatinga, Northern bank of the Solimões, near the borders of du Peru. From the collections of Mr. Spix. Schlegel, Cat.No 1].”

But this completely misquotes Schlegel, H., 1876. *Museum d’Histoire Naturelle des Pays-Bas. Les Singes. Simiae*. Leiden: E. J. Brill. First, on p. 222, lists under *Pithecia monacha*:

“Individus montés. – 1. Mâle adulte, voyage de Spix, Tabatinga, obtenu de Spix même sous le nom de *Pithecia inusta*. [Mounted individuals. – 1. Adult male, voyage of Spix, Tabatinga, obtained from Spix himself under the name of *Pithecia inusta*.]” (!)

Chris Smeenk is, or was, compiling a catalogue of the types of recent mammals in Naturalis, Leiden, and says that this agrees with what Schlegel wrote on the pedestal, and with the entry in the list of animals received from Von Spix in October 1824, which says just “*Pithecia inusta*.”

Page 32: *P. milleri*

The rank of topotype does not have any special taxonomic role. It merely signifies that the specimen is from the same locality as the holotype. Technically, the topotype, Juvenile male, AMNH 33877, should be regarded as a paratype.

Parentheses were placed erroneously around the author name at the top of the page. It should read: “*Pithecia milleri* Allen, 1914.”

Page 49: *P. inusta*

There is an inconsistency in the publication date in the synonymy. It should be 1823 not 1824 for the Spix publication.

Parentheses were placed erroneously around the author name at the top of the page. It should read: “*Pithecia inusta* Spix, 1823.”

Page 63: *P. aequatorialis*

The rank of topotype does not have any special taxonomic role. It merely signifies that the specimen is from the same locality as the holotype. Technically, the topotype, adult female FMNH 86994, should be regarded as a paratype.

Parentheses were placed erroneously around the author name at the top of the page. It should read: “*Pithecia aequatorialis* Hershkovitz, 1987.”

Page 64: Distribution of *P. aequatorialis*

While assembling the location data for the various species, Marsh misplaced an email from Diego Tirira in 2010 regarding a pet saki in a village in southeast Ecuador. This captive saki is clearly *P. aequatorialis* and was from Pastaza province, comunidad Enkerido, entre ríos Ácaro y Tarangaró, territorio Waorani: 01°23’S, 77°23’W, 430 m. This locality is south of the Curaray River. Tirira believed that the pet was from this area and not from further south across the Peruvian border along the same river. Therefore, it is important to note that it DOES appear that *P. aequatorialis*, and not just the overly grizzled *P. napensis*, occurs at least within this watershed. Thus, *P. aequatorialis* CAN be

considered to occur in Ecuador, although its confirmation in the wild state is required for a true “range extension” based on Marsh (2014).

Page 69: *P. napensis*

Parentheses were placed erroneously around the author name at the top of the page. It should read: “*Pithecia napensis* Lönnberg, 1938.”

Page 69: Spelling correction

L. Soderstrom should be L. Söderström.

Page 70: Table correction

Table 18. The registration number of the holotype is RNHM A60-1921.

Page 75: Spelling correction

Bluntschili should be Bluntschli.

Page 83: *P. albicans* types

Gray (1860) clearly refers to at least one adult and a juvenile (“young”) in his description of *P. albicans*, which would as such be syntypes. Napier (1976) lists an adult male (BMNH 1860.4.16.3) as holotype of *P. albicans*, but also an indeterminate adult (BMNH 1860.4.16.2) from the same locality. Hershkovitz (1987) mentions male, female and young syntypes. Therefore, BMNH 1860.4.16.3 is actually a lectotype and not a holotype for *P. albicans*.

Marsh (2014; 83) listed several specimens as paratypes, which were collected by W. Erhardt between 1925 and 1927. These specimens were collected long after Gray’s (1860) original description and hence cannot possibly be considered syntypical material. These specimens were labeled erroneously as paratypes in the Natural History Museum, London. They should be listed as Key Specimens.

Parentheses were placed erroneously around the author name at the top of the page. It should read: “*Pithecia albicans* Gray, 1860.”

Page 84: Table correction

Table 20. These are all Key Specimens – none are syntypes.

Page 91: *P. irrorata*

Hershkovitz (1987) does indeed give the holotype as BMNH 101a based on Napier (1976).

Parentheses were placed erroneously around the author name at the top of the page. It should read: “*Pithecia irrorata* Gray, 1842.”

Page 92: Table correction

Table 22. None of these specimens are paratypes – only Key Specimens.

Page 101: *P. vanzolinii*

Parentheses were placed erroneously around the author name at the top of the page. It should read: “*Pithecia vanzolinii* Hershkovitz, 1987.”

Page 105: *P. mittermeieri* holotype

Under “Type localities”: The number for the holotype should be BMNH No. 27.8.5.9.1, not 28.8.5.9.1.

Page 113: *P. rylandsi* holotype

Marsh (2014; 113) designated as holotype for *P. rylandsi* AMNH 247669, subadult male skin and AMNH 248723 subadult male skull only. It is not possible for a holotype to comprise parts of two separate individuals. Given that most diagnostic characters for *Pithecia* spp. are based on skins, we designate AMNH 247669 as holotype for *P. rylandsi* and place AMNH 248723 as a paratype.

Page 114: Table correction

Table 25. AMNH 248723 should be redesignated as a paratype.

See comment above under p. 113.

Pages 137–143: Suggested missing references

Beolens, B., Watkins, M. and Grayson, M. 2009. *The Eponym Dictionary of Mammals*. The Johns Hopkins University Press, Baltimore, MD. xiii + 574 pp.

Desmarest, A. G. 1820. *Mammalogie ou description des espèces de mammifères. Première partie, contenant les ordres des bimanés, des quadrumanes et des carnassiers*. M^{me} Veuve Agasse, Paris. viij + 276 pp.

Matschie, P. 1915 (April). Ein anscheinend neues Kralenäffchen vom oberen Amazonas. *Sitzungsberichte der Gesellschaft naturforschender Freunde zu Berlin*, 1915(4): 95–96.

Page 150: Location correction

Tabolosos should be placed in San Martín, not Huánuco [-6.385674, -76.631259]. This was a mislabeling on a specimen collected in the region. The location is placed correctly on the map (p. 55, Map 6).