

# EcoMinga Foundation Progress Report 2008

By Lou Jost

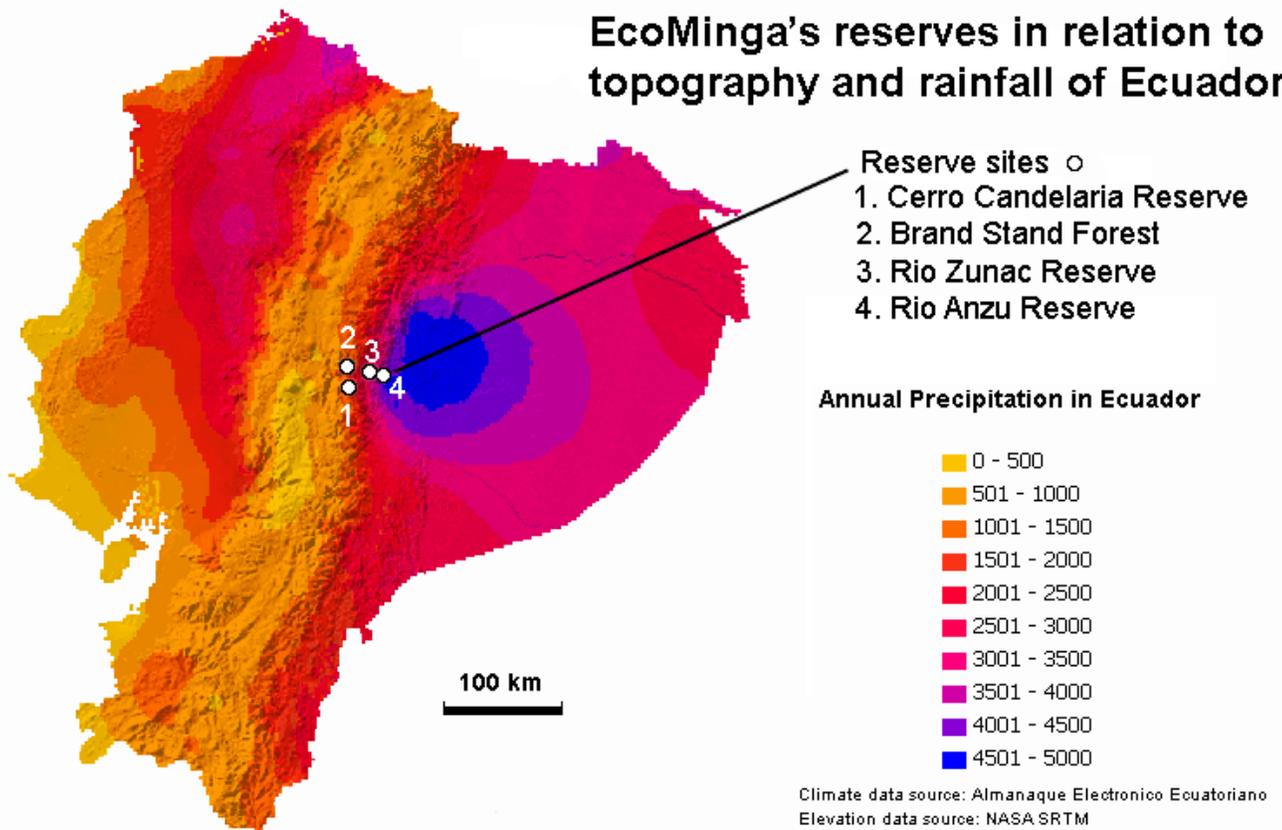


*Top of the Cerro Candelaria Reserve. Photo: Luis Recalde*

The western edge of the Amazon Basin contains some of the most diverse cloud forests in the world, and some of the most endangered. The EcoMinga Foundation has been working to establish forest reserves in this part of the world, specifically in central Ecuador. The economy of this region runs largely on ecotourism, so the local people are supportive of concrete efforts to preserve these forests. By working closely with the local people and by establishing ecological reserves in strategic places, we can preserve this region's biodiversity and simultaneously improve the standard of living of the people who live here.

This report summarizes our progress over the last year.

## EcoMinga's reserves in relation to topography and rainfall of Ecuador



### Land Purchases: Cerro Candelaria Reserve

The EcoMinga Foundation's forest reserves in Ecuador grew by about 1000 hectares this year. We now have 3900 hectares (9750 acres) under our ownership and protection. Our largest reserve is **Cerro Candelaria Reserve** (see map above), which now has more than 2600 ha. This reserve grew by 538 ha this year, at an average price of \$125/ha (\$50/acre) for these new properties.



This reserve is the home of endangered wildlife such as Mountain Tapir, Spectacled Bear, and Highland Woolly Monkey, as well as unique plants such as our newly discovered tree species pictured here. This tree, like many other species of plants, is so far known only from our reserve and nowhere else in the world. It is being named in honor of Sir David Attenborough, patron of EcoMinga's partner, World Land Trust.

*New Blakea tree species. Photo by Lou Jost*

## Land Purchases: Brand Stand Forest



With the help of a donation to World Land Trust by the company, Brand Stand (through their Organic Meltdown chocolate), we have established the 347 ha **Brand Stand Forest** sector, close to Candelaria but on the north side of the Rio Pastaza, adjoining Parque Nacional Los Llanganates. This sector is currently difficult to access, and for this reason it has been virtually untouched by humans, but cattle ranchers are now encroaching on the area. We are excited that we will be able to protect this forest.

*Masdevallia rosea*. Photo Luis Recalde

## Land Purchases: Rio Zuñac Reserve

Our **Rio Zuñac Reserve** has also grown this year, with several new purchases totaling 144 ha. One of these purchases was through funding from the World Land Trust – US, and another with funding from the World Land Trust (and in particular Dr. McWilliam). In contrast to our previous purchases in this area, these purchases have full legal title (escrituras). Our earlier purchases were of possession rights. These new purchases considerably strengthen our position in the area. We are currently working on obtaining escrituras for our other properties there. This reserve is particularly rich in new endemic species of plants, especially miniature orchids.



*Young river otter in the Rio Zunac. Photo Israel Valencia*  
Below: *Cock of the Rock*, and new *Lepanthes* orchid from the Zunac.



## **Rio Anzu Reserve**

Our Rio Anzu Reserve, is a lowland forest growing on limestone, an unusual situation which makes this forest distinctive in its mix of species. It is now the focus of an ecotourism project of the town of Mera, in the province of Pastaza. This project could be good or bad for our reserve. We have now gotten involved in the project from the inside, and we hope we can guide it so that it really turns into something beneficial for the area.



*The limestone canyon of the Rio Anzu. Photo Lou Jost.*

## Investigations

This year we have supported an investigation of the reptiles and amphibians of our reserves, through a grant by our director Nigel Simpson to the Jocotoco Foundation. The investigators were from the Ecuadorian Museum of Natural Sciences (mainly Mario Yanez and Juan Pablo Reyes). They discovered at least three new species of frogs in our reserves, and more than eleven additional species cannot be identified yet and may turn out to be new.



*Frogs of the Rio Anzu. Photos Juan Pablo Reyes*

Thanks to a small grant from World Land Trust, we have sponsored a study by the University of Florida at Gainesville to analyze the DNA of the most special plants of Cerro Candelaria, the orchids of the genus *Teagueia*. This study may reveal the evolutionary history of one of the most remarkable plant radiations in the world, the 30 recently discovered species of *Teagueia* orchids which grow only on the mountains around Baños. This radiation is currently the subject of an exhibit in the Smithsonian Institution (Jan 25-April 2009).



*New Teagueia species from our area. Photo Lou Jost*

We are exploring the deep interiors of our reserves, where we are beginning to discover enormous ancient trees such as the mahogany tree (*Swietenia* sp.) shown below. This tree has a diameter of almost 2 meters, an extraordinary find in these very dynamic cloud forests.



*Our guard Luis Recalde with a giant mahogany tree in Candelaria. Photo Juan Pablo Reyes.*

## **Development of alternative agricultural crops for our neighbors**

We are slowly advancing with our project to help our neighbors grow organic shade grown coffee under a canopy of native trees. We have now sponsored a study of the biological characteristics of the soil and the quality of the existing coffee trees in the area, and in a few weeks an organic coffee expert will do further studies. We still need to do an economic study as well. We have some local farmers who will let us use their land for test plantings. If this project succeeds, the local people will reforest the area around our reserves and simultaneously improve their standard of living by growing this high-value crop.

## **Reforestation**

In our Cerro Candelaria Reserve there are about 6.7 hectares of abandoned pastures. With the help of World Land Trust, through its Carbon Balanced program, we have reforested one hectare as a test. This test succeeded and we have sown a very diverse forest, focusing on tree species that are heavily used by local birds and animals. We are now in the process of reforesting the rest of these pastures.



*Forest nursery. Photo by our reserve caretakers.*

## Recognition

Various publications have mentioned our reserves this year. The main one was a booklet published by the Ministerio del Ambiente about Parque Nacional Sangay and its buffer zone. This booklet included a chapter by me about the region's orchids and the importance of private reserves (such as ours) in protecting lower-elevation environments in the Upper Pastaza Watershed not contained in the park. There were also several publications about EcoMinga and the Teagueia orchids



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*A page from the Swedish orchid magazine, Orkideer. showing our Candelaria Reserve.*

## Personnel and finances

We now have four reserve caretakers working full time in the reserves: Jesús Recalde, Luis Recalde, Fausto Recalde, Israel Valencia. They not only make sure that nobody hunts or cuts trees, they also explore and photograph and learn about the wildlife of the reserves. They also act as our ambassadors in their communities. We also have two half-time administrators (Juan Pablo Reyes and I), a half-time Executive Director (Javier Robayo), and two part-time accountants (one in Quito and one in Baños). Our fixed costs for these salaries are about \$3000/month plus about 20% in taxes and insurance. In 2008 these costs were covered by World Land Trust and a personal donation by Henri Botter and Ardy van Ooij. We must find a way to generate that amount each month for 2009. Our net donations to the EcoMinga forest reserve system for 2008 (as of Dec 24) were \$209,607, mostly earmarked for land purchases. Our expenses for the forest reserve system were \$197,422, again mostly land purchases.



*Reserve caretaker Fausto Recalde in the high paramo of Cerro Candelaria. Photo Luis Recalde*

## **Thanks**

I want to give my warmest thanks to our team: Javier Robayo (Executive Director), Juan Pablo Reyes (Reserve manager), Jesús Recalde, Luis Recalde, Fausto Recalde, Israel Valencia (reserve caretakers), Diana Recalde (helper), Matilde Alban (accountant), Jacqueline Rivera (accountant), Pablo Hermida (San Lorenzo project), our lawyer Oscar Valenzuela, our directors, especially Nigel Simpson, Lori and Juan Miguel Espinoza, and Francesca Rota, and our individual and corporate donors:

**World Land Trust (and specifically their corporate supporters:**

**PriceWaterhouseCoopers, Miko Coffee through their Puro brand, Brand Stand Chocolate, BskyB, and their many individual supporters, particularly Dr Noel McWilliam)**

**World Land Trust – US (and specifically their supporter, Wild Waters Foundation)**

**Dr. Malli and Vera Lee Rao**

**Dr. Steve Beckendorf and Cindy Hill**

**Dr. Nigel Simpson, O.B.E**

**Orchid Conservation Alliance**

**South East Pennsylvania Orchid Society (SEPOS)**

**Jardin Botanique de Montréal (Lise Gobeille)**

**Orchid societies of the Bay Area, California**

**CEIBA Foundation**

**Henri Botter and Ardy van Ooij**

**Orchid Growers Guild (Madison, WI)**

**Hilo Orchid Society, Hawaii**

**Pauline Brault**

**Atlanta Orchid Society**

**Dr. Anne Chao**

**John Little**

**Dr. Mary Gerritsen**

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**Dr. Mark Wilson**

**Canterbury School, Florida**

**Edward Keith**

**Barry Barker**

**Metamorf**

**Orchid Conservation Coalition**



*The alternative....*