

ATLANTIC-PRIMATES: a dataset of communities and occurrences of primates in the Atlantic Forests of South America

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Abstract. Primates play an important role in ecosystem functioning and offer critical insights into human evolution, biology, behavior, and emerging infectious diseases. There are 26 primate species in the Atlantic Forests of South America, 19 of them endemic. We compiled a dataset of 5,472 georeferenced locations of 26 native and 1 introduced primate species, as hybrids in the genera *Callithrix* and *Alouatta*. The dataset includes 700 primate communities, 8,121 single species occurrences and 714 estimates of primate population sizes, covering most natural forest types of the tropical and subtropical Atlantic Forest of Brazil, Paraguay and Argentina and some other biomes. On average, primate communities of the Atlantic Forest harbor 2 ± 1 species (range = 1–6). However, about 40% of primate communities contain only one species. *Alouatta guariba* (N = 2,188 records) and *Sapajus nigritus* (N = 1,127) were the species with the most records. *Callicebus barbarabrownae* (N = 35), *Leontopithecus caissara* (N = 38), and *Sapajus libidinosus* (N = 41) were the species with the least records. Recorded primate densities varied from 0.004 individuals/km² (*Alouatta guariba* at Fragmento do Bugre, Paraná, Brazil) to 400 individuals/km² (*Alouatta caraya* in Santiago, Rio Grande do Sul, Brazil). Our dataset reflects disparity between the numerous primate census conducted in the Atlantic Forest, in contrast to the scarcity of estimates of population sizes and densities. With these data, researchers can develop different macroecological and regional level studies, focusing on communities, populations, species co-occurrence and distribution patterns. Moreover, the data can also be used to assess the consequences of fragmentation, defaunation, and disease outbreaks on different ecological processes, such as trophic cascades, species invasion or extinction, and community dynamics. There are no copyright restrictions. Please cite this Data Paper when the data are used in publications. We also request that researchers and teachers inform us of how they are using the data.

Key words: *Atelidae*; *biodiversity hotspot*; *Callitrichidae*; *Cebidae*; *defaunation*; *forest fragmentation*; *macroecology*; *Pitheciidae*.

The complete data sets corresponding to abstracts published in the Data Papers section in the journal are published electronically as Supporting Information in the online version of this article at <http://onlinelibrary.wiley.com/doi/10.1002/ecy.2525/supinfo>.