

The type locality of *Pan troglodytes vellerosus* (Gray, 1862), and implications for the nomenclature of West African chimpanzees

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Abstract We show that, in 1862, Richard Burton collected the type specimen of *Pan troglodytes vellerosus* not on Mount Cameroon, as has been generally assumed, but in Gabon. Therefore, *P. t. vellerosus* is not the correct name for the chimpanzee population of western Cameroon and southern Nigeria, if that population is taxonomically distinct. As First Reviser, we choose the name *Pan troglodytes ellioti* for this population of chimpanzees, based on *Anthropopithecus ellioti* named by Matschie [Matschie P (1914) Neue Affen aus Mittelafrika. Sitzungsber Ges Naturforsch Freunde Berlin 1914:323–342] from a specimen in the Humboldt Museum, Berlin, collected in Bascho (=Basho), Cameroon, and given to the museum in 1905.

Keywords Nigeria–Cameroon chimpanzee · *Pan troglodytes ellioti* · *Pan troglodytes vellerosus* · Type locality

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Introduction

In 1862, John E. Gray named the species *Troglodytes vellerosus* from a skin sent to the British Museum by Richard F. Burton, who was then the British Consul at Fernando Po (Gray 1862). No precise locality was given for this specimen, but it was assumed to have come from Mount Cameroon because Gray's paper was entitled "List of Mammalia from the Camaroon Mountains, collected by Capt. Burton, H.M. Consul, Fernando Po." Subsequent references in the literature to the locality for this type specimen (ZD 1862.6.28.1) have assumed that it had indeed originated in Cameroon (e.g. Rothschild 1905; Jenkins 1990; Groves 2001). Elliot (1913) noted, however, that no locality was given for the type and he placed a query against "Cameroon Mountains".

Gray's species *vellerosus* was sunk into the taxon *Pan satyrus satyrus* by Schwarz (1934). Schwarz (1934) continued to use the name *satyrus* despite the fact that it had previously been suppressed by the International Commission on Zoological Nomenclature (Opinion 114 1929), and that subspecies later became widely known by the name *Pan troglodytes troglodytes*, following Allen (1939). The subspecies *P. t. troglodytes* was regarded as being distributed from the lower Niger east and south to the Ubangi and Congo.

Studies of the hypervariable region I (HVRI) region of mitochondrial DNA from chimpanzees living in Nigeria and Cameroon led Gonder et al. (1997, 2006) to revive the name *vellerosus* (as the subspecies *Pan troglodytes vellerosus*) for the chimpanzee population in that region, based on an observed deep divergence in HVRI haplotype lineages north and south of the Sanaga River in Cameroon, and on the assumption that the earliest available name for that population was Gray's *Troglodytes vellerosus*. Gonder et al. (2006)

showed that HVRI haplotypes of *P. t. vellerosus* are more closely related to those of *P. t. verus* of Upper Guinea than to those of *P. t. troglodytes* south of the Sanaga. Other recent studies have also supported the suggestion that chimpanzees in the Nigeria–Cameroon border region are taxonomically distinct (Hu et al. 2001; Pilbrow 2006).

Methods

In an effort to determine exactly where the type specimen of *P. t. vellerosus* was collected, one of us (J.F.O.) studied Burton's own accounts of his African travels. We examined the type specimen in the Natural History Museum, London, and the museum's collections register. To locate an alternative name for chimpanzees in the Nigeria–Cameroon border region, we have consulted the literature in primate taxonomy and corresponded with the Museum für Naturkunde of Humboldt University, Berlin.

Results

In his detailed account of his December 1861–February 1862 visit to Mount Cameroon, Burton (1863) makes no mention of the collection of any chimpanzees. However, in an account published many years later, Burton (1876) gives a clear and detailed description of how he obtained and prepared a specimen of a chimpanzee during a visit in March 1862 to the region of the Gaboon (Gabon) River. Burton visited Mbátá south of the Gabon estuary “to shoot a specimen or specimens of the gorilla, and, if possible, to buy or catch a youngster.” He failed to accomplish either of these goals, and on 31 March 1862 returned to the settlement of Glass Town on the north shore of the estuary. Burton reports (1876, p. 174) that on the evening of his return to Glass Town, a youth from Mbátá arrived with a “noble specimen of Nchígo Mpolo...an old male.” It seems probable that this ape had been killed that day or perhaps the day before: Burton does not state how fresh the specimen was, but he describes the difficulties he had preparing the skin in the rains. He notes (p. 176) that Gray named it *Troglodytes vellerosus* (the “hairy chimpanzee”) from the bear-like masses of hair on its breast, and he records visiting the specimen when he returned to England (“the portly old bully-boy of the woods had become a wretched pigeon-breasted, lean-flanked, shrunk-limbed, hungry-looking beggar”). The Mbátá creek is today contained within Gabon's Pongara National Park.

The Natural History Museum's collections register correctly records that specimen 1862.6.28.1 is a skin from “Gaboon Country” purchased from Burton. The non-original label on the type specimen records the collection

locality as “Gaboon”, but this has been crossed out and “Cameroons” written in. There is no reason to suspect that the specimen in the Natural History Museum is not that collected by Burton. This was originally a mounted specimen on display in public galleries. The current label would have been attached to the specimen when it was removed from display and placed in storage, but there is no information as to when this occurred. The current label was most probably transcribed directly from the gallery label and/or a label that was attached to the undersurface of the display base.

Our conclusion is that the type locality for *P. t. vellerosus* is Mbátá, Gabon, and not Mount Cameroon.

Discussion

The confusion as to the place of origin of the type of *vellosus* seems to have arisen because Gray placed his description in the same paper as a description of mammals that were indeed collected on Mount Cameroon, and whose collection Burton (1863) describes. Presumably Burton included the skin collected in Gabon with his shipment to the British Museum of the specimens he had collected on Mount Cameroon. Gray's published statement (“With these animals was sent the skin of a Chimpanzee without its skull...”) was probably technically correct, but served only to mislead future readers as to the place of origin of the specimen.

Because the type specimen of *P. t. vellerosus* in fact originated in Gabon, this name must be regarded as a junior synonym of *P. t. troglodytes* [Blumenbach, 1799] and the name *vellosus* cannot be applied to any taxonomically distinct chimpanzee population inhabiting the region north of the Sanaga. The available names for a population in this region are *Anthropopithecus oertzeni* and *elliotti* given by Matschie (1914) to specimens collected near Bascho (=Basho), Cameroon, in 1905 by lieutenant (later captain) Jasper von Oertzen, and *Anthropopithecus papio* given 6 years later by the same author to a specimen collected at Elephant Lake (Barombi-Mbo), Cameroon, in 1903 by Governor Puttkamer (Matschie 1919). Basho (6° 07' N and 9° 27' E) is a settlement close to the eastern edge of the present Takamanda Forest Reserve in the South West Province of Cameroon. Evidently, the two names published by Matschie in 1914 are the earliest available names for the taxon presently known as *P. t. vellerosus*.

Matschie described *Anthropopithecus oertzeni* and *A. elliotti* on the same page (327) of his 1914 paper (Matschie 1914). Both species were described from specimens in the Berlin Museum, each consisting of a skin and postcranial skeleton without a skull, and each said to be an adult male. Matschie noted that the skulls belonging to

these skins were still in the possession of their collector, Jasper v. Oertzen. Matschie refers to the type specimen of *A. oertzeni* as A. 60, 05, 1 and to the type of *A. ellioti* as A. 60, 05, 2. Dr. Frieder Mayer of the Berlin Museum (personal communication, 2008) confirms that these specimens are still present in the museum's collections, with catalogue numbers ZMB 83716 and ZMB 83709, respectively. Dr. Mayer has examined the skeleton of ZMB 83716 and reports that it is a subadult, of almost adult size but lacking epiphyseal fusion.

Matschie gave the name *ellioti* to one of his two new species from Basho to honour Elliot's support in the study of ape natural history. Elliot (1913) had previously studied these same two skins and, himself considering them to be different from other named taxa, listed them as "*Pan* ———?". In our capacity as First Reviser, we choose the name *ellioti* to take priority for this presumed taxon, in acknowledgement of Elliot's role in its original description. According to the International Code of Zoological Nomenclature (4th edn, Article 24.2.1; <http://www.iczn.org/iczn/index.jsp>), when two (or more) names are published simultaneously, at the same taxonomic rank, "the precedence is fixed by the action of the first author citing in a published work those names or acts and selecting from them; this author is termed the 'First Reviser'".

Based on current evidence, the taxonomic name of the chimpanzee population occurring in forested areas of West Africa between the Dahomey Gap and Cameroon north and west of the Sanaga River is therefore not *P. t. vellerosus* but *P. t. ellioti*.

Our purpose in this note has been to settle nomenclature. The taxonomic status of the chimpanzees of this region is a different matter, which will benefit from further research.

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