



# Carbon Balanced

Report prepared for Web Wiz, October 2018

World Land Trust (WLT) works with local partners around the world to save and protect threatened tropical forests and other vital habitats for wildlife. In 2008, WLT introduced its innovative Carbon Balanced programme offering individuals and companies a means to offset their unavoidable greenhouse gas emissions through the protection and restoration of carbon-rich wildlife habitats in the tropics.

It is estimated that 10-20% of global greenhouse gas emissions are caused by forest destruction and degradation.

## Addressing climate change through Carbon Offsetting

WLT Carbon Balanced projects are in areas where tropical forest habitat, which stores large volumes of carbon in its vegetation and soil, is critically threatened. WLT uses funds raised through Carbon Balanced to protect land from deforestation and degradation, thus preventing the release of CO<sub>2</sub> into the atmosphere. Retaining standing forest is WLT's preferred approach for biodiversity conservation, and where appropriate, this technique is supplemented by forest restoration in areas of degraded or cleared land.

In 2017, WLT Corporate Supporters offset 3,401 tonnes of CO<sub>2</sub> through Carbon Balanced.

## Current Carbon Balanced projects



**Ecuador:** WLT is working with local partner Naturaleza y Cultura Ecuador (NCE) to secure parcels of carbon-rich habitat and extend Nangaritza reserve which protects the superb biodiversity of the Amazonian Andes in south Ecuador. More information about this project on pages 2-3.

**Guatemala:** The newest addition to the Carbon Balanced portfolio, WLT's partner FUNDAECO has developed an off-setting project in partnership with Althelia Climate Fund to protect 316,000 acres (128,000 hectares) of tropical habitat to ensure a safe haven for wildlife while locking up carbon.



**Vietnam:** WLT is working with local partner Viet Nature Conservation Centre to protect 49,420 acres (20,000 hectares) of Annamite lowland forest at Khe Nuoc Trong, north Vietnam. By protecting and aiding the recovery of this forest, approximately 50,000 tonnes of CO<sub>2</sub> emissions will be stored each year. Carbon Balanced Paper (right) funds this project.

**DID YOU KNOW?**



You can offset your printed materials through WLT's Carbon Balanced Paper scheme, where the carbon impacts have been offset through WLT's Carbon Balanced conservation project. Just ask your printer or visit [carbonbalancedpaper.com](http://carbonbalancedpaper.com)

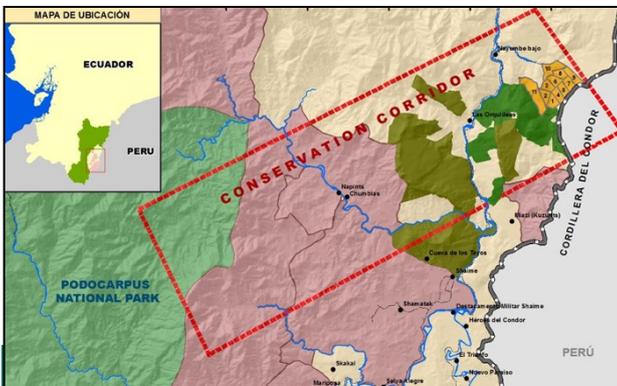
Top: Nangaritza reserve © Charlotte Beckham/WLT; Left: Red-skirted Tree Frog © Alejandro Arteaga, [tropicalherping.com](http://tropicalherping.com); Above right: Baird's Tapir © Bernard Dupont; Left: Red-shanked Douc Langurs © Bjornolesen.com/Viet Nature

## Spotlight: Nangaritza Project, Ecuador



The Nangaritza valley in southern Ecuador is the last remaining extensive band of forest connecting the cloud forests of the Andes Mountains with Amazon Rainforest in Peru.

This isolated transition zone, linking Ecuador's Podocarpus-El Condor Biosphere Reserve with the Cordillera Del Condor mountain range on the Peruvian border, means Nangaritza has a complex mosaic of ecosystems including Amazonian lowlands, Andean foothills and Sandstone plateaus similar to Venezuela's Tepuys (table top mountains) As a result, the Nangaritza valley supports a rich biodiversity including a high level of endemic species.



The valley's forests also provide a significant carbon reservoir, with studies identifying up to 170 metric tonnes of stored carbon per hectare, and with this value increasing to 250 metric tonnes in mature forests and more developed soils.

This region is highly threatened. To the north of the Nangaritza valley, most of the Amazonian foothill forests have been degraded as a result of agriculture and cattle grazing, logging and illegal mining.

**Nangaritza Reserve (dark green) amongst other protected areas including Shuar Territories, Reserves and National Park.**

WLT has been working with local partner NCE since 2012. The Carbon Balanced programme funds the protection and expansion of Nangaritza Reserve, known locally as Maycú, to ensure the forest remains intact as a reservoir of stored carbon. Where areas of forest are already degraded, protection allows the forest to recover naturally or through the planting of native tree species, which as they grow, take in CO<sub>2</sub> from the atmosphere and incorporate it into this reservoir.

The project also has very high conservation value for biodiversity, as well as measurable benefits, including water supply, for the indigenous Shuar communities and local farmers who NCE is working closely with to create a protected network of private, municipal and indigenous reserves across Nangaritza valley.

## Biological Richness

With its unique mixture of ecosystems, the Nangaritza valley supports amazing biodiversity. This region around Podocarpus National Park has some of the highest levels of plant diversity in the world, with more than 3,500 plant species, many of them endangered and 40 per cent of them endemic to Nangaritza.



This area is home to more than 600 bird species, including the threatened Military Macaw, 60 species of hummingbird, 80 different tanagers and many endemic species found only in these mountains.

An abundance of amphibian and reptile species rely on this habitat, many endemic, and many still undiscovered due to the remoteness of the region.

Nangaritza provides habitat for an array of endangered rainforest mammals such as Mountain Tapir, Ocelot, Spectacled Bear and Jaguar.



**Above left: Rainbow Boa, Nangaritza Reserve. © Jaime Culebras / tropicalherping.com**

**Left: Nangaritza Reserve is the only area in Ecuador where the rare Orange-throated Tanager is found. © Lars Petersson**

## Community tourism initiatives in Nangaritza

NCE has been working with regional community organisations to research and develop tourism initiatives for Nangaritza reserve (Maycú).

For the past few years, NCE has helped the Las Orquideas community, in the neighbouring reserve to Maycú, to access funding through an Ecuador government social programme that pays landowners for protecting forest on their property. Using part of these funds, in early 2018 the community landowner organisation (ATASMO) completed the construction of a multi use building and restaurant, which has now receives groups of tourists, who can participate in ecological guided walks along Maycú's trails.

A tourism expert and ATASMO members have developed 3-5 day tour packages, and NCE instructors have run tourism training workshops for ATASMO and indigenous Shuar community members including a workshop on Maycú's unique ecology, geology and flagship species.

Four community members have also taken part in a 4-day guide training workshop for Maycú's nature reserves and cultural attractions, and each has received formal guide training accreditation from the National Ministry of Tourism. NCE plans to start actively promoting tourism in Maycú including exploring the feasibility of an annual bird-watching and cultural festival.



Community tourism training, Nangaritza  
© NCE

## Nangaritza Symposium

In April, NCE held a scientific symposium about Nangaritza with the Provincial Government of Zamora Chinchipe, the Environmental Ministry, and the National Institute of Biodiversity. Felipe Serrano, Andes and Amazon Program Coordinator, NCE, spoke about the importance of the Nangaritza valley as a link between the Andes and the Amazon, the region's unique wildlife with species still to discover, and NCE's work with the local communities of the region to create a network of private and public protected reserves.

Outcomes from the symposium include:

- ⇒ the commitment of the Environment Ministry to promote the reviewing of the legalised mining concessions in Nangaritza with the Mining Ministry
- ⇒ the commitment of the Provincial Government of Zamora Chinchipe to promote Nangaritza through a regional communications campaign called 'Salvemos el Alto Nangaritza' which is now underway.

**New frog discovered** A research team of Herpetologists from the Pontificia Universidad Católica del Ecuador recently visited Nangaritza Reserve on an expedition through the Museo de Zoología.

Herpetology is the branch of zoology concerned with the study of amphibians, including frogs, toads, salamanders and newts, and reptiles, including snakes, lizards, turtles and tortoises.

During the expedition, the team discovered within Nangaritza Reserve a frog new to Ecuador called the Charapita glass frog (*Centrolene charapita*), a species that had only previously been recorded in Peru.



Amphibian field work © NCE

World Land Trust thanks Web Wiz for your contributions to the Carbon Balanced programme.  
Between August 2010 and July 2018, Web Wiz has offset 78.4289 tonnes of CO<sub>2</sub>  
helping to protect tropical habitat for wildlife.

Thanks to the contributions of WLT Carbon Balanced supporters, and through WLT's Buy an Acre programme, to date nearly 3,500 acres have been purchased and incorporated into protection within Nangaritza Reserve.