

Golden Lion Tamarins, *Leontopithecus rosalia* (Linnaeus, 1766) in the Taquara Municipal Natural Park (Duque De Caxias, Rj): A Southern Extension of the Known Range

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- Horwich, R. H. 1983. Breeding behaviors in the black howler monkey (*Alouatta pigra*) of Belize. *Primates* 24: 222–230.
- Mason, W. A. 1996. Social organization of the South American monkey, *Callicebus moloch*: A preliminary report. *Tulane Studies in Zoology* 13: 23–28.
- Mendes, S. L. 1989. Estudo ecológico de *Alouatta fusca* (Primates: Cebidae) na Estação Biológica de Caratinga, MG. *Revista Nordestina de Biologia* 6: 71–104.
- Palombit, R. A. 1994. Extra-pair copulations in a monogamous ape. *Animal Behaviour* 47: 721–723.
- Pope, T. R. 1990. The reproductive consequences of male cooperation in the red howler monkey: Paternity exclusion in multi-male and single-male troops using genetic markers. *Behav. Ecol. Sociobiol.* 27: 439–446.
- Reichard, U. 1995. Extra-pair copulations in a monogamous gibbon (*Hylobates lar*). *Ethology* 100: 99–112.
- Smuts, B. B. 1987. Sexual competition and mate choice. In: *Primate Societies*, B. B. Smuts, D. L. Cheney, R. M. Seyfarth, R. W. Wrangham and T. T. Struhsaker (eds.), pp.385–399. The University of Chicago Press, Chicago.

GOLDEN LION TAMARINS, *LEONTOPITHECUS ROSALIA* (LINNAEUS, 1766) IN THE TAQUARA MUNICIPAL NATURAL PARK (DUQUE DE CAXIAS, RJ): A SOUTHERN EXTENSION OF THE KNOWN RANGE

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Introduction

The golden lion tamarin, *Leontopithecus rosalia* (Linnaeus, 1766), is an endangered species (IUCN, 2004) according to the World Conservation Union, Species Survival Commission. The first geographical study of this species, by Wied-Neuwied (1826), described *L. rosalia* as distributed along the coast of the state of Rio de Janeiro between 22° and 23°S, from the São Tomé Cape to the municipality of Mangaratiba. In 1969, Coimbra-Filho hypothesized that the historical distribution of this lion tamarin species extended across the length of the coast of the state of Rio de Janeiro in lowland forests and at low altitudes usually not exceeding 300 m a.s.l. (Coimbra-Filho, 1969; Kleiman and Rylands, 2002). According to Coimbra-Filho, the historical distribution of *L. rosalia* comprised several municipalities of the Fluminense lowlands, including Duque de Caxias. Based on population counts performed between 1962 and 1969, Coimbra-Filho reported that *L. rosalia* was extinct in

17 municipalities, including Duque de Caxias (Coimbra-Filho, 1969; Kleiman and Rylands, 2002).

In the 1990s, censuses across the range of *L. rosalia* by Kierulff (1993) and later, Kierulff and Procópio de Oliveira (1996) found *L. rosalia* in only four of the municipalities described by Coimbra-Filho: Silva Jardim, Casimiro de Abreu, Cabo Frio, and Saquarema. More recently, *L. rosalia* was found in Araruama in some mountainous areas of Macaé de Cima (Rylands *et al.*, 1993), but this recent expansion of their range clearly resulted from human interference and is not indicative of past distribution. In the most recent census of *L. rosalia* distribution (Kierulff and Rylands, 2003), the authors reported a population of 562 individuals distributed in groups of three to six and restricted to the aforementioned four municipalities. They also reported reintroduced populations throughout the length of the BR-101 road between the municipalities of Rio Bonito and Casimiro de Abreu in Rio de Janeiro state. Here, we report the occurrence of golden lion tamarins in the Taquara Municipal Natural Park, a conservation unit of the municipality of Duque de Caxias (RJ), where the species was considered extinct during the most recent census (Kierulff and Rylands, 2003).

Materials and Methods

In August 2006, golden lion tamarins were observed in the Taquara Municipal Natural Park (22°35' S, 43°14' W, approximately 76 m a.s.l.), municipality of Duque de Caxias, Rio de Janeiro. The 190 km² park was created according to Law 1157 (November 11, 1992), and its northern limit is the Taquara River, near the Núcleo Colonial of Duque de Caxias District Three (Fig. 1). The lion tamarins were observed by the authors during visits to the park guided by biologists.

Results and Discussion

Based on reports of the presence of golden lion tamarins near the conservation unit, we interviewed local inhabitants and showed them pictures to identify the species they had observed. When golden lion tamarins were confirmed as the species sighted, we began periodic morning surveys by walking existing trails close to the areas where the animals had been spotted. In the first encounter with lion tamarins, we observed a non-habituated group of approximately 12 animals that fled towards the Environmental Protection Area of Petrópolis (APA Petrópolis), a conservation unit contiguous with the Taquara Municipal Natural Park. Subsequent sightings of the same group were recorded at an altitude of approximately 76 m a.s.l. Occasionally, the group was observed foraging in sympatry with groups of *Callithrix jacchus*, *Callithrix penicillata* and, possibly, hybrids of these two introduced marmoset species.

Increased control of access into Taquara Municipal Natural Park will allow *L. rosalia* to safely utilize the forest

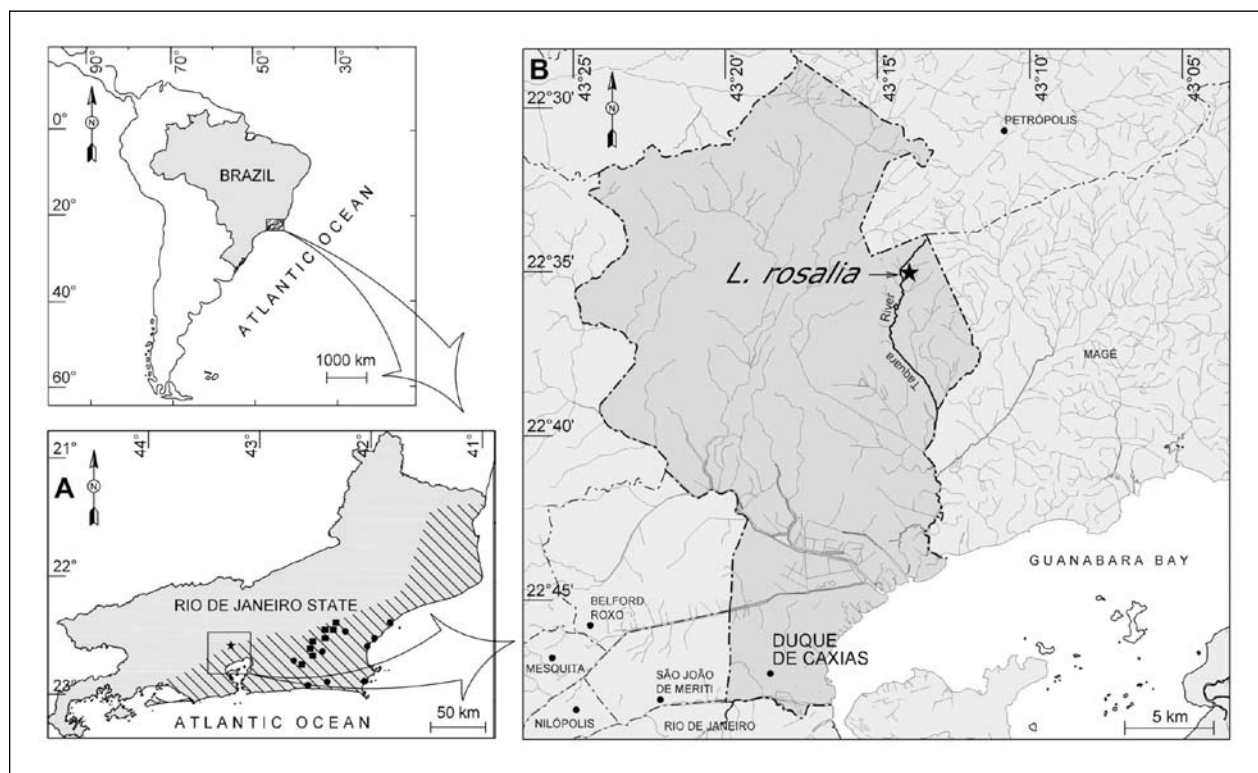


Figure 1. (A) State of Rio de Janeiro (RJ), with the original distribution of *Leontopithecus rosalia* (lines) and fragmented current distribution (< reintroduced population and =town, according to Rylands *et al.*, 2002). (B) Map indicating the location of the *L. rosalia* group seen in the Taquara Municipal Natural Park (star) in the municipality of Duque de Caxias, Rio de Janeiro (RJ), the new southernmost location for the species.

here, as well as in the higher altitude protected area of the APA Petrópolis. Research on home range use, activity budget, and interspecific interactions with other monkey species by this lion tamarin group (possibly with the aid of radiotelemetry) at the park, as well as an assessment of the size of this golden lion tamarin population, its genetic structure, distribution, and possible threats to its survival, are urgently needed to evaluate its long-term viability. These data will also serve as baseline information for future programs of population supplementation or species reintroduction.

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References

- Coimbra-Filho, A. F. 1969. Mico-Leão, *Leontideus rosalia* (Linnaeus, 1766): Situação atual da espécie no Brasil (Callitrichidae, Primates). *Anais Acad. Brasil. Ciências* 41 (Suppl.): 29–52.
- IUCN. 2004. Red List of Threatened Species. <www.redlist.org>.
- Kierulff, M. C. M. 1993. Status and distribution of the golden lion tamarin in Rio de Janeiro. *Neotrop. Primates* 1(4): 23–24.
- Kierulff, M. C. M. and Procópio de Oliveira, P. 1996. Re-assessing the status and conservation of the golden lion tamarin *Leontopithecus rosalia* in the wild. *Dodo, J. Wildl. Preserv. Trust* 32: 98–115.
- Kierulff, M. C. M. and Rylands, A. B. 2003. Census and distribution of the golden lion tamarin (*Leontopithecus rosalia*). *Am. J. Primatol.* 59(1): 29–44.
- Kleiman, D. G. and Rylands, A. B. 2002. *Lion Tamarins: Biology and Conservation*. Smithsonian Institution Press, Washington, DC.
- Rylands, A. B., Coimbra-Filho, A. F. and Mittermeier, R. A. 1993. Systematics, geographic distribution, and some notes on the conservation status of the Callitrichidae. In: *Marmosets and Tamarins: Systematics, Behaviour and Ecology*, A. B. Rylands (ed.), pp.11–77. Oxford University Press, Oxford.
- Rylands, A. B., Kierulff, M. C. M. and Pinto, L. P. S. 2002. Distribution and status of lion tamarins. In: *Lion Tamarins: Biology and Conservation*, D. G. Kleiman and A. B. Rylands (eds.), pp.42–70. Smithsonian Institution Press, Washington, DC.
- Wied-Neuwied, Prinz Maximilian zu, 1826. *Beiträge zur Naturgeschichte von Brasilien, vol.2*.