

Project Update: October 2018

Biological work and social work
Santuario de Fauna y Flora Guanentá Alto Río Fonse
Institución Educativa Agroindustrial Francisco Medrano
Coordinates: 5°56`12" N; 73°07`01" W.

Presentation of the report

The report is composed of two parts, the first is focused on social work which was carried out with high school children from the school of El Carmen. The second part corresponds to the biological work done in two field trips in different coverages of the sanctuary for the search of the species under conservation, the first corresponded to the Andean forest and the second to the zone of páramo and lagoons.

CHAPTER I Social work



Vegetables garden from the school

1. Organization

The work with the children consisted in evaluating the assessment of the natural, unlike the previous exit due to the age of the children we used a different methodology. It was organized useful for children.



Left: Organization of the audio-visual material. Right: Organization of the children.

2. Presentation

There was a short presentation about the work we are doing in the sanctuary, a presentation was made of the richness in biodiversity of our country, as well as the protected area and threats.



Left: Presentation of the project. Right: Presentation of the threats.



Left: Frogs of Colombia. Right: Participation by children.

3. Development of work with secondary school children.

This activity was based on the children had to make work teams and go outdoors, to develop the activity, this was to make with plasticine any of the frogs that they know of the region, as a motivation there was a special prize for the best Frog and the best description by the team. In the development the activity could see the children very animated and participatory, likewise working as a team, laughing and playing a high knowledge of the main characteristics of the amphibians of the region was observed.



Left: Development of the activity in open place. Right: Work with the children.



Left: Children's work. Right: The children were excited by the activity.



Left: Team with their frogs. Right: All groups showed interest in conservation.



Left: Interaction with the teams. Middle: Work team. Right: Boys working.



Left: More frogs. Right: More children.



Left: Final conclusions by the children. Right: Children told us the importance of conserving.



Some of the works of children.

CHAPTER II

Biological work

Description of the field work

Two field trips were carried out to find the amphibians with conservation value to be able to evaluate the habitats and threats.

Study area

The field trip was developed in two different coverages, the first corresponds to an Andean forest, where it was sampled at the site called "El Hoyo" (Coordinates $06^{\circ} 01'13.3''N$, $073^{\circ} 05'52.4'' W$) located in Chontales high (Fig 1). Installed in the site, intensive search sampling of amphibian species was carried out, with emphasis on the potential habitats for the species with value under conservation.

The second exit corresponded to páramo cover, was made in Las Lagunas locality, which is located in the area of the park called El Venado (Fig 1 (Coordinates $05^{\circ}59'12,20''N$, $073^{\circ}05'21.42''W$)).

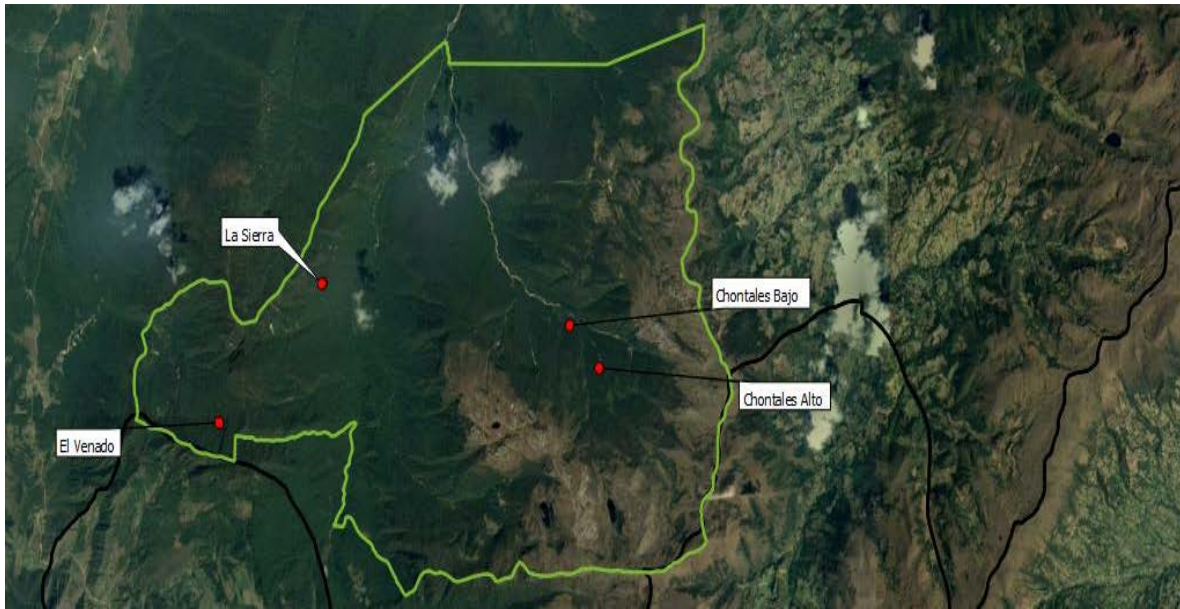


Fig1. Identification of the localities of the park. The names of the localities are on the part of the park authorities.

First field trip

The samplings were carried out along streams, since they represent a potential habitat for *Atelopus mittermeiri*, in addition sampled in forest patches since they are the habitats of *Pristimantis miyatai* and *Pristimantis carlossanchezi*.



Left: Some of the potential habitats covered. Right: Some of the potential habitats covered.



Left: The biologist Azarys looking at in the vegetation. Right: The team work in the search of amphibians.



Left: Searching of the amphibians. Right: Searching of the amphibians.



Left: Searching of the amphibians in the night. Right: Searching of the amphibians in the night.

During the sampling in the Andean forest, none of the conservation objects was found, however, several species were found, which were photographed in great detail to be later identified, and for the manipulation the protocol for the capture was followed of samples to analyse the presence of fungi.



Left: Some amphibians. (*Pristimantis* sp). Right: Some amphibians. (*Pristimantis* sp).



Left: Some amphibians. (*Pristimantis* sp). Right: Some amphibians. (*Pristimantis* sp).



Left: Manipulating the amphibians. Right: Taking samples for analysis in search of pathogens.

During the tours several potential threats could be identified, the presence of bovine cattle was observed protected area of the park, added to this it can be evidenced large areas that were at some point forest, but now they are grasslands, some introduced plants with flowers were also observed These threats are latent and will be taken into account for the full assessment of amphibian threats.



Left: Cows in the forest. Right: Thraiths in the forest.



Left: Transformation of the habitats. Right: Foreign species.

The samplings were carried out in the páramo, an exhaustive search was carried out in different potential microhabitats, such as the vegetation, the necro mass of the *Espeletias*, the edge of lagoons and the edge of the stream.



Left: Lagoon Aguas Claras. Right: The páramo.

The area was characterized, a temperature of 11 ° C and a humidity of 89% was obtained, the predominant vegetation was the frailejones, and a sweep was made by the site.



Left: Search for amphibians. Right: Search on the ground.



Search in the necro mass.

During the tour, the nascent creek of one of the lagoons, called Aguas Claras, was inspected.



Left: Search in edge of quebrada. Right: Pond search.

In this exit, no records of amphibian individuals were obtained, except that we found tadpoles in the stream, these were photographed for later taxonomic identification, an unexpected encounter was obtained from a lizard of the genus *Anolis*, which was an important finding for the Sanctuary because it was found at a considerable height that has not been reported in the literature.



Individual tadpoles



Individuals of genus *Anolis*.

With the advance of the field trips we have been able to obtain important results about the state of the amphibians, although we have not found the objects of conservation we have been able to explore and characterize the habitats, from this we will continue in the search of the values objects of conservation, likewise we are performing analysis on the results we have obtained so far.



Left: Work team- Azarys Paternina, Diego Felipe Higuera, Johana Muñoz, Diego Escamilla, Andrés Pérez & María Estupiñán. Right: Work team with sanctuary guide.

In this field trip we have the help of young students who are members of the research group, since we wanted to encourage research and conservation through the project, something important to note was that in this outing we had the help of the guide of the Sanctuary who was present in the last expedition that registered one of our species conservation objects *Atelopus mittermeieri*, we visited the sites that originally visited in this sector.

Upcoming activities: Exit of biological field for the search of the values object of conservation, exits of social fields, for the work with the community.