

The National Religious Coalition on Creation Care  
Religious Campaign for Forest Conservation

## Guatemalan Rainforest Restoration

### 2008 Report

THE RCFC IS DEVELOPING A COMMUNITY APPROACH TO RAINFOREST RESTORATION. Our strategy is working better than we ever anticipated. First we secure degraded land that was once rainforest and obtain a guarantee of future preservation. Next, we train school teachers in the importance of their forests. The teachers explain the values of the local rainforest to their students. We invite the students to grow seedlings in their backyards. Once the seedlings are tall enough, the children plant these seedlings in the rainforest. In school they learn more about the rainforest and are tasked with the care and nurture of the trees throughout their school years. This new strategy is providing some unexpected benefits. The story is below.

Initially we used government tree nurseries in a system similar to that employed by other tree planting groups. That works, but now we enlist school children to grow seedlings. Once seedlings reach one to two feet in height, the children plant the trees along with a sign indicating the name of the planter. In the process their parents become educated to the value of tropical rainforests. In the photo at the right, a group of student teachers pose with Jose (front left) after a presentation on the importance of letting young school children take initiative in learning how to assist in the restoration of local forests.



Classroom study by itself is not enough to appreciate the intricacies of the rainforest. Field trips provide an exciting way to train students in the art of rainforest reforestation. Jose, our program director (at left), discusses the values and blessings of the rainforest. He teaches the richness, the beauty and bounty of the rainforest. As they learn about the forest, they become respectful and treat it with care. Each trip into the forest becomes is an adventure in learning.



A crucial feature of our tree planting program is that it is led by local people. Decision making is done cooperatively with the students which allows for the development of local leadership. This is a novel experience for the students as almost all other decisions are made for them.

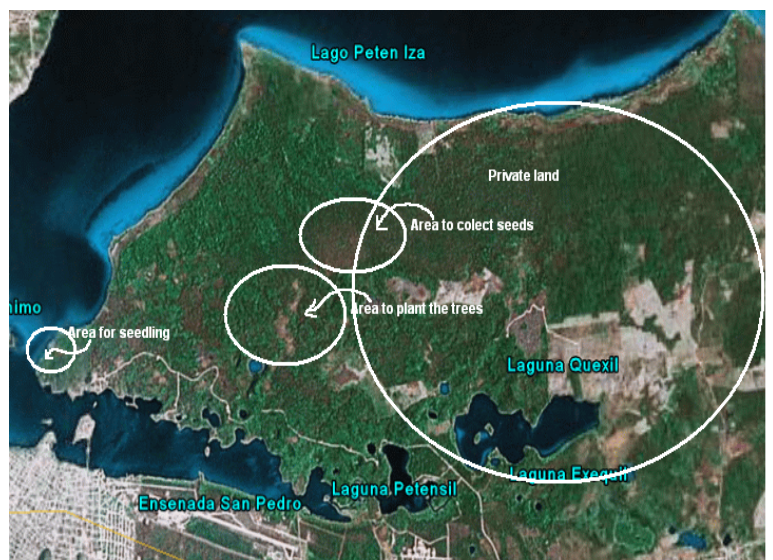


One development of cooperative decision making is that the students' parents are taking an interest in the tree planting and joining and supporting our efforts. Many school teachers are joining with Jose and our tree planting efforts. This teacher (seated, front center) surrounded by several students, now offers a class on the benefits of the rainforest that is close to the village. The students help plan the steps in the tree planting and forest restoration.

Jose travels with several students by water taxi from the town of Flores across Lake Peten-itza to the Tayasal peninsula where he and the high school students will map a proposed new rainforest restoration site.



### Map of Guatemala



This map identifies areas on the Tayasal peninsula that will be reforested. Smaller circles indicate areas for seed gathering and for planting different tree

Restoring the rainforest is hard work. There are no roads into the remote areas where we plant. Trees have to be carried by hand into degraded or devastated areas. Those involved work in hot, humid and sweaty conditions. It often rains during the summer months which are the best times for forest restoration – because there is more moisture to allow seedlings to take root.



After tree seeds are gathered in the rainforest, they are soaked in water to speed germination. As soon as they sprout, they are moved into enriched soil for continued growth. Here on the left several girls plant the seeds that will eventually become seedlings and that will be transplanted into the rainforest.

Our newest nursery is in the town of Santa Elena. It is maintained cooperatively by students plus a few soldiers from the nearby Army base. Another small nursery that we use is located in the small village of El Caoba, just south of Tikal World Heritage Park.



These high school students are from the towns of San José de Peten and San Andres de Peten. They will carry the potted seedlings for up to several miles in milk cartons and transplant them into their permanent location in areas that have been targeted for restoration.

The photo at right shows former rainforest land that was cleared for pasture but is now in the process of restoration. Despite the semi-open appearance, lanes must be cut through the thick brush by machete so that sunlight can reach down and accelerate seedling growth, and also so that people can access planting locations. A side effect to the conversion forest land to pasture is that moisture levels drop. This means that young trees must often be watered by hand to ensure their survival. Even so, we still lose roughly 10% of the seedlings that we plant due to unnaturally dry conditions.



Rainforest restoration is a team effort. Effective restoration requires surveying, seed gathering, sprouting and nurturing young plants, packaging and transportation, clearing areas for planting followed by watering and a watchful eye to ensure that the young plants thrive and grow.



Except for transportation of seedlings to a trailhead, almost all of our work is done manually. Our single largest expense is the trucking of young trees from the nursery to a staging area on the edge of the forest. Here teenagers plus a few parents help to unload the truck. From this end-of-the-road location, seedlings will be carried by hand, by bucket, but mostly by milk cartons into the planting areas.

These young trees will be carried to a location where planting is taking place. Before the planting can take place, teams go into the rainforest and prepare for planting by clearing areas and digging holes that will receive the seedlings.



As the school children get involved in forest restoration, so do their parents. Here one student's uncle (left) is helping with restoration efforts. This is a consequence of educating the children about the values of the tropical rainforest. From the children, the information spreads throughout the village. A further consequence is that some adults see jobs and perhaps a future in this village area.

Even after the trees are in the ground, they must still be checked and sometimes watered to ensure their survival. Our immediate goal is a restored rainforest, but long term we seek a healthy human respect for the tropical forest, a restoration of the forest as the "lungs of the planet," and especially its ability to sequester excessive carbon dioxide. Without healthy forests, we cannot have either a stable climate or a healthy world in which to live.

