

Guatemala, July 4th 2017

REPORT V & VI: Environmental main threats and habitat restoration program

Introduction. The environmental educational program for teachers at the Guatemalan Caribbean as a key for conservation in rural areas, is a project sponsored by Rufford Foundation. Its main goal is to create replicators of knowledge in rural schools of Izabal, promoting access of environmental education to children and youth, so that they can positively change their attitudes and perceptions about the environment.

On July 3rd and 4th 2017, the fifth and sixth environmental workshop were held. During these days, the topic of *Environmental main threats* as well as the *Habitat restoration* practice were presented to teachers.

For the first part of the workshop, teachers learned what a threat is, and which threats they are facing in the region. The top three are: pollution, deforestation and overexploitation of natural resources, including hunting and fishing.

After the presentation, teachers were taught about the field practice and the program “Adopt a tree”. With this practice they were motivated to face environmental issues and try to do small actions against them.

Teachers learned how a tree nursery works, how to transplant trees and how to take care of them properly. In total, we plant 30 trees distributed in 8 different native species in two areas of Izabal (Puerto Barrios and Livingston), where teachers will take care of them for the next two years. This practice was carried out with the help of the Natural Resources and Environment Ministry (MARN in Spanish) and the Land Military Reserve through its tree nursery.

At the end of the practice, teachers exchanged an ecosystem they previously prepared with their students as part of an assignment of the project. In this activity, teachers had to prepare a box filled with information about an ecosystem of their choice. Children and teachers worked together creating beautiful educative surprises that were in the box. Now, teachers are coming back to their schools and will open the box (with their students) they received to learn about a new ecosystem or how other students perceive it.

Environmental main threats presentation

During the first part of the morning, a presentation about environmental main threats was presented to teachers. In this presentation worldwide problems such as pollution, overexploitation, illegal hunting and poaching were discussed.

Teachers learned how these problems affect not only our environment but human lives too. At the end of the presentation a round table was made for them to discuss about the threats that the environment that surrounds them is facing.

All of them agreed that pollution, deforestation and overexploitation were the main threats for their region and that these problems were the ones they would like to take actions against.

Habitat restauration

After the presentation, teachers were taken to a tree nursery in the Land Military Reserve. In that place, an officer taught them how a nursery runs and how they get native seeds to plant more trees in the region.

Teachers learned how to prepare good soil for trees and how to transplant trees that are ready to go from their places to plastic bags (transportation purposes). They helped to fill bags with soil and chose the tree they wanted to plant.



Figure 1. Teachers filling the tree bags with the prepared soil.



Figure 2. Teachers filling the tree bags with the prepared soil.

The species of tree that were planted are native of the region and some of them can easily be found at the mountains between Puerto Barrios and Livingston. The trees are: Matilisguate, Cipres, Caoba, Santa Maria, Zapoton, Cortez, Rosul y Melina (common names for the trees in the region).

After choosing their trees, teachers were taken to the public school Instituto Experimental de Puerto Barrios, and Complejo Deportivo de Livingston, where they plant 30 trees.

After planting, each teacher wrote down the information of their trees and the name they gave to it. They draw their tree and wrote about the characteristics of it on the Adopt a Tree form.



Figure 3. Teacher of Puerto Barrios planting a Matiliguat tree.



Figure 4. Teacher of Puerto Barrios planning a Cortez tree.



Figure 5. Teachers of Livingston planting a Santa Maria Tree.

Ecosystem exchange

When the planting was finished, teachers exchanged an ecosystem box they made with their students. Each box was a representation of an ecosystem of their choice. They put information in it, as well as other objects such as drawings, letters, toys, recycled-made-animal-displays, etc.

The objective of this activity is that teachers can open the box they received with their students, and learn about a new ecosystem or how students from other schools perceive nature.

Most of the teachers did a marine ecosystem box. They were really creative since some of them created puppet scenarios, boxes filled with Animalia, and other activities for children.



Figure 6. Teachers and their exchanged ecosystem boxes.