
6. CONSERVATION

Ateles is threatened by hunting, live capture and habitat destruction (Grimwood, 1969; Freese, et al., 1976; Hermandez-Camacho and Cooper, 1976; Mittermeier, 1977; Mittermeier and Coimbra-Filho, 1977).

For several reasons, spider monkeys are extremely vulnerable to hunting. Locally, they form an important food item, as they are large and good to eat. The size and noisy habits make them rather easy to locate, track and hunt. They defend themselves from human intruders by means of an aggressive branchshaking and dropping display. This behavior affords a hunter shooting an entire subgroup out of a tree crown. In addition, they show a very low reproductive rate. Females do not give birth before the age of five and, thereafter, only once every three to four years. Spider monkey social structure makes them even more vulnerable to hunting, as the group's survival may well depend on the few leading females having the best temporal and spatial knowledge of food sources. Unfortunately, for purposes of life capture, particularly the females carrying an infant will be shot. The infants serve a local pet market. Finally, population density is originally rather low (i.e., 7.1 individuals per Km²).

Habitat destruction is another threat to spider monkey's survival. *Ateles* are largely restricted to undisturbed, most heterogeneous lowland rainforests which are going to disappear quickly all over their range.

In general, *Ateles* is an extremely vulnerable primate that shows little or no adaptability to human intrusion. In Amazonia, hunting is the main cause of decline. In Central-America, it is primarily threatened by habitat destruction. In Surinam, most of the interior is still undisturbed, making the outlook for conservation fairly good. At the moment, Surinam parks and nature reserves protect as much as 5,304 km² of rain forest habitat in the interior, most of them in remote and uninhabited areas. When the infrastructure of the interior shall be improved in the near future, the protection of these areas will be a major problem to conservationists. Hunting pressure will increase and illegal lumber extraction will threaten these areas too.

Unfortunately, a number of tree species providing spider monkeys, among other animals, with safe sleeping sites and food, produce commercially valuable timber. For these reasons, the national parks and nature reserves will be best protected by so-called buffer zones surrounding them. These areas should lack an infrastructure which, in general, enables more than incidental hunting and logging.

As pointed out before, for many canopy trees and lianas spider monkeys play an important, sometimes perhaps vital role in seed dispersal and escape from seed predation. Local extinction of spider monkeys alone may strongly affect primary forest composition and structure and may cause forest degradation. Unfortunately, this will be noticeable a long time after, since these processes take place gradually.