

A short term study of six complete days, published by Kinzey and Becker (1983), was the first attempt to collect data on *Callicebus personatus*. The aim of the thesis was to obtain further data on the ecology of masked titis through a long-term study. The research was carried out in a forest area of about 100 ha, located in the Lemos Maia Experimental Station (CEPLAC) near the town of Una in southern Bahia. The project was started in June 1991. Due to the difficulty of following the masked titis, radio-telemetry was used in order to locate the groups for habituation. After chemical immobilization, a transmitter was attached to one of the group members. The animals then became habituated after six weeks. Details of the methods involved in capture and radio-tracking were reported by Müller (1994). Between October 1992 and September 1993, two groups of titi monkeys were observed during 101 days. The total observation time was 1030 hours.

Masked titis are active for an average of 10 hours and 12 minutes during the day, with a maximum of 11 hours and three minutes (March) and a minimum of 8 hours and 40 minutes (July). Budgets for the principal activities are shown in the table.

Activity	Duration	%
Locomotion	3 h 24 min.	32.1
Feeding	2 h 48 min	27.1
Resting	3 h 54 min.	40.0
Playing	6 min.	0.8

Masked titis are predominantly frugivorous: 76.6% of the diet consisted of fruits, 17.2% leaves. Other components included flowers, buds, stems, insects and soil, totalling 1.8% of the diet. A seasonal difference in food intake was observed: during the warm season, a greater proportion of the diet consisted of fruits, whereas this was true for leaves in the cooler season. Fruits and leaves of 11 species eaten by the titis comprised 60% of the diet. This contrasts with the information available for other *Callicebus* species, where three to six plant species took up 60% of the diet. Masked titis are as such more eclectic feeders.

The distance between food patches used during the day averaged 109 m. In addition, 81.6% of the trees used by the monkeys had a crown diameter of less than 10 m. The relatively long food patch distance compared with other primates, and the large number of small-crowned trees used, would indicate that nutritional resources are small and uniformly dispersed in their habitat. This might indicate why *Callicebus personatus* form small family groups. Furthermore, as discussed in the thesis, it might explain their monogamous mating system.

The project was continued, beginning in October 1993, by two DPZ doctoral students under the supervision of myself and Dr Alcides Pissinatti. The focus of their study

includes aspects of optimal foraging strategies and their social behavior. It will continue until July 1995. Other primatologists interested in studying these animals for a Master's or Doctoral degree should contact Dr Müller or Dr Pissinatti.

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CYTOGENETIC STUDIES IN THE FAMILY ALOUATTINAE

Alouatta is the single genus within the subfamily Alouattinae of the Neotropical family Cebidae (Napier and Napier 1967). The six species currently recognized by most authorities have a widespread distribution from southern Mexico to northern Argentina (Wolfheim, 1983; Crockett, 1986).

Although previous karyological studies of this genus are scarce, many interesting rearrangements have been reported, with inter- and intraspecific chromosomal variations detected. Five species have been analyzed for their karyotypes, and the diploid number ranged from 43 in *A. seniculus* to 54 in *A. palliata*. Different translocations have been reported in four of the five species analyzed: *A. palliata* (v. Ma *et al.*, 1975), *A. belzebul* (v. Armada *et al.*, 1987), *A. seniculus* (v. Yunis *et al.*, 1976; Minezawa *et al.*, 1985; Lima and Seúñez, 1992), and *A. fusca* (v. Koiffmann, 1977). Studies of the *A. caraya* karyotype have shown a constant diploid number of 52, and translocations or other rearrangements have not been found to date (Mudry *et al.*, 1992).

Due to these facts and the confused taxonomic relationships within this group, research into the chromosomal and phylogenetic relationships of the

Alouattinae is being carried out for the four species occurring in Brazil: *A. seniculus*, *A. belzebul*, *A. fusca*, and *A. caraya*. Blood samples were collected from individuals in a number of institutions: the Centro de Primatologia do Rio de Janeiro (CPRJ/FEEMA); the Fundação Rio-Zoo, Rio de Janeiro; Itaipú Binacional, Foz do Iguaçu, Paraná; Passeio Público de Curitiba, Paraná; the Centro Nacional de Primatas, Belém; the Museu Paraense Emílio Goeldi, Belém; and the Centro Argentino de Primatologia (CAPRIM), Corrientes, Argentina.

The research involves the cytogenetic characterization of the four species through banding techniques (G, C, and NOR). Using the data in conjunction with that previously published, a model will be proposed of the chromosomal evolution of the genus leading to the karyotypic variation observed today, which will clarify the phylogenetic relationships within the subfamily.

The research is part of a Master's thesis for the postgraduate course in genetics of the Federal University of Paraná, Curitiba, supervised by Dr. Ives J. Sbalqueiro in collaboration with Prof. Margarida M. C. Lima (Federal University of Pará). It is supported by the Federal University of Pará, the Federal University of Paraná, and the Brazil Science Council (CNPq).

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RIO NEGRO STATE PARK: A NEW PROTECTED AREA IN THE BRAZILIAN AMAZON

The Rio Negro State Park, c. 436,042 ha, was decreed by the Governor of the State of Amazonas in April 1995 (State Decree No. 16.497 / 2 April 1995). It is located on both sides of the Rio Negro, north-west of Manaus, in the

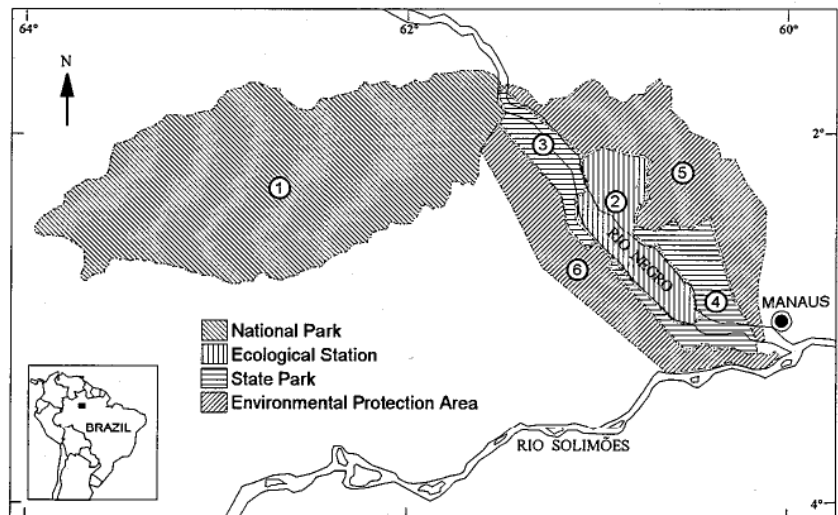


Figure 1. Map showing the location of: 1) Jaú National Park, 2) Anavilhanas Ecological Station, 3) Rio Negro State Park, northern sector, 4) Rio Negro State Park, southern sector, 5) Left Bank of the Rio Negro Environmental Protection Area, and 6) Right Bank of the Rio Negro Environmental Protection Area.