the facilities, improvement of the breeding conditions of the animals, development of new research programs, and expansion of the staff. The main objective of the Center is to provide a captive breeding colony of Brazilian Primates for ethological and biomedical research.

The CPUnB is located in the Fazenda Água Limpa (FAL) about 30 km from the University of Brasília (16° 30' S and 46° 30' W). The FAL, a farm of 4.062 ha, is an experimental station for agronomic, forestry, and ecological research. About one half of the area is an ecological reserve. Surrounding the FAL there are two other reserves, the Brasília Botanical Garden and the Ecological Reserve of the Brazilian Institute for Geography and Statistics (IBGE), together comprising a continuous protected area of 10.000 ha.

The Center is within an area of 30 ha of Cerrado (tropical savanna) vegetation with tropical semideciduous riverine forest. Three primate species occur there naturally: the marmoset (*Callithrix penicillata*), the black howler monkey (*Alouatta caraya*), and the tufted capuchin monkey (*Cebus apella*). The facilities include a laboratory, offices, classroom, kitchen, quarantine facilities, and 36 cages, each with indoor-outdoor sections.

At present the colony has 50 individuals of five primate species: *Callithrix penicillata, Callithrix jacchus, Saguinus midas, Saimiri ustus* and *Cebus apella.* The following research projects are currently undertaken with these animals: learning abilities in capuchin monkeys; color vision in capuchin monkeys and tamarins; temporal and spatial memory in callitrichids; environmental enrichment; spontaneous periodontal disease and diet in squirrel monkeys; and cytoarchitecture of the visual cortex in callitrichids. Research activities are partially supported by Brazilian National Research Council (CNPq) and are in accordance with the regulations imposed by the Brazilian Institute for the Environment and Renewable Natural Resources (Ibama). Furthermore, one of the goals of the Center is the breeding of endangered species along with the development of research on reproductive behavior relevant to their husbandry and management.

The staff is composed by two Senior researchers, four Assistant Professors, two doctoral students, one Master's student, 11 undergraduate students, and two caretakers. The staff has a multidisciplinary background and includes psychologists, physicians, veterinarians, biologists, and dentists.

The CPUnB is maintained by the University of Brasília. The refurbishing of the old and the construction of the new facilities have been supported by FAL and the Centro de Eventos Especiais (CESPE-UnB). The Center is willing to collaborate with researchers and other academic institutions. Further information can obtained from Prof. Maria Clotilde Tavares, Director of the Primate Center.

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Social and Sexual Relations of the Muriquis at the Caratinga Biological Station, Minas Gerais

Promiscuity in primates appears to be a female strategy to increase the possibility of conception. Female muriquis, *Brachyteles arachnoides*, often copulate with more than one male, and there are a number of indications that muriquis have particular preferences for certain sexual partners (Strier, 1986, 1992, in press). From 1 August 1995 to 30 July 1996, a study was carried out at the Caratinga Biological Station, Minas Gerais, Brazil, to clarify the dynamics of female mate choice, observing whether males or females initiate sexual interactions, and determining what the sexes do to attract each other. Methods used included focal animal, scan sampling and opportunistic behavior sampling. Nineteen adult females from the Matão group were observed. The focal animal method was used to record each adult female's activities and her nearest neighbors, scan sampling recorded the degree of group dispersion. All rare events observed were recorded opportunistically.

The study was supervised by Dr Karen B. Strier, Department of Anthropology, University of Wisconsin, Madison, USA. It was supported by grants to her from the U. S. National Science Foundation (Grant BNS 8958298), the Liz Claiborne and Art Ortenberg Foundation, the Chicago Zoological Society, and the Lincoln Park Zoo Scott Neotropic Fund, Chicago.

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The Diet of Muriqui Females, *Brachyteles arachnoides*, in Different Reproductive Conditions

In September, 1996, Cláudio Pereira Nogueira defended his Master's thesis in Biological Sciences, comparing the diets and activity budgets of female muriquis, *Brachyteles arachnoides*, in different reproductive conditions. The degree was awarded by the Faculty of Applied Sciences of the University of Guarulhos, São Paulo, Brazil. The research was supervised by Dr. Mário Sérgio Galvão Bueno in collaboration with Dr. Karen B. Strier of the Department of Anthropology, University of Wisconsin, Madison, and was supported by grants from the Liz Claiborne and Art Ortenberg Foundation, and the Chicago Zoological Society - NSF BNS 8958298 (through Karen B. Strier). The following is a summary of the thesis.

From August 1992 to July 1993, a field study of a group of 17 female muriquis (*Brachyteles arachnoides*) was carried out in the forest of the Biological Station of Caratinga (Fazenda Montes Claros), Minas Gerais, Brazil (see Strier, 1992). Behavioral data was obtained from 1,764 focal samples (of 10 minutes each) of four classes of females: nonreproductive, pregnant, lactating with infant up to 12 months old, and lactating with offspring more than 12 months old. The data indicated that females spend an average of 51.6% of their time resting, 36.0% feeding, 11.2% traveling, 0.5% in social behavior and 0.3% drinking water. Females devoted an average of 60.2% of their feeding time to leaves, 26.9% to fruits, 9.3% to flowers and 3.6% to bamboo, bark and ferns. The increase in time spent feeding compared to other studies may be due to the increase in size of the Matão group and the change in group composition, with a larger number of females with greater energetic requirements. Comparing the females in different reproductive conditions revealed significant differences in their activity budgets. Nonreproductive females devoted an average of 57.6% of their time to resting, 31.4% to feeding, 10.3% to traveling, 0.6% to social behavior, 0.1% to drinking and 64.4% of their feeding time to leaves, 27.1% to fruits, 6.7% to flowers, 1.2% to bamboo, 0.5% to bark and 0.1% to ferns. The pregnant females devoted an average of 54.4% of their time to resting, 31.4% to feeding, 13.2% to traveling, 0.3% to social behavior, 0.1% to drinking and 56.1% of their feeding time to leaves, 27.2% to fruits, 12.5% to flowers, 3.8% to bamboo and 0.4% to ferns. The lactating females with infants up to 12 months old devoted an average of 50.3% of their time to resting, 38.8% to feeding, 9.7% to traveling, 0.5% to social behavior, 0.7% to drinking, and 58.2% of their feeding time to leaves, 30.5% to fruits, 8.2% to flowers, 1.6% to bamboo, 1.0% to barks and 0.5% to ferns. The lactating females with offspring over 12 months of age devoted an average of 47.2% of their time to resting, 39.5% to feeding, 12.5% to traveling, 0.5% to social behavior, 0.3% to drinking water and 60.2% of their feeding time to leaves, 23.9% to fruits, 10.9% to flowers, 1.7% to bamboo, 2.6% to bark and 0.7% to ferns. The results indicated that the females with lower energetic requirements (nonreproductive females) spent less time feeding and adopted an energy-saving strategy, spending less time in traveling and more time in resting, while including a larger proportion of leaves in their diet. The pregnant females spent less time in feeding but consumed more high energy food and avoided feeding competition by varying their diet. The females with the highest energetic requirements (lactating) spent more time in feeding and consumed more high-energy food (fruits and flowers).

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Cytogenetic and Phylogenetic Studies of *Alouatta* from Brasil and Argentina

Edivaldo Herculano Corrêa de Oliveira completed his Master's thesis on the cytogenetics of howling monkeys, *Alouatta*, at the Federal University of Paraná (UFPR), Curitiba in May 1996. He was supervised by Dr Ives José Sbalqueiro (UFPR), in collaboration with Prof. Margarida M. C. de Lima (Federal University of Pará, Belém). The research was financed by the Brazil National Science Council (CNPq), the Brazilian Higher Education Authority (CAPES), and the Federal