

New 2.4 Million Acre Regional Conservation Area Created in the Peruvian Amazon

On December 14th, the Regional Counsel of Loreto, Peru together with the President of Loreto, Yván Vásquez Valera, unanimously approved a declaration establishing the Nanay-Pintuyacu-Chambira Regional Conservation Area (RCA) of 2.4 million acres. This area will establish a conservation and sustainable use regime for the three named river basins it protects, and will allow the improved management of the area's natural resources for the communities of these basins. Furthermore, this new area protects the potable water source for the city of Iquitos and adjoining areas while also conserving Amazon rainforest with some of the highest biological diversity in the world.



The Nanay-Pintuyacu-Chambira RCA is the third and largest Regional Conservation Area in Loreto, and follows the creation of the Tamshiyacu-Tahuayo RCA and the Ampiyacu-Apayacu RCA, each protecting over 1 million acres. These proposals have been developed by the Program for the Conservation and Sustainable Management of the Regional Biodiversity (PROCREL) with the vision that they be a basis for the sustainable development of the region. A notable success of the PROCREL program has been development of improved products and markets for community artisanry, with market outlets in Peru and the United States, which has doubled community incomes in some areas. PROCREL is composed of Nature and Culture International, the Institute for the Investigation of the Peruvian Amazon, and the Regional Government of Loreto.

NCI's Watershed Protection Program a Continued Success



In the southern Ecuador municipalities of Macará, Celica, and Puyango, NCI has successfully purchased a number of new areas critical to the protection of the water supply for thousands of people. These purchases protect 11% of the area of interest in Macará and 20% of the area of interest in Celica. In Puyango, the municipal government purchased three additional areas within the watershed as well, and together with NCI's purchase, 21% of the watershed is now protected.

Besides directly protecting water resources, these purchases will drive the municipalities to create a number of ordinances establishing conservation programs in the region. Each municipality will be empowered with the management of the purchased areas through the guidance of NCI, and management funds will be generated through

water tax ordinances that we are currently creating. The next step is the creation of the Regional Water Fund to enable the municipalities of southern Ecuador to purchase thousands of additional acres in the near future to further strengthen watershed protection in the region.

We are also working with local students through our environmental education program to instill upon them concepts of environmental responsibility, conservation, restoration, and resource management. In Celica, the municipality has built an environmental education cabin on the NCI property within the watershed, affording students hands-on learning experiences and a stronger connection to their water resources. Our goal is to create a new generation of conservationists that will promote the benefits of land preservation and the environmental services provided by intact ecosystems.



Bi-national Science & Technology Fair Showcases Projects from Ecuador and Peru



NCI's environmental education department successfully organized the 7th Annual Bi-national Science & Technology Fair this November in Saraguro, Ecuador, which showcased nearly 100 student projects from southern Ecuador and northern Peru. This year, 55 high schools from the two countries participated in the three day event, where they exchanged ideas and shared their experiences in the planning and execution of scientific research projects regarding the environmental aspects of their city and country. Several high schools participated in the event for the first time this year including the

municipalities of Macará, Celica, and Cariamanga. Also for the first time this year, the Ecuadorian government supported the fair through a grant of \$20,000.

Belgian Government Provides Funding for CO₂ Reduction Program

The Flemish Tropical Forest Fund of the Belgian Government recently approved project that will provide funding for a Reduction of CO₂ Emissions from Deforestation (RED) program in the region of Celica and Pindal, Ecuador. The project seeks to capture the gas using coffee plants and Tara (*Caesalpinea spinoza*) trees, as economic alternatives instead of the enlargement of corn plantations. The project will also promote land zoning and continued watershed protection in the local communities, in addition to helping strengthen communal governments in the



region. This is the second time NCI has received funding from the Belgian Government. Previously, funds were used in the Laipuna Tropical Dry Forest for conservation activities and to improve the organic cultivation of a number of local crops.

Conservation of a Key Piece of Dry Forest in Zapotillo



Through a purchase, NCI is now the owner of a 2,000 acre property in the Cazaderos sector of Ecuador. Here, NCI will initiate conservation activities in the most pristine dry forest of Ecuador. This sector forms a crucial forest corridor between the La Ceiba Reserve and the Biosphere Reserve of Northwestern Peru. The endemic fauna and flora here have survived thanks to the isolated location and small human population in the area, but the situation is changing due to the increased cultivation of corn. The critically threatened crocodile –

Cocodrilo de Tumbes (*Crocodylus acutus*) – can even be seen in this area. This first purchase is located within an area of approximately 12,400 acres of intact forest where other potential purchases are possible.

Optimism and Goodwill Prevail in Sierra de Alamos after Devastating Hurricane

The Sierra de Alamos region of Mexico where NCI is working to preserve the northernmost tropical dry forests in the Americas suffered devastating damage from flooding as a result of October's Hurricane Norbert. Torrential rains in the area caused rapid and extreme flooding of several rivers in the region, which created a wall of water that washed away many of the local residents' homes, cars, and other belongings. Fortunately, there has been an outpouring of support by personnel from NCI and our partner organization, Pronatura, in an effort to rebuild lives literally



washed away by the storm. A shelter and a kitchen were set up for the residents, and government officials have sent in doctors and food supplies. A US donor has also purchased notebooks and backpacks for the children, all of whom lost all their school supplies in the flood. Because of high water and washed out roads, which were exacerbated by Hurricane Norbert, travel and movement of supplies into and within NCI's reserve, Rancho Monte Mojino, have been virtually impossible except by mule and burro. Efforts are now turning to repairing roads (this is done totally by hand) and opening up mule and foot trails. The aftermath of the hurricane was a very difficult time for everyone in the area, but because of the incredible amount of concern and help, residents are slowly rebuilding their lives in this exceptional region.

San Diego Zoo Scientists Explore Palm Research Possibilities at Rancho Ecológico Monte Mojino

In mid-December, 2008, Dr. Bryan Endress and Christa Horn (pictured in photo) from the San Diego Zoo spent several days visiting Rancho Ecológico Monte Mojino. The purpose of their scouting trip was to get an overview of two species of native palms that are significant in Sonoran crafts and construction. *Brahea aculeata*, which is utilized for thatching roofs, and *Sabal uresana*, a source of fronds for weaving baskets and sleeping mats. Dr. Endress is director of the Applied Plant Ecology Division of San Diego Zoo's Conservation Research Center, and Christa Horn is a research technician. The Applied Plant Ecology Division focuses on conservation, sustainable management, and restoration of plants that are potentially impacted by human use and activity. Dr. Endress has worked extensively on a sustainable palm project in northeastern Mexico at El Cielo Biosphere Reserve in the state of Tamaulipas.



Endress and Horn had the opportunity to visit several areas within Rancho Ecológico Monte Mojino, ranging from places where the palms have been heavily impacted by grazing to more remote sites, accessible only on horseback, where stands of *Brahea* and *Sabal* are in excellent condition. They also saw examples of palms that are recovering as a result of improved management efforts.

At the conclusion of the trip, they visited Sabinito Sur to see palm crafts made by the people in the village. One possibility under consideration is to market the hand-woven Sabinito baskets at the San Diego Zoo.

New NCI Website Launched

Through the work of a Peace Corps volunteer based in NCI's Loja, Ecuador office, we have launched a brand new English language website for the organization. The new site features a clearer and more spacious design, updated texts, a more robust news section, and new photos. The web page is a work-in-progress and we are always looking for feedback, comments, and suggestions to further improve the site. A new Spanish language site will be created in the upcoming months as well to reflect the new design.



The new website can be accessed here: <http://www.natureandculture.org>

Feedback, comments, and suggestions can be sent to Jason Kreiselman at: jkreiselman@naturalezaycultura.org.