

ANNUAL ACTIVITY REPORT EX-SITU CONSERVATION PROGRAMME OF THE BROWN HEADED SPIDER MONKEY (Ateles fusciceps)





PROYECTO WASHU ECUADOR 2016



1. Construction of a zoo in the Hacienda Jambeli

As a background to recent events, it is necessary to remember that the Hacienda Jambeli, where the Fundacion Ecologica Rescate Jambeli carried out its rescue and maintenance activities of ex-situ species, was sold in 2013. Since then, Proyecto Washu (PW) assumed the responsibility for the management and maintenance of the spider monkey individuals kept in these facilities.

In addition to this species kept within the old facilities, other animals can also be found. So far, the spider monkeys were in the temporary custody of Proyecto Washu, however, last November, the administration of the hacienda informed us that the spider monkeys were also included in their new patent for the running of a zoo. We were also informed that the patent has been approved and that they will start their activities as soon as possible.

During this meeting, veterinarian Julio Baquerizo, who was part of the previous administration, communicated his interest in requesting the support of the new owner in order to keep the spider monkeys out of the exhibition by means of the construction of three new islands, thus allowing us to move as many individuals and block the passage to tourists who will visit the zoo.

At the moment, this is the only alternative for the spider monkeys. A signed agreement between Proyecto Washu and the new zoo will be proposed, clarifying and establishing the new conditions. However, they have been informed that this is all temporary, while PW looks for and obtains a site for the construction, of a new ex-situ conservation centre for the species.

2. Formation of a juvenile group

During this year's last quarter, structural changes have been carried out within the groups in order to create a group of juveniles, in which some subadult and adult individuals were also included to stimulate behaviors such as the use of high strata and foraging off natural plant species within the island. Considering that the best age for primates to acquire skills is during their childhood, we intend to enhance these behaviors through the creation of this group of individuals. In addition, the included juvenile males will form ties that establish them as families. This is more complicated in the case of groups composed of adult males due to higher levels of aggressiveness between adult individuals.

We are also planning on integrating two infants with this group, including the one currently being raised by one of our researchers who is playing the role of a nurse.

This infant is currently socializing with his future group, the only individual not interacting with it being his mother, who is pregnant again and close to giving birth.



A female infant and juvenile male will also be included, they will join the Project during these first two months of the year. There are currently in the rescue center Yakusinchi.

The new group will therefore be composed of four juveniles, two infants, three adult females and one subadult male.

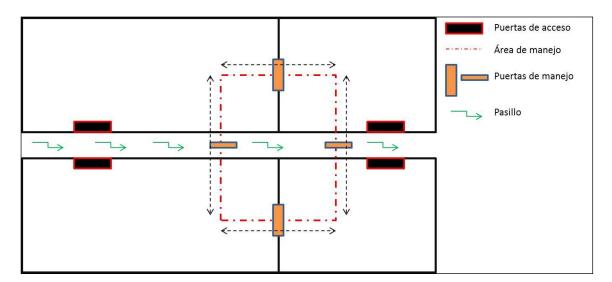


Fig. 1. Group formation enclosure scheme

3. Infant male care

During the past eight months, a male infant has been hand-reared, after being abandoned by its mother at birth, by two researchers who have been alternating. A teddy bear has been used to maintain a level of distance between the careers and the baby. This method allowed for the infant to be maintained in hammocks made with a net placed in a tree, each one at different heights. This will allow further development of the baby's muscle strength and dexterity.

Feeding has been administered by means of a bottle every 3 hours including the hours in the early morning. Formula for newborn humans (Nestogeno and Pediasure) have been used along with a multivitamin supplement. From the age of 2 months old, portions of fruit were added to the diet at 9:00 am and 3:00 pm.



Pictures 1-4. Infant male Nekunu





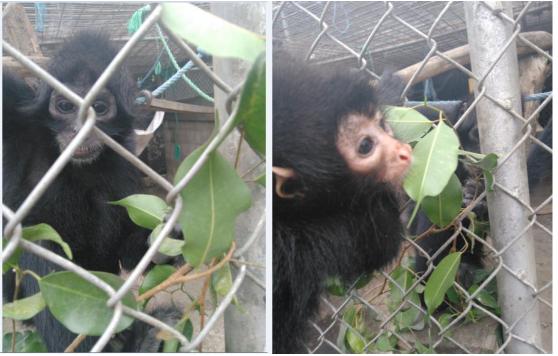




The infant has also began to relate to those of its kind through a daily visit to the enclosure and islands where the other individuals live. This has enable it to create ties with other individuals, which has been encouraged by means of imitation where other individuals can teach him how to consume natural plant species such as *Ficus*.



Pictures 5-6. Encounter process with individuals of future group of Nekunu



4. Intervention on a female individual at the Veterinary Hospital, San Francisco University of Quito

On September 9th 2016, one of the female adults on the center, names 'Pata' suffered a spontaneous loss of a fetus which apparently suffered from malformations. The placenta remained inside the uterine cavity, posing a serious risk to the female's life. She was therefore urgently moved to the Veterinary Hospital of the University San Francisco, in the city of Quito, where thanks to the "FONDO DE TUERI AYUDA A LA FAUNA SILVESTRE", the presence of the placenta inside the uterine cavity was confirmed by means of an ultrasound. It was consequently taken care of by specialist doctors, including a specialized human gynecologist who performed the curettage and cleaned the cavity. Two weeks later, the female was back in the center.



Picture 7-9. Medical intervention to adult female in Hospital Veterinario Universidad San Francisco de Quito







The female is in excellent health and has shown a lot of interest in the male infant that is being hand-raised and will be integrated in the juvenile group. We hope this to be an indication of a possible adoption.

5. Diet and birth of two baby's in the center

It is know that food plays an important role at the time of reproduction. Since Proyecto Washu began managing the center and the monkey's diet, portions and diversity of foods included in the daily diet has improved. Previously, food was administered once a day and wasn't chopped. They didn't have any water containers in each island or enclosures, the only water they had circulated between the islands. This cause dam increase in competitively between individuals due to the small portions fed to them. The recent



amelioration of their diet has had a direct effect on individuals' hair gloss, skin condition, hydration levels and three births have also been registered in 2016, two males and one female, not counting the loss due to a spontaneous abortion which had the female 'Pata'.

Picture 10. Adult female Pipa and infant Pía



Picture 11. Adult female Mullu and male infant Mishki



6. Food and handling

We want to state that the care of the individuals has been done in collaboration with one of the employees of Hacienda Jambelí, Darwin Espinoza, who has a monthly economic remuneration through Project Washu. He has nearly ten years of experience looking after and managing the individual monkeys within the enclosures and islands. It is complete important to maintain his experience and good work within the project as his experience is remarkable.



Picture 12. Darwin Espinoza rescue center keeper



7. Ex-Situ program budget expenditure of 2016

In 2016 we have made possible the maintenance and constant rehabilitation of these Brown-headed spider monkeys with the support of the organizations that are also committed in the conservation of this critically endangered species. Below are the summary budget of 2016 outcomes and the amount of each organization donation.

2016			
COSTS		FINANCIAL SOURCES	
Spider monkeys diet cost	4603.75	Zoo Doue La Fontaine	3159
Keeper assistance	2500	Amiens Zoo	1579.5
Transportation coordinator Jambeli - Quito	792	Individual donations	400
Feeding costs coordinator	1080	Fondo Tueri (Vet clinic)	320
Medical care (Emergencies)	620	Washu Chocolate	3937.25
Supplementary food infant spider monkey	400	Proyecto Washu	1000
Enclousures maintainance	400		
Total	10395.75		10395.75

We continue our searching for support to this ex-situ conservation program that is continue needed for the conservation of the species and will be included in the action plan for the primates of Ecuador after the first workshop held in Quito with the participation of founder members of Proyecto Washu.



8. Proyecto Washu in-situ conservation summary of activities

- Environmental education program

We carry out several environmental educational sessions in the months of July, August and October of 2016 in the local schools of Hoja Blanca and Flba Jaki of Chontaduro in the province of Esmeraldas. Most of the grades of the schools participate in the sessions, activities in the field is an important way to get the students and teachers close to the nature that surround them.

Picture 13. Students of the Hoja Blanca school participating in the workshops about Bats, held by Sylvana Urbina and David Mantilla.



Picture 14-15. Students of the Fiba Jaki school in Chontaduro, losing fear to snakes and learning origami Bats.







Community development program

In 2016 we continue the process with the farmers of the Tesoro Escondido area, in which we have been developing a conservation agreement since 2014 with families committed to forest conservation in which the spider monkeys can be found. In October 2016 they receive for second year the organic certification for their cacao crops, this will allow them to maintain the direct business relations with cacao buyers in Europe and USA. More than 150 hectares of primary forest of their lands are protected and are buffer zones of other private reserves in the area.



Picture 16. Cacao farms and forest protected in Tesoro Escondido.

Scientific research program

In August 2016, we started a new research in the genetic variability for a population discovered in a fragmented landscape in the province of Manabi this has been supported by the University of Manchester and recently by La Vallee Des Singes with their primate protection conservancy.

Forest patches that doesn't have spider monkeys can also provide a suitable area for the future implementation of a new rescue center in which we can offer bigger forest islands that will promote better rehabilitation conditions for the captive population.

Also with the University of Manchester we are working in the DNA extraction from the captive population, with this studies we can assess the genetic importance of the individuals from the exsitu program in the conservation strategy for the species.



Picture 15-17. Field activities for the genetic variability research in Manabí province



