REHABILITATION AND DESTINATION OF A CONFISCATED SQUIRREL MONKEY (*SAIMIRI COLLINSI*) FOLLOWING CONSERVATIONISTS GUIDELINES: A CASE STUDY

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Introduction

The placement of confiscated animals is one of the main problems concerning fiscalization actions (RENCTAS, 2001; Antunes, 2004; Padrone, 2004). According to Vidolin *et al*., (2004), any fauna confiscated should always be associated to careful rehabilitation, considering the three management options that take into account the concepts of conservation of fauna and ecosystems, i.e., 1) captivity 2) return to the wild or 3) euthanasia (IUCN, 2000). Although the majority of mammals confiscated in Brazil during the years of 1999 and 2000 were released, such activities were mostly performed without taking scientific criteria into account, and the animals were simply released back into the wild (RENCTAS, 2001).

Habitat competition and the risk of introducing diseases seems to be the main causes of failure of release programs as a whole (Rodrigues, 2001). Here we report the release of a confiscated adult female squirrel monkey (*Saimiri collinsi*), in which we attempted to follow some guidelines found in the literature for the placement of confiscated fauna (RENCTAS, 2001; IBAMA, 2006; Rocha-Mendes, 2006; IUCN, 2000). In general, the success of a release program should include evaluations of the following factors, although not limited to these:

1- It is recommended that every seized animal has a receipt form, containing, among other data, information regarding their correct taxonomic identification, preferably to species level (or subspecies, if any); biometric data; sex; date of entry; age; origin and apprehension history;

2 - It will only be considered fit to release the animal that goes through a technical council evaluation of veterinarians and biologists, attesting that the individual is in good physical health and behavioral conditions, for example. This criteria include the fact that the animal must undergo a period of rehabilitation and follow a health protocol, going through a period of quarantine examinations, in order to prevent the animal from introducing some new illness in the release area. The animal destined for release must also have their socialization with the man (imprinting) avoided to the maximum;

3 - The release procedure should only be performed in a location that is within the natural geographic distribution area of the species; in their natural habitat and respecting their ecological conditions. The quality of the habitat must also be assessed, as well as its size and, if possible, the genetics of the population of the area of release;

4 - Evaluate the most appropriate time of year for the release of the species, considering food availability (flowering, fruiting, insects), time of day, among others. The release must also follow appropriate protocols for each species, in conformity with the behavior and the habit (diurnal, nocturnal, solitary or gregarious). If possible, evaluate genetics of the animals to be released;

5 - Evaluate local pressures on species (predators, human action) and encourage the protection, restoration and extension of the habitat of the release site, as well as the participation of society and the private and research sectors;

6 - The animal must receive suitable permanent marking of each species in order to perform a post-release monitoring program (radio telemetry, for example), to evaluate the success of the return to the wild. This program will allow the planning of additional activities required (food supply, predation control) as well as bring information for future releases (habitat preferences, for example).

Results and Discussion

On 14 April 2014, an adult female squirrel monkey (*Saimiri collinsi*) was received by the Wild Animal Clinic at the Federal Rural University of Amazonia (UFRA). An employee from the University found the specimen injured due to a tree fall at one of the forest fragments surrounding the University. Following the first guideline mentioned above, all the possible measures were taken and a form was filled out with information regarding the primate taxonomic identification, biometric data, sex, entry date and the history of confiscation.

According to the second guideline, a group of two biologists and four veterinarians was formed in order to rehabilitate the primate. A full clinical exam and an x-ray revealed that the monkey's left forelimb was dislocated. The therapeutic protocol restricted the primate's movements (Fig. 1) and corticoids and analgesics were administrated for seven days to control the pain and inflammation. Stressful and stereotyped behaviors (pacing and bar-biting) were ameliorated using environmental enrichment, and imprinting was also avoided to the maximum, in order to maintain the animal's wild behavior and facilitate its release. A proper diet of fruits (some of them frozen in ice), flowers and some insects was offered, and after a total of 28 days of rehabilitation, another x-ray, and two days in observation, our group considered that the primate was in good health and in suitable behavioral conditions for being released back into the wild.

Figure 1. Confiscated adult female squirrel monkey (*Saimiri collinsi*) being rehabilitated at the Wild Animal Clinic at Federal Rural University of Amazonia (UFRA)

The area chosen for this action was as close as possible to the area where the animal was found. A group of squirrel monkeys was located and observed nearby, and the individual was released about five meters close to the group. Its interactions with the group members were observed and the primate vocalized towards them, obtaining vocal responses as the individual approached the group. No agonistic interaction was observed and the female then followed the group into the woods, suggesting a positive acceptance.

Even with the impossibility of a post-release monitoring, the protocol adopted for rehabilitation and destination of the individual highlighted the importance and need of a suitable destination protocol for confiscated fauna. This is especially true concerning the northern region of Brazil, where the lack of criteria for the release of confiscated animals is urgent, given the increasing number of confiscated fauna.

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FIRST ASSESSMENT OF HELMINTH PARASITES IN WILD SQUIRREL MONKEYS (*SAIMIRI COLLINSI*) IN NORTHEASTERN PARÁ STATE, BRAZIL

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Introduction

Pathogens are increasingly recognized as having an important role in the behavioral ecology, health and conservation of primate populations (Gillespie, 2006; Gillespie et al., 2008; Martínez-Mota et al., 2015). Recent studies have focused on parasite surveys in wild populations of neotropical monkeys (Eckert et al., 2006; Kowalewski and Gillespie, 2009; Soto-Calderon et al., 2016). Although some of these studies have sampled squirrel monkeys (Michaud et al., 2003; Phillips et al., 2004), most of the data on helminthic parasites of *Saimiri* come from captive populations. These data indicate a variety of gastrointestinal parasites in these primates, including helminths, bacteria and protozoa. Helminthic parasites include cestodes, acanthocephalans, trematodes and nematodes (Dunn, 1968). Yet, the