

demais fêmeas adultas. Não houve propriamente uma separação forçada entre o infante e sua mãe, pressuposto que caracteriza o rapto segundo a definição dada por Clarke (1990). O infante carregado pela fêmea de G2, estando com quase seis meses de idade, já apresentava grande independência, permanecendo no dorso da mãe apenas durante os deslocamentos mais longos, tanto que encontrava-se distante dela (inclusive em outra árvore) quando ocorreu o suposto rapto. Além disso, o contato com a fêmea de G2 ocorreu voluntariamente por parte do infante. As situações de rapto descritas na literatura envolvem a remoção agressiva do filhote do ventre da mãe e são mais freqüentes durante as primeiras semanas de vida dos infantes, quando estes permanecem a maior parte do tempo em contato com suas mães e são mais atrativos a outras fêmeas e juvenis. Desta forma, o fato de os animais de G1 terem “protestado” não invalida a hipótese de que a fêmea de G2 tenha carregado o filhote sem intenção, conforme já comentado anteriormente.

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Referências

Agoramoorthy, G. 1998. Intergroup infant transfer among red howlers, *Alouatta seniculus* in Venezuela: Adoption or kidnapping. *Neotrop. Primates* 6: 121-122.

Agoramoorthy, G. and Rudran, R. 1992. Adoption in free-ranging red howler monkeys *Alouatta seniculus* of Venezuela. *Primates* 33: 551-555.

Altmann, S. A. 1959. Field observations on a howling monkey society. *J. Mammal.* 40: 317-330.

Baldwin, J. D. and Baldwin, J. I. 1973. Interactions between adult females and infant howling monkeys (*Alouatta palliata*). *Folia Primatol.* 20: 27-71.

Bolin, I. 1981. Male parental behavior in black howler monkeys (*Alouatta palliata pigra*) in Belize and Guatemala. *Primates* 22: 349-360.

Calegario-Marques, C. and Bicca-Marques, J. C. 1993. Allomaternal care in the black howler monkey (*Alouatta caraya*). *Folia Primatol.* 61: 104-109.

Clarke, M. R. 1990. Behavioral development and socialization of infants in a free-ranging group of howling monkeys (*Alouatta palliata*). *Folia Primatol.* 54: 1-15.

Clarke, M. R. and Glander, K. E. 1981. Adoption of infant howling monkeys (*Alouatta palliata*). *Am. J. Primatol.* 1: 469-472.

Fortes, V. B. 1999. Dieta, atividades e uso do espaço por *Alouatta fusca clamitans* (Primates: Cebidae) na Depressão Central do Rio Grande do Sul. Dissertação de Mestrado, Universidade Federal do Rio Grande do Sul, Porto Alegre, Brasil.

Glander, K. E. 1974. Baby-sitting, infant sharing and adoptive behavior in mantled howling monkeys. *Am. J. Phys. Anthropol.* 41: 482.

Izawa K. 1989. The adoption of an infant observed in a wild group of red howler monkeys (*Alouatta seniculus*). *Field Studies of New World Monkeys, La Macarena, Colombia* 2: 33-36.

Jones, C. B. 1980. The functions of status in the mantled howler monkey, *Alouatta palliata* Gray: Intraspecific competition for group membership in a folivorous Neotropical primate. *Primates* 21: 389-405.

Maestripieri, D. 1994. Influence of infants on female social relationships in monkeys. *Folia Primatol.* 63: 192-202.

Marques, A. A. B. de and Ades, C. 2000. Male care in a group of wild *Alouatta fusca clamitans* in southern Brazil. *Folia Primatol.* 71: 409-412.

Neville, M. K. 1972. Social relations within troops of red howler monkeys (*Alouatta seniculus*). *Folia Primatol.* 18: 47-77.

Neville, M. K., Glander, K. E., Braza, F. and Rylands, A. B. 1988. The howling monkeys, genus *Alouatta*. In: *Ecology and Behavior of Neotropical Primates*, Vol. 2, R. A. Mittermeier, A. B. Rylands, A. F. Coimbra Filho and G. A. B. da Fonseca (eds.), pp.349-453. World Wildlife Fund-US, Washington, DC.

Nicolson, N. 1987. Infants, mothers and other females. In: *Primate Societies*, B. B. Smuts, D. L. Cheney, R. M. Seyfarth, R. W. Wrangham and T. T. Struhsaker (eds.), pp.330-342. University of Chicago Press, Chicago.

Sekulic, R. 1983. Spatial relationships between recent mothers and other troop members in red howler monkeys (*Alouatta seniculus*). *Primates* 24: 475-485.

ON THE DIAGNOSTIC CHARACTERS AND GEOGRAPHIC DISTRIBUTION OF THE “YELLOW-HANDED” TITI MONKEY, *CALLICEBUS LUCIFER*, IN PERU

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The recent review of the titi monkeys (*Callicebus*) by Van Roosmalen and co-workers (2002) has expanded our knowledge of the taxonomy and geographic distribution of this genus, but has also shown that considerable gaps still exist. Here we discuss some problems associated with the diagnostic characters and geographic distribution of the Peruvian titi monkeys.

Van Roosmalen *et al.* (2002) raised to species rank what were considered subspecies of *Callicebus torquatus* by

Hershkovitz (1990). For one of these, *Callicebus lucifer*, orange hands are given as one of the diagnostic characters. Hershkovitz (1990) also considered orange hands as distinguishing *Callicebus torquatus lucifer* from *Callicebus torquatus medemi*. Observations made by us at different localities in north-eastern Peru, however, cast some doubt on the general validity of this character as a distinguishing feature for this taxon.

In January 1982, EWH visited Mishana on the right bank of the Río Nanay (3°52.75'S, 73°29.50'W; GPS position in Räsänen *et al.*, 1998), the site where Warren Kinzey and his co-workers carried out their field studies of titi monkeys (see, for example, Kinzey, 1977). In the village of Mishana, a hunter was carrying a juvenile titi monkey on his shoulders (Fig. 1). It was easily identifiable as of the *Callicebus torquatus* group, the most prominent character being its whitish-creamy hands.

In August 2000, FEC saw an infant/young juvenile titi monkey kept as a pet in the village of Negro Urco, on the right bank of the Río Napo. The hands were white, only the tips of the hairs had some dirty-yellowish coloration, perhaps resulting from the animal walking on the earthen floor. In the forest near Negro Urco, he saw three wild titi monkeys at a distance of about 20 m. Observation of the animals with a binocular showed that the hands were whitish-creamy without any tendency towards yellow or orange.

In May 2002, FEC visited Santa María on the left bank of the upper Río Nanay, where he saw a juvenile titi monkey kept as a pet. The hairs of its hands were whitish-creamy, but the tips of the hair (which were partially sticking together as if dirty) were a brownish-yellowish colour.

Our observations of whitish-creamy hands, particularly of the pet in Mishana and the wild animals near Negro Urco, clearly contrast with the orange hands listed as a diagnostic



Figure 1. A pet *Callicebus lucifer*, Mishana, Río Nanay, Loreto, 3°52.75'S, 73°29.50'W, 7 February 1983. Photos © Eckhard W. Heymann. These photographs can be seen in colour at the following website: <http://www.dpz.gwdg.de/voe_page/peruvian_primates.htm>.

or distinguishing character by Van Roosmalen *et al.* (2002) and Hershkovitz (1990). There are four possibilities to account for this discrepancy. First, since the animals were juveniles, it is possible that they had not yet attained fully adult colouration. We are not aware of any information in the literature on ontogenetic changes in the colouration of titi monkeys. Second, hand colour might be variable within species or subspecies. The individuals we have seen might represent but one variety within the populations. No information is available on the variability of hand colour within populations of titi monkeys, although Pekka Soini has observed titi monkeys with variably whitish, dirty white and yellowish hair on the hands at Mishana and in areas near to Iquitos (south of the Nanay). Third, the titi monkeys from the Río Nanay and the Río Napo could differ from other populations of *C. lucifer*, and might perhaps represent a new species or subspecies. This possibility can only be explored by comparing representative specimens from the different areas. Fourth, the titi monkeys seen by us represent idiosyncratic forms, different from all other animals of the respective population. People might have captured these animals because they were different from the rest of the population. If this were the case, one might also suspect that “collections ... acquired by purchasing live and dead animals from animal dealers who sent natives into the bush” (Van Roosmalen *et al.*, 2002, p.42) are biased towards idiosyncratic individuals which attracted the hunters' attention. The observation of white hands in wild individuals near Negro Urco is clear evidence against such an explanation. Under any circumstances, our observations suggests that orange hands cannot be taken as a diagnostic character of *C. lucifer* until more information is available on variation within and between populations and on whether or not ontogenetic changes in hand colouration do occur.

There is also an inconsistency in the current literature with regard to the geographic distribution of *C. lucifer* in Peru. Hershkovitz (1990, p.83) gives the area “between the Ríos Putumayo, Nanay and Amazonas”, and Aquino and Encarnación, (1994, p.30), following Hershkovitz, state “north of the rivers Nanay and Amazonas to the Río Putumayo”. The map provided by Van Roosmalen *et al.* (2002), however, does not include the area between the lower Napo and the Nanay.

The presence of *C. lucifer* at Mishana and close to Iquitos clearly indicates its distribution south of the lower Nanay, contrasting with the information provided by Hershkovitz (1990) and Aquino and Encarnación (1994). Sightings at Santa María and Negro Urco also provide clear evidence of its presence on the left bank of the upper Nanay and the right bank of the Napo. However, its presence in areas between the Napo and Nanay is less clear. It was not seen during brief surveys by FEC along the Río Chambira, an affluent of the left bank of the lower Nanay, and its affluent Río Pintoyacu. People on these rivers did not report the species to be present in the area, although they knew it from the Nanay and from the Río Mazán, an affluent of the right bank of the lower Napo. Summarizing the available

information, one might suspect that *C. lucifer* has a patchy distribution in Peru. Kinzey and Gentry (1979) had argued that *C. torquatus* is restricted to white-sand forests, but this hypothesis was convincingly rejected by DeFler (1994) for *Callicebus (torquatus) lugens*. It would be premature to speculate on any ecological or edaphic factors relating to the distribution of *C. lucifer* in Peru until its full distributional range and the extent to which it may be patchy are known.

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References

- Aquino, R. and Encarnación, F. 1994. Primates of Peru – Los Primates del Perú. *Primate Rep.* 40: 1-127.
- DeFler, T. R. 1994. *Callicebus torquatus* is not a white-sand specialist. *Am. J. Primatol.* 33: 149-154.
- Hershkovitz, P. 1990. Titis, New World monkeys of the genus *Callicebus* (Cebidae, Platyrrhini): A preliminary taxonomic review. *Fieldiana Zoology, N.S.* (55): 1-109.
- Kinzey, W. G. 1977. Diet and feeding behavior in *Callicebus torquatus*. In: *Primate Ecology: Studies of Feeding and Ranging Behaviour in Lemurs, Monkeys and Apes*, T. H. Clutton-Brock (ed.), pp.127-151. Academic Press, London.
- Kinzey, W. G. and Gentry, A. H. 1979. Habitat utilization in two species of *Callicebus*. In: *Primate Ecology: Problem-Oriented Field Studies*, R. W. Sussman (ed.), pp.89-100. John Wiley & Sons, New York.
- Räsänen, M., Linna, A., Irion, G., Rebata Hernani, L., Vargas Huaman, R. and Wesselingh, F. 1998. Geología y geofomas de la zona de Iquitos. In: *Geoecología y Desarrollo Amazónico: Estudio Integrado en la Zona de Iquitos, Perú*, R. Kalliola and S. Flores Paitán (eds.), pp.59-137. Turun Yliopisto, Turku.
- Van Roosmalen, M. G. M., Van Roosmalen, T. and Mittermeier, R. A. 2002. A taxonomic review of the titi monkeys, genus *Callicebus* Thomas, 1903, with the description of two new species, *Callicebus bernhardi* and *Callicebus stephennashi*, from Brazilian Amazonia. *Neotrop. Primates* 10(suppl.): 1-46.
- próprias etiquetas de material no Museu Nacional, Rio de Janeiro: MN-2856 (holótipo, pele e crânio, macho adulto, Comissão Rondon, 9 de abril de 1914), MN-2851 (parátipo, sexo indeterminado, pele e crânio, Comissão Rondon, 10 de abril de 1914), MN-2857 (parátipo, sexo indeterminado, pele e crânio, Comissão Rondon, 08 de abril de 1914).
- Foi no ano de 1914 que a Comissão Rondon integrou-se à expedição Norte-Americana do Presidente T. Roosevelt, formando assim uma Comissão Mista. A expedição Roosevelt-Rondon explorou naquele ano o rio da Dúvida e o rio Juruena, via o formador rio Papagaio. O material coletado de 1907 a 1914 pela Comissão Rondon foi destinado em parte ao Museu Nacional da Universidade Federal do Rio de Janeiro (UFRJ) e em parte ao American Museum of Natural History, Nova Iorque.
- Do material coletado pela referida Comissão, muitos espécimes tinham etiquetas informando a origem como sendo o rio Castanho. Na época, foram consultados outros materiais de primatas e mamíferos cujas localidades referiam-se ao mesmo rio Castanho, mas muitas das vezes citado como “Rio Castanho (= Rio Roosevelt)” (vide também Hershkovitz, 1977).
- Sendo assim a localidade tipo foi determinada como “Foz do Rio Castanho (= Rio Roosevelt), afluente esquerda do rio Aripuanã, Estado do Rio Amazonas, Brasil” (Alperin, 1993).
- Segundo as anotações do próprio Presidente Roosevelt, o nome “Castanho” era somente conhecido pelos seringueiros da região, sendo um nome completamente desconhecido pelos geógrafos, e na verdade tratava-se do principal afluente a esquerda do rio Aripuanã. Tal magnitude pode ser notado quando ele descreve: “Evidently the Castanho was, in length at least, substantially equal, and probably superior, to the upper Aripuanan...” (Roosevelt, 2000).
- Descreve a sua importância como rio, para a formação do que era conhecido como o baixo Aripuanã: “The upper Aripuanan, a river of substantially the same volume as the Castanho, but broader at this point, and probably of less length, here joined the Castanho from the east, and the two together formed what the rubbermen called the lower Aripuanan.”
- Uma das principais confusões que foram feitas quanto a sua localização, muito provavelmente provém desta mesma época, conforme indica Roosevelt em seus escritos: “The mouth of this was indicated, and sometimes named, on the maps, but only as a small and unimportant stream.”
- A confusão do que seriam rios diferentes, como o Rio Castanho, o Rio Aripuanã, e Roosevelt, ao menos em termos nomenclaturais, fica bastante claro quando a própria Expedição Roosevelt nomeou o então “rio Roosevelt”: “set forth the fact that we had now by actual exploration and investigation discovered that the river whose upper portion had been called the Dúvida on the maps of the Telegraphic Commission and the unknown major part of which we had

SOBRE A LOCALIDADE TIPO DE *MICO MARCAI* (ALPERIN, 1993)

Ronaldo Alperin

Na época da descrição do material referente a *Callithrix argentata marcai* (Alperin, 1993), as únicas informações disponíveis quanto sua localidade tipo, encontravam-se nas