

References

- Bueno, A. R. 1989. Determinação da área de uso de um grupo de saguis *Callithrix aurita* em um fragmento florestal do sul de Minas Gerais. Bachelor's thesis, Universidade Estadual de São Paulo, Rio Claro.
- Coimbra-Filho, A. F. 1991. Apontamentos sobre *Callithrix aurita* (E. Geoffroy, 1812), um sagüi pouco conhecido (Callitrichidae, Primates). In: *A Primatologia no Brasil-3*, A. B. Rylands and A. T. Bernardes (eds.), pp.145-158. Fundação Biodiversitas and Sociedade Brasileira de Primatologia, Belo Horizonte.
- Corrêa, H. K. M. 1995. Ecologia e comportamento alimentar de um grupo de saguis-da-serra-escuros (*Callithrix aurita* E. Geoffroy 1812) no Parque Estadual da Serra do Mar, Núcleo Cunha, São Paulo, Brasil. Master's thesis, Instituto de Ciências Biológicas, Universidade Federal de Minas Gerais, Belo Horizonte.
- Eiten, G. 1970. A vegetação do estado de São Paulo. *Bolm. Inst. Bot.* 7: 1-147.
- Hershkovitz, P. 1977. *Living New World Monkeys (Platyrrhini), With an Introduction to Primates, Volume 1*. University of Chicago Press, Chicago.
- Janzen, D. H. 1973. Sweep samples of tropical foliage: effects of seasons, vegetation types, elevation, time of day and insularity. *Ecology* 54: 687-708.
- Leitão-Filho, H. de F. 1992. A flora arbórea da Serra do Japi. In: *História Natural da Serra do Japi: Ecologia e Preservação de Uma Área Florestal no Sudeste do Brasil*. L. P. Morellato (org.), pp.40-62. Editora da Unicamp/FAPESP, Campinas.
- Mantovani, W. 1984. Composição e similaridade florística, fenologia e espectro biológico do cerrado da Reserva Biológica de Mogi-Guaçu - SP. M.Sc. Thesis, Universidade Estadual de Campinas, Campinas.
- Mantovani, W. 1987. Análise florística e fitossociológica do estrato herbáceo-subarbustivo do cerrado na Reserva Biológica de Mogi-Guaçu e em Itirapina. Ph.D. Thesis, Universidade Estadual de Campinas, Campinas.
- Mantovani, W., Rossi, L., Romaniuc Neto, S., Assad-Ludewigs, I. Y., Wanderley, M. das G. L., de Melo, M.M. da R. F., and de Toledo, C. B. 1989. Estudos fitossociológicos da área de mata ciliar em Mogi-Guaçu - SP. In: *Simpósio sobre a Mata Ciliar*, L. M. Barbosa (coord.), pp. 235-267. Fundação Cargill, São Paulo.
- Marinho-Filho, J. 1992. Os mamíferos da Serra do Japi. In: *História Natural da Serra do Japi: Ecologia e Preservação de uma Área Florestal no Sudeste do Brasil*, L.P. Morellato (org.), pp. 264-286. Editora da Unicamp/FAPESP, São Paulo.
- Marquis, R. J. and Braker, H. E.. 1994. Plant-herbivore interactions: diversity, specificity and impact. In: *La Selva: Ecology and Natural History of a Neotropical Rain Forest*, L. A. McDade, K. S. Bawa, H. A. Hespenheide and G. S. Hartshorn (eds.), pp. 261-281. University of Chicago Press, Chicago.
- Martuscelli, P. and Rodrigues, M. G. 1992. Novas populações do mico-leão caçara *Leontopithecus caissara* (Lorini e Persson, 1990) no sudeste do Brasil (Primates-Callitrichidae). *Rev. Inst. Flor. São Paulo* 4: 920-924.
- Milton, K. and Lucca, C. de 1984. Population estimate for Brachyteles at Fazenda Barreiro Rico, São Paulo State, Brazil. *IUCN/SSC Primate Specialist Group Newsletter* (4): 27-28.
- Muskin, A. 1984. Field notes and geographic distribution of *Callithrix aurita* in eastern Brazil. *Am. J. Primatol.* 7: 377-380.
- Rylands, A.B. 1989. Sympatric Brazilian callitrichids: the black-tufted-ear marmoset *Callithrix kuhli* and the golden-headed lion tamarin *Leontopithecus chrysomelas*. *J. Hum. Evol.* 18: 679-697.
- Rylands, A. B. 1994. Sagüi-da-serra-escuro *Callithrix aurita* (É. Geoffroy, 1812). In: *Livro Vermelho dos Mamíferos Brasileiros Ameaçados de Extinção*, G. A. B. Fonseca, A. B. Rylands, C. M. R. Costa, R. B. Machado, Y. L. R. Leite (eds.), pp.47-54. Fundação Biodiversitas, Belo Horizonte.
- Rylands, A. B. 1995. Habitat and the evolution of social and reproductive behavior in Callitrichidae. *Am. J. Primatol.* 37. In press.
- Stevenson, M.F. and Rylands, A. B. 1988. The marmosets, genus *Callithrix*. In: *Ecology and Behavior of Neotropical Primates, Vol. 2*, R. A. Mittermeier, A. F. Coimbra-Filho, A. B. Rylands and G. A. B. Fonseca (eds.), pp.131-222. World Wildlife Fund, Washington, D. C.
- Torres de Assumpção, C. 1983. An ecological study of the primates of southeastern Brazil, with a reappraisal of *Cebus apella* races. Ph. D. Thesis, University of Edinburgh, Edinburgh.
- Vivo, M. de 1991. *Taxonomia de Callithrix Erxleben, 1777 (Callitrichidae, Primates)*. Fundação Biodiversitas, Belo Horizonte.
- Vuono, Y.S. de, Barbosa, L. M. and Batista, E. A. 1982. A Reserva Biológica de Mogi-Guaçu. *Silv. São Paulo* 16A: 548-556.

A NEW RECORD FOR *CALLITHRIX MAUESI* MITTERMEIER, SCHWARZ & AYRES, 1992

The Rio Maués marmoset (*Callithrix mauesi*) was recently described by Mittermeier *et al.* (1992), based on one specimen deposited in the scientific collection of the Museu Paraense Emílio Goeldi (holotype:

MPEG-22177) and two social groups in the wild, including seven live animals captured and the birth in captivity of two infants in the collection of Marco Schwarz. The new species was placed in the tasseled subgroup of the *Callithrix argentata* species group (Hershkovitz, 1977; Vivo, 1991; Mittermeier *et al.*, 1992). This was due to it being considered a close relative of *C. humeralifera* and *C. chrysoleuca*, and presenting as diagnostic features the shape and placement of the ear tufts and their erect, "neatly trimmed" appearance, the dark fur coloration, the absence of the characteristic light mantle of *C. humeralifera*, and the light orange tint to the underparts.

All specimens cited by Mittermeier *et al.* (1992) originated from the type locality, on the left bank of the Rio Maués-Açu (a widening of the Rio Maués), opposite the town of Maués, Amazonas state, Brazil (0323°S, 5746°W). Based on information from local people in 1985, the authors presumed that the species occurred in the area between the Rios Maués, Paraná Urariá, and Abacaxis. During a recent expedition to the region, a new locality record was obtained for this species, confirming in part the proposed range (Fig. 1). Three adult specimens, a male and two females (MPEG-23962, 23963, 23964), were collected at the locality of Santa Maria, right bank of the lower Rio Abacaxis, municipality of Nova Olinda do Norte, Amazonas state (0354°S, 5846°W). The material included skins and skulls, skeletons, endoparasites, and blood and liver samples for genetic

studies, as well as stomach and intestinal contents. The gut measurements were also taken. The marmosets were in a small patch of secondary forest, near a guaraná (*Paulinia cupana*) plantation. *C. mauesi* was particularly abundant in this area (Silva Jr. and Noronha, in prep.). Although it was not possible to visit the area, local people also reported the occurrence of *C. mauesi* in the vicinity of the town of Abacaxis, right bank of the Rio Abacaxis (0355°S, 5845°W), a few kilometers below Santa Maria. Locals, including a hunter, reported its absence however, from São João, left bank of the Rio Marimari, near its confluence with the Rio Abacaxis (0357°S, 5848°W), and two other places on the left bank of the Rio Abacaxis, opposite Santa Maria. This suggests that the Rio Abacaxis is the limit to its range in the southwest. *C. mauesi* may be partially sympatric with a newly described species of bare-eared marmoset (Silva Jr. and Noronha, in press) on the right bank of the Rio Abacaxis, according to information obtained from the localities of Abacaxis and Santa Maria cited above, and also based on the data available for the paratypes of the new species (MPEG-23959, 23960), originating from the locality of Terra Preta, right bank of the middle Rio Abacaxis (0449°S, 5826°W). However, this remains to be demonstrated.

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References

- Hershkovitz, P. 1977. *Living New World Monkeys, Vol. 1. (Platyrrhini)*, With an Introduction to the Primates. University of Chicago Press, Chicago.
- Mittermeier, R.A., Schwarz, M. and Ayres, J.M. 1992. A new species of marmoset, genus *Callithrix* Erxleben, 1777 (Callitrichidae, Primates) from the

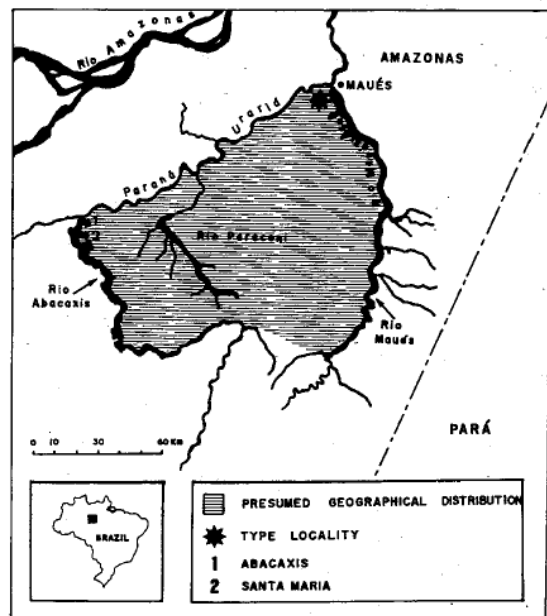


Figure 1. Available data on the geographic distribution of *Callithrix mauesi*, based on Mittermeier *et al.* (1992) and the new records.

Rio Maués region, state of Amazonas, central Brazilian Amazonia. *Goeldiana Zoologia* (14): 1-17.

Silva Jr., J.S. and Noronha, M.A. In press. On a new species of bare-eared marmoset, genus *Callithrix* Erxleben, 1777, from central Amazonia, Brazil (Primates: Callitrichidae). *Goeldiana Zoologia* (18).

Silva Jr., J.S. and Noronha, M.A. In prep. Resultados de uma pequena expedição primatológica à Amazônia Central Brasileira (Primates, Platyrrhini).

Vivo, M. de. 1991. *Taxonomia de Callithrix Erxleben, 1777 (Callitrichidae, Primates)*. Fundação Biodiversitas, Belo Horizonte.

PRIMATES AND CONSERVATION IN THE GUAJARÁ-MIRIM STATE PARK, RONDÔNIA, BRAZIL

Located in western Rondônia (Fig. 1), the 258,000 ha Guajará-Mirim State Park was decreed in 1990. The Park is just over 200 km south-west of the Samuel Ecological Station, the primate fauna of which is well-known from the rescue operation during the construction of the Samuel Hydroelectric Reservoir (Schneider *et al.*, 1990). Seven diurnal primates are found at Samuel, including *Saguinus fuscicollis* which has a distribution otherwise restricted to the west of the Rio Madeira (Hershkovitz, 1977), but excluding howler monkeys, *Alouatta*.

An equivalent primate community was encountered on the west or left bank of the Rio Jiparaná at Calama, 100 km northwest of Samuel (Fig. 1), but not east of this river, which plays a role in the zoogeography of at least five platyrrhine genera (Ferrari and Lopes, 1992). As no major river or other geographic barrier apparently separates these two sites from Guajará-Mirim, an equivalent primate community would be expected at this site. However, while seven diurnal monkeys were also observed during the preliminary survey at Guajará-Mirim in August 1995 reported here (Table 1), the composition of the primate community was different from that at the two sites described above, with the addition of howler monkeys, *Alouatta seniculus*, and omission of marmosets, *Callithrix emiliae*. The absence of *Callithrix* was confirmed in

Table 1. Diurnal primates observed in the Guajará-Mirim State Park Rondônia.

Alouatta seniculus
Ateles chamek
Callicebus brunneus
Cebus apella
Pithecia irrorata
Saguinus fuscicollis weddelli
Saimiri (sciureus) ustus

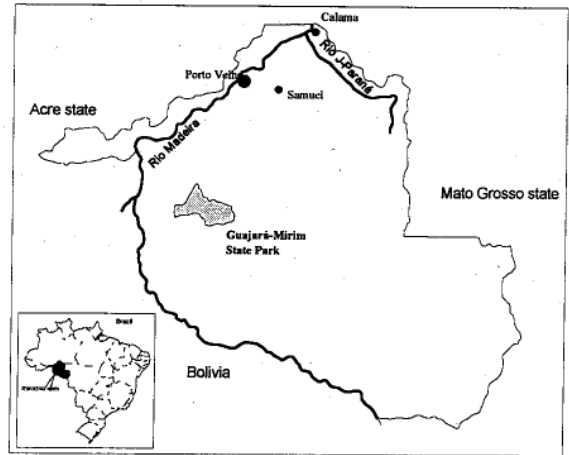


Figure 1. Location of the Guajará-Mirim State Park, Rondônia, Brazil.

interviews with local residents, although the possibility of marmosets occurring in areas of the Park not visited during the survey cannot be ruled out altogether.

The differences between these communities raise a number of interesting questions with regard to the ecology and zoogeography of primates in southwestern Amazonia, in particular because both *Alouatta* and *Callithrix* are among the most ecologically versatile of the platyrrhines.

One factor that may be important in the case of *Callithrix* is competition with a second callitrichine, *S. fuscicollis* (see Lopes and Ferrari, 1994), combined with differences in habitat quality, similar to those that may determine the distribution of *Callithrix argentata* east of the Rio Xingu (Ferrari and Lopes, 1990). Primary forest habitat observed at Guajará-Mirim appeared, qualitatively, to be of lower stature, more open, and more deciduous than that at Samuel, as might be expected from respective differences in latitude, altitude, and precipitation. However, while competition with a second ateline (*Ateles chamek*) may - at least potentially - be a factor, it is unclear how these same differences in habitat quality might have the opposite effect on the distribution of *Alouatta seniculus*.

Far more data are needed before a more definitive analysis of such factors will be possible, but the present study does indicate that *Callithrix* is less widely distributed in western Amazonia than was previously thought (Rylands *et al.*, 1993), and that *S. fuscicollis* is more widespread.

The Guajará-Mirim State Park has, until very recently, been isolated from areas of human colonization, but