

## **The Southernmost Record of *Mico emiliae* (Thomas, 1920) for the State of Mato Grosso, Northern Brazil**

Author: Garbino, Guilherme Siniciato Terra

Source: Neotropical Primates, 18(2) : 53-55

Published By: Conservation International

URL: <https://doi.org/10.1896/044.018.0204>

---

BioOne Complete ([complete.BioOne.org](https://complete.BioOne.org)) is a full-text database of 200 subscribed and open-access titles in the biological, ecological, and environmental sciences published by nonprofit societies, associations, museums, institutions, and presses.

Your use of this PDF, the BioOne Complete website, and all posted and associated content indicates your acceptance of BioOne's Terms of Use, available at [www.bioone.org/terms-of-use](https://www.bioone.org/terms-of-use).

Usage of BioOne Complete content is strictly limited to personal, educational, and non - commercial use. Commercial inquiries or rights and permissions requests should be directed to the individual publisher as copyright holder.

---

BioOne sees sustainable scholarly publishing as an inherently collaborative enterprise connecting authors, nonprofit publishers, academic institutions, research libraries, and research funders in the common goal of maximizing access to critical research.

moved to an electric post and mated. Jorge's group was resting in a nearby tree. There was no attempt of copulation interruption by his group's adult female or her adult male group mates, who remained at the other side of the road. At 13:15, the couple mated again and Jane returned to her group. Jorge vocalized while she crossed the road via the cable.

July 19<sup>th</sup>: Jorge, the adult female, and the subadult vocalized at 16:15 when Jane arrived at the border of her home range. She crossed the road as usual at 16:30, reaching a tree within the home range of Jorge's group. The couple mated four times near his group while her male group members howled at the other side of the road. At 16:45, Jorge began to slowly moving away from the border of the road, only stopping to rub his chin on tree trunks. He was followed by Jane. An adult male from Jane's group (apparently slightly larger than Jorge) also crossed the road using the electric cable, reaching the trees. The last EGC was recorded at 17:15. After that, Jane returned to her home range, whereas Jorge remained with his group. We don't know whether the adult male from Jane's group left the area prior or together with her.

In sum, both Jorge and Jane sought EGCs, but only her attempts were successful. When Jorge moved to her home range, he was chased away by her adult male group mates. On the other hand, his adult female group mate appeared to ignore his sexual interactions with Jane. We have no data on the occurrence and frequency of EGCs during the days we were not monitoring our study group and whether Jane mated within her group during our study. We also do not know whether Jane got pregnant as a result of these EGCs because our study ended only five weeks after the record of the first event. Therefore, our data do not allow excluding any of the aforementioned hypotheses for explaining the EGCs between Jorge and Jane. This was the second report on EGC in *Alouatta guariba clamitans*.

## Acknowledgements

We thank Silvia Beatriz Saint-Martin Ribeiro, Vera Lúcia dos Santos, Celso dos Santos, and Mr. Ari for logistical support, and Jonas da Rosa Gonçalves for helping in the field at the beginning of the study. This study was approved by the Scientific Committee of the Faculdade de Biociências/Pontifícia Universidade Católica do Rio Grande do Sul (project #3477). KGDJ was supported by a FAPERGS PROBIC grant and JCBM by a CNPq PQ-1D grant (#303154/2009–8).

**Karine Galisteo Diemer Lopes**, and **Júlio César Bicca-Marques**, Laboratório de Primatologia Faculdade de Biociências Pontifícia Universidade Católica do Rio Grande do Sul, Porto Alegre, RS 90619–900, Brasil. E-mails: <karine.galisteo@acad.pucrs.br> and <jbicca@pucrs.br>.

## References

- Agoramoorthy, G. and Hsu, M. J. 2000. Extragroup copulation among wild red howler monkeys in Venezuela. *Folia Primatol.* 71: 147–151.
- Di Fiore, A., Link, A. and Campbell, C. J. 2011. The atelines: behavioral and socioecological diversity in a New World monkey radiation. In: *Primates in Perspective*, C. J. Campbell, A. Fuentes, M. C. MacKinnon, S. K. Bearder and R. M. Stumpf (eds.), pp. 155–188. Oxford University Press, New York.
- Fialho, M. S. and Setz, E. Z. F. 2007. Extragroup copulations among brown howler monkeys in southern Brazil. *Neotrop. Primates* 14: 28–30.
- Glander, K. E. 1992. Dispersal patterns in Costa Rican mantled howling monkeys. *Int. J. Primatol.* 13: 415–436.
- Kowalewski, M. M. and Garber, P. A. 2010. Mating promiscuity and reproductive tactics in female black and gold howler monkeys (*Alouatta caraya*) inhabiting an island in the Parana river, Argentina. *Am. J. Primatol.* 72: 734–748.
- Reeder, D. M. 2003. The potential for cryptic female choice in primates: behavioral, anatomical, and physiological considerations. In: *Sexual Selection and Reproductive Competition in Primates: New Perspectives and Directions*, C. B. Jones (ed.), pp. 255–303. American Society of Primatologists, Norman.
- Van Belle, S., Estrada, A. and Strier, K. B. 2008. Social relationships among male *Alouatta pigra*. *Int. J. Primatol.* 29: 1481–1498.

---

---

## THE SOUTHERNMOST RECORD OF *MICO EMILIAE* (THOMAS, 1920) FOR THE STATE OF MATO GROSSO, NORTHERN BRAZIL

Guilherme Siniciato Terra Garbino

The marmoset genus *Mico* comprises 14 species, 13 of which are endemic to Brazil (Rylands *et al.*, 2009; Ferrari *et al.*, 2010). *Mico emiliae* was described by Thomas (1920) based on two specimens collected by Emilia Snethlage in the Rio Curuá, a tributary of the Rio Iriri, that is an affluent of the Rio Xingu (Thomas, 1920; Vivo, 1985). *Mico emiliae* is restricted to the region between the Rio Curuá and Rio Iriri to the north, reaching the Rio Teles Pires to the west (Pimenta and Silva Jr., 2005; Fialho, 2010). The southern limit of the distribution remains unconfirmed but has been proposed by Roosmalen *et al.* (2000) to lie between the Xingú headwaters region and the eastern (or right) margin of the Upper Rio Teles Pires. Besides the aforementioned distribution, *M. emiliae* was believed to occur westwards, in the Madeira/Aripuanã interfluvium (Alperin, 1993; Ferrari and Lopes, 1992; Vivo, 1985, 1991). The form from this region, however, has now been described as a new species, *M. rondoni* (Ferrari *et al.*, 2010). In this note, I report the first record of *M. emiliae* south of the Rio Teles Pires

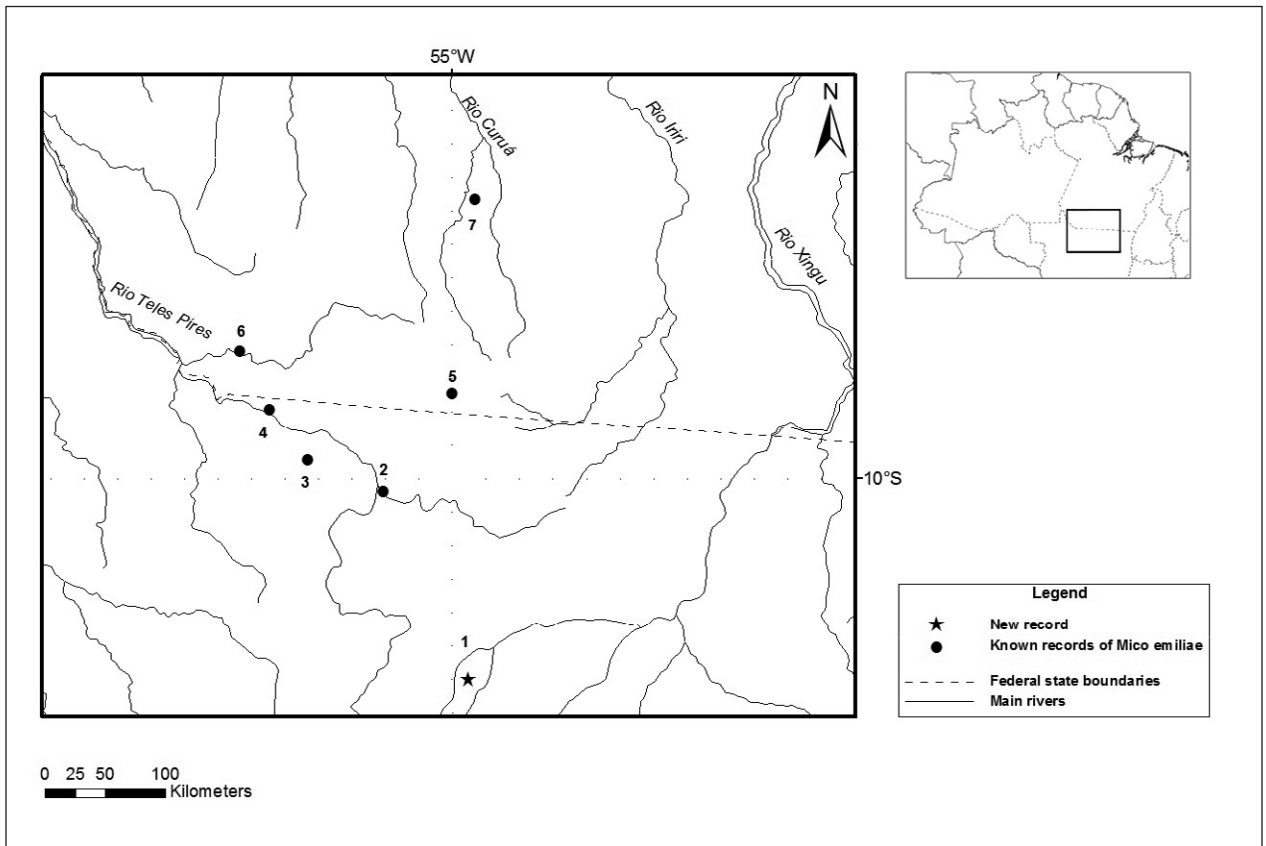
and Rio Iriri interfluvium, in the Xingú headwaters region, and provide an updated map of the known occurrence records of *M. emiliae*.

After reviewing the published records of *M. emiliae* and analyzing 12 museum specimens housed in the Museu de Zoologia da Universidade de São Paulo, São Paulo (MZUSP) and Museu Paraense Emílio Goeldi, Belém (MPEG) zoological collections, a total of seven locality records of *M. emiliae* were found (Figure 1). Pimenta and Silva Jr. (2005) cited the record from Vieira (1955) as distinct from Thomas (1920), but both publications refer to the type locality of *M. emiliae*. The new record is based on a stuffed skin, with separated skull and postcranial skeleton (field number PEV 1194–1195, voucher number MZUSP 35106), collected in the municipality of Cláudia (10°30'S, 54°53' W, 345m) (Figure 1) by Marília Kerr in 24.vii.1997. The determination of the species was based on diagnostic characters described in the literature (Vivo, 1991; Ferrari *et al.*, 2010). According to the field notes made by the collector, the animal was run over by a vehicle while crossing the MT-423 highway (the label identifies it as “MT-427”, but since this road does not exist, and MT-423 passes through the municipality of Cláudia, I assume that the collector was referring to this highway) and was previously identified as

*Callithrix melanura*. The collecting locality lies on a particular region, on the southeastern limit of the Brazilian Amazon Forest that can be classified phytogeographically as “Evergreen Seasonal Forest” (Ivanauskas *et al.*, 2008).

The observed characters agree with the analyzed series from Alta Floresta (MPEG 24595, 24596), Orolândia, Alta Floresta (MPEG 24606, 24608, 24609, 24610, 24611), Serra do Cachimbo (MPEG 38104, 38105, 38106) and also with the paratype (MPEG 170). The specimen showed the typical black crown, white patch at the brow, unpigmented face, pigmented naked ears, light gray dorsum and black tail. The specimen differs slightly from the other analyzed specimens in its darker pelage (dark gray) of the dorsal sacral region and by having a tail with signs of annulations, caused by the presence of a dark brown basal band and a black distal band on the tail fur. The external measurements were taken from the label and are as follow: weight = 330 g, total body length = 539 mm, tail length = 333 mm, foot length = 65 mm, ear length = 25 mm.

This record confirms the occurrence of the species 165 km south of its previous southernmost locality, in the Xingú headwaters region, as predicted by Roosmalen *et al.* (2000) and is an important confirmation of the species' presence



**Figure 1.** Map showing the known records of *Mico emiliae*. The grey area indicates the putative distribution of the species according to Rylands *et al.* (2009). 1. Cláudia (11°30'S, 54°53'W) (new record); \*2. Fazenda São José, Peixoto de Azevedo (10°06'S, 55°31'W) (Ávila-Pires, 1986); 3. Alta Floresta (09°52'S, 56°05'W) (Ferrari *et al.*, 2010); 4. Orolândia, Alta Floresta (09°29'S, 56°22'W) (Ferrari *et al.*, 2010); 5. Serra do Cachimbo (09°22'S, 55°00'W) (Pimenta and Silva Jr., 2005); \*\*6. Rio São Benedito, left margin (09°03'S, 56°35'W) (Fialho, 2010, Fialho pers. comm.); 7. Maloca, Upper Rio Curuá (type locality) (07°55'S, 54°50'W) (Thomas, 1920).

\*Specimen housed in private collection; \*\*Observational record

in the area. The possibility that the animal was kept in captivity by the local human population cannot be ruled out, as the collector did not state whether the single collected specimen belonged to a larger group of individuals or was found alone. As more specimens become available, a more comprehensive study about geographical variation in pelage among distinct populations of *M. emiliae* would be important for understanding whether the variation found within the species warrants its division into separate specific taxa or not.

## Acknowledgements

I am grateful to Dr. José de Souza e Silva Júnior and Dr. Suely Marques-Aguiar at MPEG. M. Fialho, for the correct information about his locality of *M. emiliae*. Dr. Mario de Vivo for the advising and Juliana Gualda Barros, collection manager at MZUSP. Rafael S. Marcondes, for critically reading the manuscript. Research was funded by CAPES.

**Guilherme Siniciato Terra Garbino**, Museu de Zoologia da Universidade de São Paulo, Seção de Mastozoologia, Caixa Postal 42694. CEP 04299-970. São Paulo, SP, Brasil. E-mail: <gstgarbino@hotmail.com>

## References

- Alperin, R. 1993. *Callithrix argentata* (Linnaeus, 1771): considerações taxonômicas e descrição de subespécie nova. *Bol. Mus. Para. Emílio Goeldi, Sér. Zool.* 9(2):317–328.
- Ávila-Pires, F.D. de. 1986. On the validity of and geographical distribution of *Callithrix argentata emiliae* Thomas, 1920 (Primates, Callitrichidae). In: *A primatologia no Brasil*—2. M.T. de Mello (ed.), pp. 319–322. Sociedade Brasileira de Primatologia, Brasília.
- Ferrari, S.F. and Lopes, M.A. 1992. A New species of marmoset, genus *Callithrix* Erxleben, 1777 (Callitrichidae, Primates) from western Brazilian Amazonia. *Goeldiana Zoologia* 12:1–13.
- Ferrari, S.F., Sena, L., Schneider, M.P.C. and Silva Júnior, J.S. 2010. Rondon's marmoset, *Mico rondoni* sp. n., from southwestern Brazilian Amazonia. *Int. J. Primatol.* 31: 693–714.
- Fialho, M.S. 2010. Contribuição à distribuição do gênero *Mico*, (Callitrichidae, Primates) no Médio Teles Pires, Jacareacanga, Pará. *Neotrop. Primates* 17(1): 31.
- Ivanauskas, N.M., Monteiro, R. and Rodrigues, R.R. 2008. Classificação fitogeográfica das florestas do Alto Rio Xingu. *Acta Amazonica* 38(3): 387–402.
- Pimenta, F.E. and Silva Júnior, J.S. 2005. An Update on the Distribution of Primates of the Tapajós-Xingu Interfluvium, Central Amazonia. *Neotrop. Primates* 13(2): 23–28.
- Roosmalen, M.G.M. van, Roosmalen, T. van, Mittermeier, R.A. and Rylands, A.B. 2000. Two new species of marmoset, genus *Callithrix* Erxleben, 1777 (Callitrichidae, Primates), from the Tapajós/Madeira interfluvium, South Central Amazonia, Brazil. *Neotrop. Primates* 8(1): 2–18.

- Rylands, A. B., Coimbra-Filho, A. F. and Mittermeier, R. A. 2009. The systematics and distributions of the marmosets (*Callithrix*, *Callibella*, *Cebuella*, and *Mico*) and callimico (*Callimico*) (Callitrichidae, Primates). In: *The smallest anthropoids: the marmoset/callimico radiation*. S.M. Ford, L. Porter and L.C. Davis (eds.), pp. 25–61. Springer, New York.
- Thomas, O. 1920. On mammals from the lower Rio Amazonas in the Goeldi Museum, Pará. *Ann. Mag. Nat. Hist.* 9(6):266–283.
- Vieira, C.O. da C. 1955. Lista remissiva dos Mamíferos do Brasil. *Arq. Zool.* 8(11): 354–374.
- Vivo, M. de. 1985. On some monkeys from Rondônia, Brasil (Primates: Callitrichidae, Cebidae). *Papéis Avulsos de Zoologia, São Paulo* 4: 1–31.
- Vivo, M. de. 1991. *Taxonomia de Callithrix* Erxleben, 1777 (Callitrichidae, Primates). Fundação Biodiversitas, Belo Horizonte.

---

## OBSERVATIONS OF TERRESTRIAL BEHAVIOR IN THE PERUVIAN NIGHT MONKEY (*AOTUS MICONAX*) IN AN ANTHROPOGENIC LANDSCAPE, LA ESPERANZA, PERU

Sam Shanee  
Noga Shanee

## Introduction

The Peruvian night monkey (*Aotus miconax*) is one of the least studied of all Neotropical primate taxa. *A. miconax* is endemic to northeastern Peru (Aquino and Encarnacion 1994) and its entire range lies within the 'tropical Andes biodiversity hotspot', an area characterized by its high levels of species endemism and threats to conservation (Myres et al. 2000). This species has not been the focus of previous behavioral studies and is only known from *ad libitum* observations and collection localities in the departments of Amazonas, Huánuco and San Martín (Thomas 1927a; 1927b; Butchart et al. 1995; Cornejo et al. 2008). These same departments have some of the highest rates of deforestation in Peru (Elgrogen 2005; INEI 2007). Deforestation in the area is fuelled by immigration of people from the central and northern highlands looking for land for small scale agriculture, cattle ranching and timber extraction (Garland 1995; Schjellerup 2000; Shanee 2010). In many areas this has caused the complete loss of large areas of forested land (Shanee et al. 2007; Shanee 2010). In other areas patterns of land use and ownership have caused the isolation of many small patches of forest forming an anthropogenic landscape mosaic (Shanee 2010). *A. miconax* is listed as Vulnerable by the IUCN (Red List categories A2c) and Endangered under Peruvian law (Decreto Supremo 34–2004-AG). *A. miconax* lives in small family groups of 2–6 individuals (personal observation). Like other night monkey species these groups generally comprise a heterosexual pair and their off-spring. The diet of night monkeys