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## A Translocation Experiment for the Conservation of Maned Sloths (*Bradypus torquatus*), a Species Threatened with Extinction in the Brazilian Atlantic Forest

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The Atlantic forest covered a significant part of Brazil before the arrival of Europeans in the early 1500s, but today is restricted to less than 10% of its original extent in forest remnants scattered through biological reserves and private properties. As a consequence, many species now have severely reduced and fragmented populations, significantly increasing the chances of extinction due to demographic and environmental stochasticity and genetic deterioration. It is becoming increasingly necessary, therefore, to intervene in order to reduce these risks and improve the conservation status of endangered species in this biodiversity "hotspot".

One initiative has been carried out with maned sloths (*Bradypus torquatus*), an Atlantic forest endemic. This species was chosen because it is a poorly-known forest dweller that is threatened with extinction mainly due to habitat loss and fragmentation. An ongoing experiment translo-

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cating maned sloths found in the urban zone and neighborhoods of Santa Teresa, a small town located in the state of Espírito Santo, in southeastern Brazil, was started in 1994. Maned sloths are found mostly during the rainy season (December-March), when dispersing individuals are seen wandering through inhospitable habitats (pastures, agriculture land, etc.), or happen to be found crossing roads in or near to the urban zone of the municipality. Captured animals are brought to the local biology museum (Museu de Biologia Mello Leitão), where they are examined, weighed, measured, fitted with radio-collars and released into protected forest reserves located in the region. Thus far the Santa Lúcia Biological Station (ca. 500 ha) and the São Lourenço Municipal Reserve (ca. 500 ha) have been selected as release sites.

The radio-collared animals are then monitored twice a month by trained observers, who find them in the forest and collect detailed data on ranging, activity budgets, and diet. Since 1994, five translocated adults have been monitored, but thus far observations have been restricted to the first year after release, not long enough to fully ascertain the success of the experiment. Data from previous work showed that individuals differ greatly in their space requirements, behavior and diet and, therefore, we now intend to collect additional data on other individuals as well as to prolong observations beyond the initial period of adaptation.

The project's main objective is to study the survival of victims of deforestation and other anthropogenic disturbances, when the animals are released back to larger, less disturbed forest tracts. It is essential to collect field data from as many individuals as possible, in order to know comprehensively the species capacity for adaptation, as well as its real requirements of space, forest types, and food sources. The once a year monitorings utilized till now have proved to be insufficient to conclude that maned sloths are amenable to such experiments, as they are long-lived and show much individual variation in diet (Chiarello, 1998b), activity budgets, and ranging patterns (Chiarello, 1998a). For example, individual home ranges esti-

mated during the first year varied from 3 to 6 ha, but it is not known if the sloths continue to stay in these home ranges for longer periods of time. We do not know if the marked preference the study animals show for some plant species (notably *Micropholis venulosa*, Sapotaceae) is repeated in subsequent years, or is also exhibited by other individuals released in other localities. It is essential, therefore, to monitor additional individuals and to extend the observation period beyond the first year after release in order to address these issues.

The methods used in this project are the same that have been used successfully since 1994 (Chiarello, 1998a, 1998b). During the sampling days study animals are observed continuously from dawn to dusk, allowing an exact quantification of their main activities, ranging, and diet. These data are then analyzed to study the capacity for adaptation to the translocation process, quantifying the changes that occur in home range, movements, time allocated to main activities, and importance of differing tree species as food sources. Interindividual differences in activity budgets, day and night range length, and home range are also compared.

For species with strictly forest habitat and low dispersion ability, as is typically exemplified by sloths, it is becoming increasingly necessary that we intervene to increase the chances of long-term survivorship and the loss of genetic diversity of isolated populations. The results of this project will be relevant to the conservation of maned sloths as this will represent an experimental analysis of translocation, a management tool that can also be used to help ameliorate the conservation status of other species and populations which are isolated in Atlantic forest remnants. Additionally, the project will contribute to the better understanding of the natural history of this poorly known species, and provide data about its food, habitat, and space requirements. Projects of this nature are necessary to prevent or diminish the continuous deforestation and fragmentation of animal communities in remnants of this highly diverse but greatly deforested biome (Chiarello, 1997, 1999).

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## NEWS

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### Edentate Conservation Action Fund

The Edentate Specialist Group of the Species Survival Commission (SSC) of The World Conservation Union (IUCN) has established a conservation action fund which will offer small grants to support studies and conservation initiatives related to edentates. Financed by the Center for Applied Biodiversity Science at Conservation International, based in Washington, DC, the grants offered will be a maximum of US\$3,000, with a typical amount given around US\$1,000. The grant application process is designed to have a fast turn around time. Those interested in submitting a proposal should contact Jennifer Pervola, Center for Applied Biodiversity Science, Conservation International, 1919 M St., NW, Suite 600, Washington, DC, 20036, USA, e-mail: <j.pervola@conservation.org.>

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### New Specialist Groups

The SSC has several new Specialist Groups. The Afrotheria Group, chaired by Galen Rathbun, was created to cover the Superorder Afrotheria, which includes aardvarks, hyrax, golden-moles, elephant-shrews and tenrecs. A Caribbean Inland Freshwater Fishes Specialist Group was created as part of an evolving SSC strategy for freshwater fish. Co-Chairs are Michael Smith and Carlos Rodriguez. The Global Amphibian Specialist Group, chaired by Claude Gascon, will work towards developing a regionally-based network of amphibian specialists, using the model of SSC's Sustainable Use Specialist Group. The Iguana Specialist Group, formerly West Indian Iguana, has a new mandate to cover all species. Allison Alberts continues as Chair, with Jose Ottenwalder appointed as Co-Chair. The first regionally-based Invertebrate Specialist Group, the Southern African Invertebrates Specialist Group, has been established, chaired by Michael Samways. A new Philippine Plant Specialist Group, chaired by Domingo Madulid, will address the important issues relating to plant diversity conservation in the Philippines. A list of all SSC Specialist Groups and Task Forces with contact details, is available on the SSC website at <[www.iucn.org/themes/ssc/sgs/sgs.htm](http://www.iucn.org/themes/ssc/sgs/sgs.htm)>. Information from the IUCN Species Survival Commission E-Bulletin - February 2001.

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### Fauna and Flora International - The 100% Fund

Fauna and Flora International's 100% Fund offers a unique approach to the funding of small-scale conservation projects focused on the protection of endangered species throughout the world. It is one of very few grant sources for this purpose, especially for applicants from developing countries. It was set up in 1971 to provide money very quickly for urgent conservation action. Since then the Fund has supported more than 570 projects in over 120 countries. It provides grants to a wide diversity of projects ranging from popula-