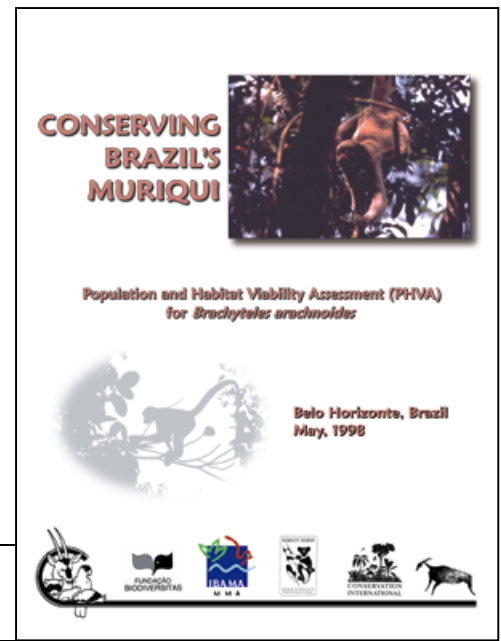


MURIQUI (*Brachyteles arachnoides*)
Population and Habitat Viability Assessment
Belo Horizonte, Brazil
23 - 26 May 1998



Executive Summary and Recommendations

The muriqui is one of the world's greatest country-specific flagship species. It is comparable to the giant panda of China, the bonobo and the okapi in the Congo, the platypus and koala in Australia and the birds of paradise of New Guinea. The muriqui is the largest mammal endemic to Brazil, one of two primate genera endemic to the country and the largest non-human primate of the Americas. The two taxa in the genus *Brachyteles* are among the 35 most critically endangered primates on earth. Along with the lion tamarins, this species was primarily responsible in the late 1970s and early 1980s for putting the until then overlooked Atlantic forest region of Brazil at the top of the global priority list for biodiversity conservation, to the point that it is now considered one of the top five threatened biodiversity hotspots on Earth. Indeed, early work on the muriqui (and the lion tamarins), basic research, conservation efforts and public awareness campaigns are a classic example of use of a flagship primate to stimulate major international activity on behalf of a globally important eco-region.

In spite of this past success and the great future potential that this genus has for conservation in Brazil, it remains relatively unrealized. Indeed, in recent years, the main focus of muriqui conservation has been on research in Caratinga and a few other areas (which has served to further emphasize the uniqueness of the genus *Brachyteles*), with relatively little use nationally and even less internationally, of the muriquis as symbols for conservation efforts.

Recognizing the importance of the muriqui to conservation in Brazil, Fundação Biodiversitas, Conservation International - Brazil and Ibama, in collaboration with the Primate Specialist Group and the Conservation Breeding Specialist Group (SSC/IUCN), hosted a Population and Habitat Viability Assessment (PHVA) workshop 23-26 May 1998 in Belo Horizonte, Brazil. The goal of the workshop was to produce a collaborative and systematic conservation assessment for the muriqui.

Participants included representatives from Ibama, the Primate Center in Rio, local universities, Conservation International, FBCN, Fundação Biodiversitas, Instituto de Pesquisas Ecologicas, the World Wildlife Fund, Museu de Biologia – Espírito Santo, the Instituto de Floresta de Minas

Gerais, and the Primate and Conservation Breeding Specialist Groups SSC/IUCN. After presentations on the current status and management of the miquiqui, participants generated a list of problems to be addressed at the workshop (see section 1). Participants then grouped the problems into four working group themes: Distribution and Status; Population and Habitat Management; Social, Political and Economic Impacts on the miquiqui; and Species Biology and Modeling. The recommendations from each working group follow.

Overall, the participants agreed that fundamental to realizing the miquiqui's potential as a flagship species for the Atlantic rainforest is the establishment of an international management committee for the miquiqui, similar to those currently in place for the four lion tamarin species and the two endangered Capuchin monkeys. These committees have been quite successful and have established a number of important precedents for collaboration in the conservation of endangered endemic species of Brazil.

We also believe that a major survey is a priority and a thorough understanding of the distribution and status of all remaining populations of the miquiqui is fundamental to any long-term conservation efforts on their behalf. Continuation of the long-term research on the Caratinga miquiquis will provide a critical comparative framework for evaluating other miquiqui populations.

Distribution and Status Working Group

Distribuição e Status das Populações Remanescentes de *Brachyteles arachnoides*

- O grupo considera prioritária a implementação de um amplo programa de “survey” para mapear a situação atual de *Brachyteles*, identificando as áreas onde a espécie ainda ocorre e estimando, quando possível, o tamanho das populações.
- Para o desenvolvimento do censo será necessário a organização de um grupo de pesquisadores (comitê), com representantes dos estados onde ocorre *Brachyteles*, que deverá estabelecer metodologias padronizadas para o “survey”, incluindo entrevistas, censos e diagnóstico de habitat.
- As áreas consideradas prioritárias para o “survey” deverão ser aquelas mais fragmentadas e isoladas, que se concentram nos estados de BA, MG e ES.

Implement an ample survey program to map the current status of *Brachyteles*, identifying the areas where the species still occurs and estimating, when possible, the size of the populations.

To develop the census it will be necessary to organize a group of researchers (the committee) with representations from the states where *Brachyteles* occurs. The committee should establish systematic methods for the census, including interviews and habitat evaluation.

The areas considered to be priorities for the survey should be those most fragmented and isolated, which are concentrated in the states of Bahia, Minas Gerais, and Espírito Santo.

Habitat and Population Management Working Group Recommendations

Priority areas were recommended for each of the following activities:

- If translocation of animals is done, young females at reproductive age should be captured and translocated from small areas with high density to large well protected areas with low population densities. Translocation of entire groups is not recommended.
- Priority sites for environmental education should be selected based on the following criteria: available logistics/accessibility to area; presence of local NGOs; pre-disposition of land owner (in case of private areas); and the degree of threat.
- Before starting any ecotourism initiative a viability study should be carried out for the proposed site.
- Increase habitat available for the muriqui:
 - a) private lands = natural regeneration and reforestation should be considered to increase core areas, and the creation of corridors when there is a possibility to connect isolated patches of forest.
 - b) protected areas = recuperation of habitat should be carried out when appropriate.
- An attempt should be made to create private reserves (RPPNs) where private areas are identified as extremely important for the conservation of the species.

Social, Economic and Political Impacts

Impactos sociais, economicos e politicos nas populacoes de *Brachyteles arachnoides*

- Regular a extração do palmito e providenciar fontes de proteína animal para as populações locais das comunidades de entorno. Providenciar desta forma fontes alternativas de alimento, buscando minimizar a caça de muriquis selvagens.
- Estabelecer oficialmente uma organização não governamental local com intuito de coordenar as atividades relacionadas a conservação do muriqui na região do Parque Estadual de Carlos Botelho, em primeira instância.
- Oficializar uma rede de relações de pessoas locais interessadas na preservação do meio ambiente, promovendo desta forma um maior envolvimento dos diferentes setores da comunidade.

Regulate the extraction of palmito and provide sources of animal protein from the local human population in the surrounding communities. Provide alternative food sources so that hunting of muriquis is minimized.

Establish a local NGO to coordinate the activities related to the conservation of muriquis in the region of Carlos Botelho State Park.

Provide official status for groups of local people interested in environmental preservation to promote greater involvement by different sectors of the community.

Species Biology and Modeling Working Group Recommendations

1. Maintain and utilize the long-term data from the mureiquis at the Estacao Biologica de Caratinga:
 - a) Identify the criteria necessary to evaluate any future problems with this population that signal the need for rapid management responses.
 - b) Extrapolate from the Caratinga database to evaluate other mureiqui populations as census results on the sizes, age and sex structures of other populations become available. These comparisons will be used to determine which populations are at the greatest risk of extinction.
2. For the Captive population at the Centro de Primatologia de Rio de Janeiro:
 - a) We anticipate that the primary role of the CPRJ for the mureiqui will continue to be one of receiving confiscated individuals. We do not, at this point, envision the development of an extensive captive breeding program to be an immediate priority for the species.
 - b) To improve infant survivorship, we recommend that additional mureiqui enclosures are constructed to accommodate the growing population. Increasing the housing possibilities at the CPRJ will reduce density pressures that may be interfering with infant survivorship.
2. Increase information on the demographic status of other mureiqui populations:
 - a) Work with the census and management groups to maintain an updated data base on the size, composition, and density of other mureiqui populations.
 - b) Stimulate the collection and maintenance of long-term demographic data on other mureiqui populations. In particular, populations such as those at the Carlos Botelho-Intervalles areas will provide critical comparative perspectives on mureiquis living under more "natural" conditions than those at Caratinga.