

New Occurrence Records of Maués Marmoset, Mico mauesi (Primates, Callitrichidae)

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- suroccidentales ecuatorianos. *Revista Politécnica* 27(4), *Serie Biología* 7: 58–67.
- Allen, J. A. 1914. New South American monkeys. *Bull. Am. Mus. Nat. Hist.* 33: 647–655.
- Alonso, L. E., Alonso, A., Schulenberg, T. S., and Dallmeier, F. (eds.). 2001. Biological and social assessments of the Cordillera de Vilcabamba, Peru. Rapid Assessment Program (RAP). Working Papers 12 and SI/MAB Series 6. Conservation International. Washington, DC.
- Anderson, S. 1997. Mammals of Bolivia, taxonomy and distribution. *Bull. Am. Mus. Nat. Hist.* 231: 1–652.
- Brown, J. H. 1984. On the relationship between abundance and distribution of species. *Am. Nat.* 124: 255–279.
- Cabrera, A. 1958. Catálogo de los mamíferos de América del Sur. Revista del Museo Argentino de Ciencias Naturales "Bernardino Rivadavia", Ciencias Biológicas 4: 1–308.
- Defler, T. R. 1979a. On the ecology and behavior of *Cebus albifrons* in eastern Colombia: I. Ecology. *Primates* 20: 475–490.
- Defler, T. R. 1979b. On the ecology and behavior of *Cebus albifrons* in eastern Colombia: II. Behavior. *Primates* 20: 491–502.
- Defler, T. R. 1982. A comparison of intergroup behavior in *Cebus albifrons* and *C. apella. Primates* 23: 385–392.
- Defler, T. R. 2003. *Primates de Colombia*. Conservación Internacional. Serie de guías tropicales de campo 4. Bogotá DC.
- Eisenberg, J. and Redford, K. 1999. Mammals of the Neotropics, Vol. 3. The University of Chicago Press, Chicago.
 Emmons, L. H. and Feer, F. 1997. Neotropical rainforest mammals. A field guide. 2nd edition. The University of Chicago Press, Chicago.
- Groves, C. 2005. Order Primates. In: *Mammal species of the world, a taxonomic and geographic reference*, 3rd edition, D. E. Wilson and D. M. Reeder (eds.), pp.111–184, The John Hopkins University Press, Baltimore.
- Haugaasen, T. and Peres, C. T. 2005. Primate assemblage structure in Amazonian flooded and unflooded forests. *Am. J. Primatol.* 67: 243–258.
- Hershkovitz, P. 1949. Mammals of northern Colombia. Preliminary report 4: monkeys (Primates), with taxonomic revisions of some forms. *Proceedings of the U. S. National Museum* 98: 323–427.
- Izar, P. 2003. Female social relationships of *Cebus apella nigritus* in a Southeastern Atlantic forest: An analysis through ecological models of primate social evolution. *Behaviour* 141: 71–99.
- Krabbe, N., Agro, D. J., Rice, N. H., Jacome, N., Navarrete, L., and Sornoza M., F. 1999. A new species of antpitta (Formicariidae: Grallaria) from the southern Ecuadorian Andes. *Auk* 116: 882–890.
- Linares, O. 1998. *Mamíferos de Venezuela*. Sociedad Conservacionista Audubon de Venezuela, Caracas.
- Lynch Alfaro, J. W. 2007. Subgrouping patterns in a group of wild *Cebus apella nigritus*. *Int. J. Primatol.* 28: 271–289.
- Schulenberg, T. S. and Awbrey, K. (eds.). 1997. The Cordillera del Cóndor region of Ecuador and Peru: A biological

- assessment. Rapid Assessment Program (RAP). Working Papers 7. Conservation International, Washington, DC.
- Tate, G. H. H. 1939. The mammals of the Guiana region. Bull. Am. Mus. Nat. Hist. 76: 151–229.
- Terborgh, J. 1983. *The behavioral ecology of five species of Amazonian primates*. Princeton University Press, Princeton, New Jersey.
- Tirira, D. G. 2007. *Guía de campo de los mamíferos del Ecuador*. Publicación especial sobre los mamíferos del Ecuador 6, Ediciones Murciélago Blanco, Quito, Ecuador.

NEW OCCURRENCE RECORDS OF MAUÉS MARMOSET, *MICO MAUESI* (PRIMATES, CALLITRICHIDAE)

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Introduction

The Maués marmoset, *Mico mauesi* (Mittermeier *et al.*, 1992), was described in the last decade of the 20th century and originally placed in the genus *Callithrix*. The species was described from a specimen at the Museu Paraense Emílio Goeldi (holotype: MPEG -22177) and observations of captive and wild animals. At the time of its description the species was only known to occur at the type locality, on the left bank of the Rio Maués-Açu (03°23′S, 57°46′W), just across from the city of Maués in the state of Amazonas, Brazil. Based on distribution patterns of other species of Amazonian marmoset, Mittermeier *et al.* (1992) predicted that the new species would occur throughout the entire medium to lower Maués-Urariá-Abacaxis interfluve and that its range would be limited by these three rivers.

During primate surveys conducted in and around the Canumã-Urariá-Abacaxis interfluve, Silva Jr. and Noronha (1995, 2000) registered the presence of M. mauesi at two localities on the right bank of the lower Rio Abacaxis: Abacaxis (03°55'S, 58°45'W) and Santa Maria (03°54'S, 58°46′W). Three specimens were collected at Santa Maria and deposited in the zoological collection of the Museu Paraense Emílio Goeldi (MPEG - 23962, 23963, 23964). These findings (Silva Jr. and Noronha, 1995, 2000) and data from the literature (Hershkovitz, 1977; Vivo, 1988, 1991), confirm the northern and western limits of the species' range as proposed by Mittermeier et al. (1992). According to the range map produced by these authors, the distribution of *M. mauesi* should be limited to the east by the Rio Maués-Açu and extend as far south as 05° S. The objective of this study is to update knowledge of the geographic distribution of M. mauesi through the collection and analysis of new field data.

Methods

Data on the occurrence and habitat of the maués marmoset were collected during a field trip to the lower Rios Madeira and Tapajós interfluve (Noronha, 2004). The area surveyed during the study spanned the headwaters of the Rios Maués, Abacaxis and Sucundurí. Data were collected using two methods: direct sightings and interviews with local informants. *Mico mauesi* was identified based on the diagnostic characters described by Mittermeier *et al.* (1992) and comparisons with material from the zoological collections of the Museu Paraense Emílio Goeldi and the National Institute of Amazonian Research (MPEG-23962, 23963, 23964; INPA-4082, 4109, 4105, 4106).

Results and discussion

During the study, eight new occurrence records were obtained for *M. mauesi*, seven via direct sightings and one in an interview. Marmosets with the traits described by Mittermeier *et al.* (1992) were seen at sites 4, 5, 6, 7, 8, 9

and 10 (Fig. 1.). All records were obtained in terra firme primary forest, secondary growth and igapó, suggesting that the habitat requirements of this species are similar to other members of the genus (Digby et al., 2005; Mittermeier et al., 1992; Silva Jr. and Noronha, 1995, 2000). These new records demonstrate that the geographic distribution delineated by Mittermeier et al. (1992) underestimated the true range of the species. Although northern and western limits were predicted correctly, authors were over cautious with respect to the eastern and southern limits. Data from this study extend the range east to the Rio Maués-Açu; south almost as far as the Igarapé do Surubim (06°53'S, 59°03'W) along the corridor formed by the Rios Tapajós and Sucundurí; west to the Rio Sucundurí, reaching the mid and upper Sucundurí-Abacaxis interfluve (the northernmost record was the Cantagalo site: 06°33'S, 59°05'W). Interviews with local residents suggest that the species may extend as far south as the region of Igarapé do Urucú (07°09'S, 58°56'W), on the right bank of the Rio Sucundurí.

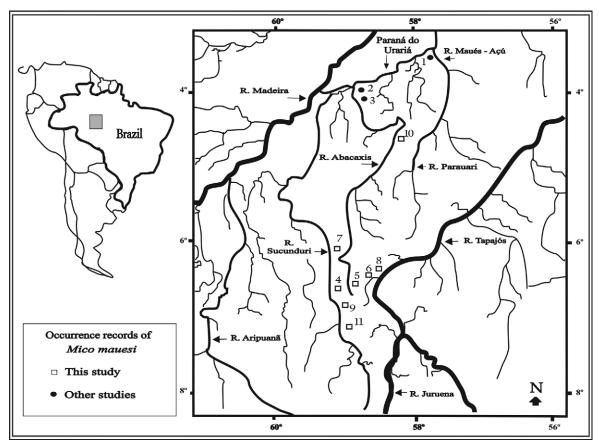


Figure 1. Geographic range of *Mico mauesi*, based on Mittermeier *et al.* (1992), Silva Jr. and Noronha (1995, 2000) and this study: (1) left bank of the Rio Maués-Açu (03°23′S, 57°46′W), across from Maués (type locality), municipality of Maués; (2) Abacaxis (03°55′S, 58°45′W), right bank of the Rio Abacaxis, municipality of Nova Olinda do Norte; (3) Santa Maria (03°54′S, 58°46′W), right bank of the Rio Abacaxis, municipality of Nova Olinda do Norte; (4) right bank of the Rio Sucundurí (06°48′S, 59°04′W), municipality of Apuí; (5) right bank of the Rio Abacaxis (06°41′S, 58°50′W) municipality of Maués; (6) left bank of the Rio Tapajós (06°34′S, 58°35′W), municipality of Maués; (7) Cantagalo, right bank of the Rio Sucundurí (06°33′S, 59°05′W), municipality of Borba; (8) left bank of the Rio Tapajós (06°34′S, 58°24′W), municipality of Maués; (9) mouth of the Igarapé do Surubim, right bank of the Rio Sucunduri (06°53′S, 59°03′W), municipality of Apuí; (10) Floresta Nacional do Pau Rosa, right bank of the Rio Abacaxis (04°40′S, 58°15′W), municipality of Maués; (11) mouth of the Igarapé do Urucú (07°09′S, 58°56′W), left bank of the Rio Sucunduri, municipality of Apuí.

According to Hershkovitz (1977), Mico humeralifer is expected to occur in the Sucundurí-Tapajós-Juruena interfluve. Rylands (1994) suggested that this species' range could extend as far south as 8° S. This study however, does not support these expectations. It is possible that Mico mauesi's range extends between the Rios Sucundurí and Juruena, reaching as far south as the transition between dense tropical forest, open tropical forest and savanna (BRASIL, 1975) at around 7°40'S, or even as far as the Serra do Sucundurí at 8°10'S. These predictions coincide with the southern limit for M. humeralifer proposed by Rylands (1994). According to Rylands (1981), south of this latitude the species M. melanurus should occur between the Rios Aripuanã and Juruena. This hypothesis is partially supported by the occurrence of M. melanurus in the Serra do Sucundurí (08°34'S, 59°08'W) and on the right bank of the Rio Bararati (08°21'S, 58°37'W). Mico melanurus was the only member of the genus occurring at these localities (M. A. Noronha, unpubl. data). Our results show that the geographic distribution of M. mauesi is large relative to that of other species of the genus in the Madeira-Tapajós interfluve. We did not find any area of contact between M. mauesi and any other species of Mico, suggesting that the species is parapatric with respect to its congeneric neighbors M. humeralifer, M. melanurus, M. acariensis and M. saterei.

This study quadrupled the number of recorded localities for *M. mauesi*, and revealed a range over twice that proposed by Mittermeier *et al.* (1992). The improved knowledge of this taxon's geographic distribution also provides information about its occurrence within protected areas. The maués marmoset is probably present in the Floresta Nacional do Pau Rosa (994,800 ha), Parque Nacional do Juruena (2,002,565 ha) and the Floresta Nacional de Maués (438,440 ha), and if we assume that the southern limit of its range is close to the Serra do Sucundurí, it also occurs in the Reserva de Desenvolvimento Sustentável do Bararati (113,606 ha), Parque Estadual do Sucundurí (808,312 ha) and the Floresta Nacional do Apuí (185,946 ha).

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References

Digby, L. J, Ferrari, S. F. and Saltzman, W. 2005. Callitrichines: The role competition in cooperatively breeding species. In: *Primates in perspectives*, C. J. Campbell, A. F. Fuentes, K. C. Mackinnon, M. Panger and S. Bearder (eds.), pp.85–106. Oxford University Press.

Hershkovitz, P. 1977. Living New World monkeys. Part 1: (Platyrrhini), with an introduction to Primates. Chicago University Press, Chicago.

Mittermeier R. A., Schwarz, M. and Ayres, M. 1992. A new species of marmoset, genus *Callithrix* Erxleben, 1977 (Callitrichidae, Primates) from the Rio Maués region, state of Amazonas, central Brazilian Amazonia. *Goeldiana, Zoologia* 14: 1–17.

Noronha, M. A. 2004. Estado atual de conservação e distribuição geográfica do *Mico saterei* Silva Jr. & Noronha, M. A. 1998 (Primates: Callitrichidae), na Amazônia Central, Brasil. MSc thesis, Instituto de Florestas, Universidade Federal Rural do Rio de Janeiro, Rio de Janeiro.

Rylands, A. B. 1981. Preliminary field observations on the marmoset, *Callithrix humeralifer intermedius* (Hershkovitz, 1977), at Dardelos, Rio Aripuanã, Mato Grosso. *Primates* 22 (1): 46–59.

Rylands, A. B. 1994. Sagui-de-Santarém. In: Livro vermelho das espécies de 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.63–72. Fundação Biodiversitas, Belo Horizonte, MG., Brazil.

Silva Júnior, J. S. da and Noronha, M. A. 1995. A new record for *Callithrix mauesi* Mittermeier, Schwarz & Ayres, 1992. *Neotrop. Primates* 3(3): 79–80.

Silva Júnior, J. S. da and Noronha, M. A. 2000. Resultados de uma pequena expedição primatológica à Amazônia Central (Primates, Platyrrhini). *A Primatologia no Brasil* 7: 291–304.

Vivo, M. de 1988. *Sistemática de Callithrix Erxleben, 1777*. PhD thesis, Universidade de São Paulo, São Paulo.

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

NEW OCCURRENCE RECORDS FOR *MICO MELANURUS* (PRIMATES, CALLITRICHIDAE)

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The black-tailed marmoset (*Mico melanurus*) was first described by É. Geoffroy in Humboldt, 1812. He provided a brief description of the species but only noted Brazil as the type locality. Allen (1916, *in* Vivo, 1991) later determined the type locality to be Cuiabá, in the state of Mato Grosso. *Mico melanurus* was considered part of the group *Callithrix argentata sensu* Hershkovitz (1977) and Vivo (1988, 1991), and associated with the bare-