

# SAVE BIODIVERSITY

## REDUCE GREENHOUSE GASES

### HELP LOCAL PEOPLE



## The Andean Rainforest Reserve

is an ancient rainforest in the upper Amazon and Andean cloud forests of southern Ecuador. This region has been declared by UNESCO to be one of the highest priority regions in the world for conservation. It's home to over 400 bird species, and an astonishing variety of plants, many of which are endangered.



These forests are highly threatened by approaching roads and unsustainable timber activities. Worldwide, the destruction of tropical forests contributes 20% to harmful greenhouse gases. That is why the protection of these standing forests will have immediate climate benefits.

Local communities in the surrounding area support the creation of this reserve and welcome sustainable programs.



This project is funded by *Living Forest™ Carbon Offsets*  
Offered by Nature & Culture International, a non-profit organization.



## THE FOREST

The areas being purchased and conserved are ancient rainforests in the upper Amazon and Andean cloud forests of southern Ecuador, a rare habitat type in an elevation band above 800 meters. This is in one of the most important regions for biodiversity in the world due to its many unique species. The region is host to such attractive mammal species as the spectacled bear, mountain tapir, and ocelot, as well as threatened bird species such as the White-breasted Parakeet and Coppery-chested Jacamar.<sup>1</sup> This region also has the highest concentration of globally threatened plant species in the world, including a great richness of orchids. Many local endemic species depend for their survival on the conservation of these tropical forests.

We are buying about 12,400 acres of beautiful forests, but their importance extends far beyond these areas. They will form critical corridors connecting Podocarpus National Park with other protected areas in Ecuador and Peru. Their purchase will allow the continued migration of species, and will also help anchor a larger integrated sustainable management plan for the entire region that will include national protected areas, and special reserves like ours.

Roads through this region will soon lead to large-scale deforestation unless these areas are protected. Conserving these areas will protect not only the region's amazing biodiversity, but also save the life-support functions of the natural ecosystems that sustain life on earth.

## WHAT IS A "CARBON OFFSET?"

A contribution to this program is referred to as a carbon offset because it reduces greenhouse gas emissions. Tropical deforestation contributes 20% to greenhouse gases. That's why we offer *Living Forest Carbon Offsets* to reduce greenhouse gases by saving standing forests.

## HOW MUCH OFFSET SHOULD YOU BUY?

An average person in the US is responsible for 21 metric tons of carbon dioxide emissions per year. By purchasing \$80 of *Living Forest Carbon Offsets*, you save a full acre of tropical forest and completely offset your emissions.<sup>2</sup> If you are from a family with a large home or if you travel frequently by air, you should purchase twice this amount. You may use our on-line Living Forest Personal Carbon Calculator to get a more exact figure if you wish. Businesses can also estimate their carbon footprint with our on-line Living Forest Business Carbon Calculator.



<sup>1</sup> Key bird species of conservation concern that will benefit from the new reserve include the globally threatened White-breasted Parakeet (*Pyrrhura albipectus*), Coppery-chested Jacamar (*Galbula pastazae*), and Orange-throated Tanager (*Wetmorethraupis sterrhopteron*) and also many other rare species: Subtropical Pygmy Owl, Little Woodstar, Chestnut-tipped Toucanet, Black-mandibled Toucan, Spectacled Prickletail, Equatorial Graytail, Plumbeous-crowned Tyrannulet, Rufous-browed Tyrannulet, Amazonian Umbrellabird, Andean Cock-of-the-rock, Gray-mantled Wren, Bronze-green Euphonia, Straw-backed Tanager, and Vermilion Tanager. This area also represents a key wintering area for the rapidly declining boreal migrant Cerulean Warbler (*Dendroica cerulea*).

<sup>2</sup> Our program reduces greenhouse gases by protecting standing forests that would otherwise be deforested. We calculate the carbon offset from saving these tropical forests as follows: The destruction of these forests would release the carbon equivalent of 320 tons of CO<sub>2</sub> per acre (199 metric tonnes carbon per hectare). The average percent of forest that would have been destroyed absent the conservation measures (additionality) is believed to be very great over the coming years, but we use a conservative figure of 10%. Tropical forests have very high carbon values, and their destruction and conversion to pasture would emit the carbon equivalent of 320 tons per acre (The carbon dioxide saved per acre is 320\*10% = 32 tons) In this project the cost of saving one acre of forest is \$80, so the cost per metric ton of carbon dioxide can then be calculated as: \$80/32 tons of carbon dioxide per acre) = \$2.50 per metric ton carbon dioxide.



Photo courtesy of NASA

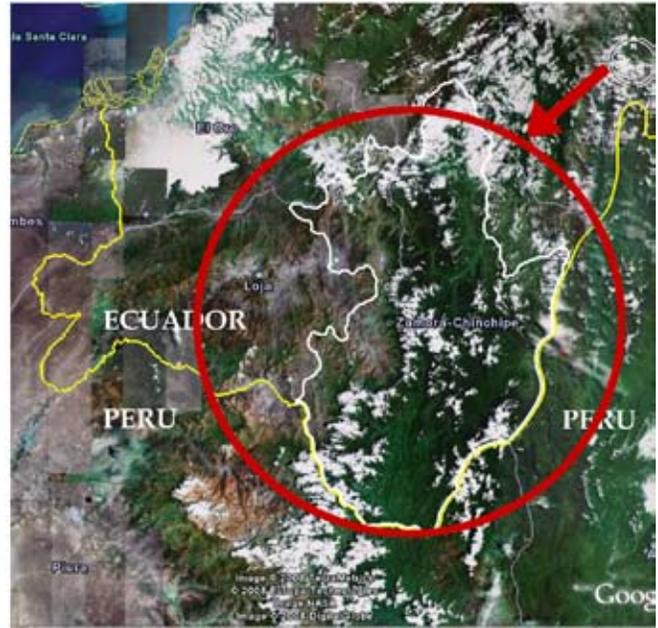


Photo courtesy of Google Earth

As shown above the area being purchased and protected is within the Podocarpus – El Condor Biosphere Reserve approved by UNESCO with the support of local communities. This project is urgent because privately owned rainforest areas will not be protected until they are purchased and converted into reserves. Along with purchase of this land, a forest reserve management fund is being established to help support an integrated management plan, and at the same time preserve and strengthen the culture of the people on the surrounding lands.

Nature & Culture International maintains a permanent office in these areas and works directly with the local and indigenous communities, respecting their rights and traditions.

**WHY NOW?**  
 Five reasons to buy *Living Forest Carbon Offsets* now:

1. Reduce global warming. Carbon offsets help you reduce the climate impact of your everyday life. For businesses, carbon offsets are the easiest way to become carbon-neutral.
2. Protect a biodiversity hot-spot. Tropical forest ecosystems contain extraordinary biodiversity with genetic resources needed to develop vital lifesaving compounds.
3. Help local people. Protect their natural resources so they can follow a sustainable way of life.
4. Time is running out. In 5 years it will be too late.
5. Have an answer when your grandchildren ask: "What did you do to help?"

**COST PER ACRE AND FUNDING REQUIRMENTS**

This rare tropical forest can be saved for a very low cost. See details below. Nature & Culture International is offering *Living Forest Carbon Offsets* to fund this project.

Land Purchase Price <sup>3</sup> .....	\$843,000
Forest Reserve Management Fund <sup>4</sup> .....	\$150,000
Project Total .....	\$993,000
Total cost per acre.....	\$80
Cost per metric ton CO2 saved.....	\$2.50

<sup>3</sup> The land will be purchased from private landowners. The price for each lot will vary, but the average price will be \$68 per acre. To the extent that the average price is lower than \$68 per acre, the final reserve will be larger than 12,400 acres.

<sup>4</sup> The Forest Reserve Management Fund will be spent over a period of three years to fund the initial forest management program. The long-term management will be provided by Nature & Culture International as part of its core mission. The program will be combined with low-impact sustainable development and ecotourism promotion.

To purchase *Living Forest Carbon Offsets*  
 please go to our website at:  
**<http://natureandculture.org>**  
 or contact us at  
 Nature & Culture International  
 1400 Maiden Lane, Del Mar, California 92014  
 Phone (858) 259-0374

All payments are tax deductible in the United States  
 Nature & Culture International is a non-profit, publicly supported organization,  
 with 501(c)(3) tax exempt status