



*Ateles hybridus & Ateles  
fusciceps Conservation  
Project 2006-2010*

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## Introduction

The *Ateles* species are considered the most endangered of the New World Monkeys (Mittermeier et al., 1989; Rylands et al., 1997). This genus has a wide distribution and systematically it is a genus difficult to understand because its variability and high rates of hybridization (Defler, 2003). There are between three and four species, depending on the researcher: *A. geoffroyi*, *A. belzebuth*, *A. hybridus* and *A. fusciceps* (Alberico et al., 2000; Defler, 2003; Groves, 2001; Kellogg and Goldman, 1944).

*Ateles hybridus* and has been poorly studied in Colombia and there are some research Colombia and only phylogenetic studies have been conducted (Collins, 1999; Green, 1978; Scott et al., 1976; Struhsaker et al., 1975). This species has been identified as priority species to carry out research projects and conservation programs in Colombia, because it is Critically Endangered due to habitat destruction and illegal hunting and for its biological characteristics could reach extinction rapidly (Collins, 1999; IUCN, 2003; Mittermeier et al., 1989; Procaminderena, 1986; Rylands et al., 1997). There is no information about the size of the population of this species and this research is considered by Defler (2003) and Defler et al. (2003) as a priority to develop conservation strategies.

*Ateles fusciceps* is Endangered (IUCN 2003) because habitat destruction and hunting. This species has been poorly studied in Colombia and there are some research Colombia and only phylogenetic studies have been conducted (Collins, 1999; Green, 1978; Scott et al., 1976; Struhsaker et al., 1976).

In Colombia *Ateles hybridus* is maintained in at least 6 zoos presenting problems of surplus animals and consanguinity (Table 1, Figure 1). On the other hand this species is suffering a lot from pet trade. There are around 40 individuals in four rescue centers (Table 2, Figure 2) that need to be re-located. To find options for these animals is a priority for this project.

**Table 1. Number of animal per Zoo in Colombia, April 2005**

Institution Zoo	No. Total Animals <i>A. hybridus</i>	No. Animals F1 <i>A. hybridus</i>	No. Total Animals <i>A. fusciceps</i>	No. Animals F1 <i>A. fusciceps</i>
Piscilago- Girardot	7	2	0	0
Matecaña – Pereira	4	2	21	7
Santacruz- Tequendama	6	2	7	2
Barranquilla Zoo- Barranquilla	10	4	11	6
Santa Fe- Medellin	11	4	9	6
Caimanes-Zoo	1	0	0	0
<b>Total</b>	<b>39</b>	<b>14</b>	<b>48</b>	<b>21</b>



**Figure 1. Enclosures from some of the Colombian zoos.**

**Table 2. Number of animal per rescue center in Colombia, April 2005**

<b>Institution Rescue Center</b>	<b>No. Animals <i>A. hybridus</i></b>	<b>No Animals <i>A. fusciceps</i></b>
<b>CAV-Medellín</b>	<b>10</b>	<b>12</b>
<b>Floralia-Cali</b>	<b>1</b>	<b>10</b>
<b>Corponor</b>	<b>2</b>	<b>0</b>
<b>CMDB</b>	<b>6</b>	<b>0</b>
<b>Total</b>	<b>19</b>	<b>22</b>



**Figure 2. Enclosure from one rescue center in Colombia**

Combine ex-situ, in-situ and education projects it is necessary to protect this endangered species. The *Ateles hybridus* & *Ateles fusciceps* conservation project is a start point to conservation of two Colombian endangered species. This project is going to offer solutions for pet trade animals and will give support to zoos and rescue centers in order to create an ex-situ conservation program. On the other hand is going to support in-situ research, in-situ conservation and will launch an educational campaign to reduce pet trade.

Ex-situ conservation needs to be supported for many institutions and the inclusion of other regions will increase the chances of maintaining viable populations. For

**this reason this project will find the way to export animals (15 to 20 animals) F1 offspring from the Colombian Zoos Breeding Program to contribute to the European Breeding Program (EEP) for this species.**

**This project has many national partners: ACOPAZOA (Colombian Zoos and Aquariums Association), CORANTIOQUIA (Cooperación Autónoma Regional de Antioquia), Ecolombia Foundation and BioDiversa Foundation. All of them stated their interest in this project and will participate in different ways such as: giving financial support, staff, equipment and animals. The project will be globally coordinated in Colombia by Alba Lucia Morales Jiménez (Fundación Biodiversa) and internationally by Pierre Gay (Doué La Fontaine Zoo) and David Gill (South Lakes Wild Animal Park), representing the European Zoos supporting this project.**

**The projects for the next five years:**

#### **Ex-situ Projects**

- 1. Pedigree reconstruction from DNA analysis of Captive population of *Ateles hybridus* and *A. fusciceps*.**

**It is important to reconstruct the relationships among animals between zoos and within them because information is very fragmented in Colombian zoo records. Apparently spider monkey groups started with few animals and now there are groups up to 20 individuals in the same enclosure that seem to be close related. We do not now how inbreeding they are and in order to manage a viable population this information is crucial.**

2. **Management of captive populations and breeding program of *Ateles hybridus* and *Ateles fusciceps* to maintain viable populations, including change of some habitats**

After finishing the studbook for Colombian spider monkeys is very important to manage this population to increase genetic variability. It is important to make interchange of animals between Colombian zoos and to manage reproduction. On the other hand, most of the enclosures are not appropriate for these animals and need to be changed or improved.

3. **Evaluation of pet trade on *A. hybridus* and *A. fusciceps* and solutions for these animals.**

Spider monkeys are subject to pet trade and this is one cause of danger for these species. It is important to know where and when the animals are being extracted in order to educate human populations in the region and to give them alternatives for subsistence. This project will find the main areas involved in pet trade of *A. fusciceps* in order to focus efforts in education and alternatives for people. Interviews and visits to markets in towns around the distribution area will be made to identify the places more affected for this activity.

4. **Reintroduction of *Ateles hybridus* and *Ateles fusciceps* in their natural habitat**

Reintroduction can be an important tool for conservation of an endangered species and to educate people around a flag-species. It is important to establish a reintroduction program for these species to: 1) evaluate this management alternative for this species; 2) to give a solution for pet trade animals from these endangered species; 3) to increase public awareness around this species and the pet trade problem.

## **Education Project**

### **1. Campaign: Knowing the spider monkeys**

All zoos involved in this project will have education activities and material to let the people known more about this endangered species and the projects being implemented to preserve these species. Education is a very important element in conservation and public awareness is crucial in this process.

## **In-Situ Projects**

### **1. Densities of *A. hybridus* in Colombia (several localities).**

The objective of this research is to identify forest areas where this species still occurs and to estimate the density of *A. hybridus* in those forests. Population status of *A. hybridus* is not known, and this is a priority research topic for conservation purposes. We will estimate the density of this species in at least three different localities, in order to know the state of the populations and how many individuals are there.

### **2. Consolidation of a protected area for *Ateles hybridus bruneus***

Protected areas for this species exist but are not respected. Habitat destruction and hunting take place in those regional protected areas. It is important to work with local communities to find alternative forms of using the forest and economic options to maintain themselves without destroying the forest and the animals that live there. It is important to identify how many regional and private protected

areas exists for this sub-species and to evaluate problems in these areas to start working with their local communities.

### 3. Densities of *Ateles fusciceps* (several localities)

There is no information about densities of this endangered species. The objective of this research is to identify forest areas where this species still occurs and to estimate the density of *A. fusciceps* in those forests. Population status of *A. fusciceps* is not known, and this is a priority research topic for conservation purposes. We will estimate the density of this species in at least three different localities, in order to know the state of the populations and how many individuals are there.

#### Planned activities 2006-2010

Activity	Year				
	1	2	3	4	5
Pedigree reconstruction	x				
Management of captive population		x	x	x	x
Re-introduction of <i>A. hybridus</i>	x	x	x	x	x
Research	x	x	x	x	x
Education projects	x	x	x	x	x



## Planned Activities 2006

Activity	Month											
	1	2	3	4	5	6	7	8	9	10	11	12
<b>Habitat improvement and construction</b>	x	x	x	x	x	x	x					
<b>National workshop about captive breeding and management</b>								x				
<b>Re-location of confiscated animals</b>		x	x	x	x	x						
<b>Reintroduction Project</b>							x	x	x	x	x	x
<b>Education Project</b>					x	x	x	x				
<b>Densities Project</b>							x	x	x	x	x	x
<b>Final report year I and papers</b>											x	x

## Budget 2006-2010 in Euros

The first year the project will need more financial support because it is necessary to improve infrastructure and in some cases to build some cages to establish the Colombian Breeding Program. At least 5 enclosures will be build in Colombian Zoos for reproduction purposes, four rehabilitation cages. In addition, the first year budget will finance research, management for animals and education projects to help in the species conservation. The flowing years budget will be use to maintain the Colombian Breeding Program, the reintroduction program, research and education in order to diminish pet trade, to evaluate wild populations and to have this species as a flag species for habitat conservation.

Year	Total cost	Obtained from other sources *	Requested from Doue La Fontain and South Lakes
1	97.000	62.000	35.000
2	85.000	60.000	25.000
3	85.000	60.000	25.000
4	85.000	60.000	25.000
5	85.000	60.000	25.000
Total	437.000	302.000	135.000

\*Zoos, rescue centres, Cornare and Ecolombia Foundation are supporting this project in different ways. They support the project with professionals, keepers, equipment and medicines that are very important to the success of this project.

## Budget 2006 in Euros

Heading	Details	Total cost	Obtained from other sources *	Requested from Doue la Fontaine and South Lakes
Reproduction enclosures	5 enclosures for improvement and 5 to build	10000		10000
Management of animals		11000	7500	3500
Rehabilitation enclosures	4 cages for the reintroduction project	3000		3000
Educational material for zoos and rescue centres		2000		2000
Veterinaries and/or biologists	1 professional per zoo or rescue center for one year	53000	53000	
Densities project	Field trips, maps, interviews, equipments, software	4500	1500	3000
National workshop about captive breeding	Meeting to qualify the team in charge of the breeding program in zoos and rescue centers	2000		2000
Others	Trips from specialists from EAZA, publications	3100		3100
Coordination of Project	Fundacion Biodiversa	11400		11400
<b>TOTAL:</b>		<b>100,000</b>	<b>62,000</b>	<b>35,000</b>
<b>TOTAL REQUESTED FROM DOUE LA FONTAINE AND SOUTH LAKES:</b>			<b>35,000 Euros</b>	

\*Zoos, rescue centers, CORANTIOQUIA, Fundación Biodiversa, Fundación Ecolombia

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