PROJECT PROGRESS REPORT



CONSERVATION OF THREATENED AND ENDEMIC TREE SPECIES OF THE ECUADORIAN DRY FOREST PRO-FOREST FOUNDATION PERIOD OCTOBER 2010 TO FEBRUARY 2011 Ruffords

PROGRESS REPORT OF PROJECT: "CONSERVATION OF THREATENED AND ENDEMIC TREE SPECIES OF THE ECUADORIAN DRY FOREST"

ACTIVITIES:

- ✓ Create a native trees guide, aimed at children 8 to 12 years.
- ✓ Edit the chapters on native trees of dry forest booklet sent by Mike Morgan.
- ✓ Give lectures and activities about native trees of the dry forest in surrounding schools near the Cerro Blanco Protected Forest CBPF.
- ✓ Deliver teaching materials (poster and trees guide) to children in schools adjacent to the Cerro Blanco Protected Forest.

SUMMARY

In view of the urgent need to prepare additional information besides the poster on native trees for use with school groups, and to be able to begin working with schools in the buffer zone of the Cerro Blanco Protected Forest, before the annual school vacations between January-April of 2011; it was decided to prepare a native trees guide which is in addition to the book of propagation of native trees, written by Mike Morgan.

In October 2010, efforts began to implement this project by starting with the selection of a list of 20 native dry forest trees, including: Pigio (*Cavanillesiaplatanifolia*), Cocobolo (*Cynometrabauhiniaefolia*), Guayacán (*Tabebuiachrysantha*), Ceibo (*Ceibatrichistandra*), among others. Work continued with the investigation and collection of information on each tree, such as: their characteristics and description to recognize the tree in the field either by its shape of its crown, leaves, flowers and fruits; the propagation of it seeds strategy of reproduction, as well as animals that feed on each tree.

Within the information that has been revised is, included the 6 chapters of the native trees propagation book sent by Mike Morgan, which includes: Palo Santo (*Burseragraveolens*), Guabas wild (*Inga manabiensis*, *Inga sapidoides*, *Inga vera*, *Inga punctata and Inga colonchensis*), Moral de Montaña (*Apisdopermaulei*), Obo Monte (*Spondiasmombis*), Amarillo (*Centrolobiumochroxylem*) and Guasango (*Loxoptergyiumguasango*).

Information was corrected in Spanish in the original text sent in the course of the months between November 2010 to February 2011. With these chapters, the book on trees dry forest trees of the Ecuadorian Coast with will be prepared for publication in June 2011 aimed high school students and University forestry students, and field technicians.

Work on the native trees guide included researching the information, editing and writing the text in a simple language to be easily understood when sharing it with children. With this in mind, we began to locate images of leaves and fruit for each tree, to accompany the texts. After having obtained the above, the process of researching teaching methods for the best way to present the material to children began.

The native trees guide, includes information that help explain the importance of the trees, such as: a poem or a story on trees and includes such topics what is a Dry Tropical Forest? And why protect to the forests, as well as the problems leading to the loss of the forests; steps to plant a tree; the Reforestation Program of the Cerro Blanco Protected Forest; as well as a summary of information on the CBPF's critically endangered flagship Great Green Macaw and games as teaching aids. With this information, placed at the beginning of the native trees guide it provides an introduction before educating children about the 20 species of native trees that are included in the Guide. To ensure the Guides are successful with the children, we looked for and selected images for that will accompany the text according to the subject that is being described.

The native trees guide was designed in full color, to produce a positive visual impact on children; the design process consisted of arranging the colors and the order of the information, in addition some topics had to be reduced and others were removed because of lack of space. With digital display of how the design was being made, some changes were made such as the type of letter to be friendlier in the view of children, so they will be encouraged to read the guide.

While the design and layout of the guide were in the process, the creation of a slide show to be used along with talks in the schools began. The talks needed to be dynamic for children, as it is difficult to hold their attention for a long time. The activities also had to be interactive between presenter and children.

With the printed material, we proceeded to coordinate with the schools in the buffer zone of the Cerro Blanco Protected Forest, the dates to visit and work with the developed materials; teaching materials to be handed out to the kids included: Posters of Dry Tropical Forest with the theme "Native Trees" and the a full color Native Trees Guide. (*See Appendix 2*)

The courses to visit are from the fifth until the seventh grades with children from 8 to 12 years old. The schools that were visited include:

- ✓ Public School "MarianitaRodas" of sector of Puerto Hondo.
- ✓ Public School "12 de Octubre" of sector of Chongón.
- ✓ Public School "Luis Enrique Morales Alfaro" of sector of Casas Viejas.

RESULTS

Within the school in the community of Puerto Hondo, the project visit was conducted on January 4th, with a total of 67 students. It also included the delivery of materials to the director and teachers of the 3 grades visited. In total, 71 people were provided with material on native trees of Tropical dry forest. (*See Appendix 1; Photo 1, 2, 3 and 4*)

In the school of the community of Chongón, material was delivered to a total of 98 students in the 3 grades visited on January 5th, in addition, materials were provided to 4 teachers and its director, giving a total of 103 materials delivered at this facility. (*See Appendix 1; Photo 5, 6, 7 and 8*)

Finally, on January 12th and 13th two schools in the community of Casas Viejas were visited. A total of four grades were visited here, as the school had one grade more than the other schools, which included ages up to 14 year olds, because of the extra class. A total of 108 students were visited; materials were provided to the students, their teachers and its director, giving a total of 113 copies of the materials delivered. (*See Appendix 1; Photo 9, 10, 11 and 12*)

We gave talks to a total of 273 students who benefited from materials that were distributed and a total of 14 teachers, giving a total of 287 copies of the teaching materials supplied to the three communities surrounding the Cerro Blanco Protected Forest.

SECTOR	STUDENTS	TEACHERS	TOTAL
PUERTO HONDO	67	4	71
CHONGÓN	98	5	103
CASAS VIEJAS	108	5	113
TOTAL	273	14	287

TABLE OF RESULT OF STUDENTS BENEFITED

RECOMMENDATIONS:

By observing the positive reaction of the children when using these materials, our recommendation is to continue with these activities at other schools adjacent to the Cerro Blanco Protected Forest. Activities that could be performed are:

- ✓ Make presentations on basic concepts on trees and issues related to the dry tropical forest.
- ✓ Carry out interactive activities with the students to assess their knowledge about what was learned in the talks.
- ✓ Deliver more educational materials on native trees of the dry forest (Poster and Trees Guide).
- ✓ Present the native trees guide and carry out the educational games that are found within.

As children are the future of Ecuador, this guide, it will help then have better environmental awareness and hopefully help to prevent some of the problems causing the disappearance of dry forest on the Ecuadorian Coast. We are waiting with the next five chapters of Mike Morgan for corrections of Spanish in the text, and for the completion and publication of the book set for June, 2011.

APPENDIX

Appendix 1.Activities in schools in the Cerro Blanco Protected Forest Buffer Zone



Photo 1. - School students "MarianitaRodas" of Puerto Hondo. This is the visit on January 4 of 2011. Photo 2.
- Student from fifth year of basic in the school in Puerto Hondo.



Photo 3.-Student from sixth grade in the school in Puerto Hondo. **Photo 4.**- Students of Puerto Hondo playing "Help Danielita and Jorgito to discover the dry forest" in the Trees Notebook.



Photo 5.-Doing an activity on what is a tree? With the students of seventh year of basic in the school "October 12" of Chongón. **Photo 6.** - Student of sixth year of basic in Chongón filling their data on the Trees Guide.



Photo 7.-Student from Chongón playing "Word Search of theDry Forest". **Photo 8.**- Students of Chongón with educational materials on native trees of the dry forest.



Photo 9. - Student of seventh year of basic in the school "Luis Enrique Morales Alfaro" of Casas Viejas playing "Word Search of theDry Forest". **Photo 10.** - Student of sixth year of basic, cutting a cube to assemble a dice for the game of "Help Danielita and Jorgito to discover the dry tropical forest".



Photo 11.- Student from eighth year of basic doing an activity "Cuts and Paste" of teaching materials in the "Trees Guide". **Photo 12.**-Students Playing "Help Danielita and Jorgito to discover the dry tropical forest" are in the eighth year of basic studies in the community of Casas Viejas.

Appendix 2. Teaching Materials



Picture 1.-Poster "Dry Forests of the Ecuadorian Coast are Critically Endangered".



