

NATURE AND CULTURE'S BI-NATIONAL ANDEAN CORRIDOR



A more than 200-mile conservation corridor connecting cloud forests, montane forests, páramo grasslands, and inter-Andean valleys



The Andes Mountains.

Nature and Culture International is working to protect a biological corridor extending 2.2 million acres down the spine of the Andes, protecting one of the most diverse ecosystems on Earth that is the home to the Andean bear (also known as spectacled bear).

The threats to this area are imminent, as the region is suffering from a high rate of deforestation. There are currently five national parks along the Corridor, but many areas between these parks are unprotected (see attached map).

Nature and Culture is proposing an ambitious series of community, municipal, regional, and national reserves to create an intact natural corridor that will link the protected areas and the critical home of the bear. This corridor will also safeguard other native wildlife and improve ecosystem services, such as water, for the surrounding communities.

Nature and Culture has successfully worked with local governments and communities in the Corridor to establish 1 million acres of reserves. Based on Nature and Culture's effectiveness in establishing these reserves, additional municipal governments and local communities have asked to partner to expand land and watershed protection throughout the Andean Corridor. By the end of 2019, we could legally protect 1.2 million additional acres to conserve key ecosystems that provide clean water and protect Andean bear habitat.



The Andean Corridor in Ecuador.

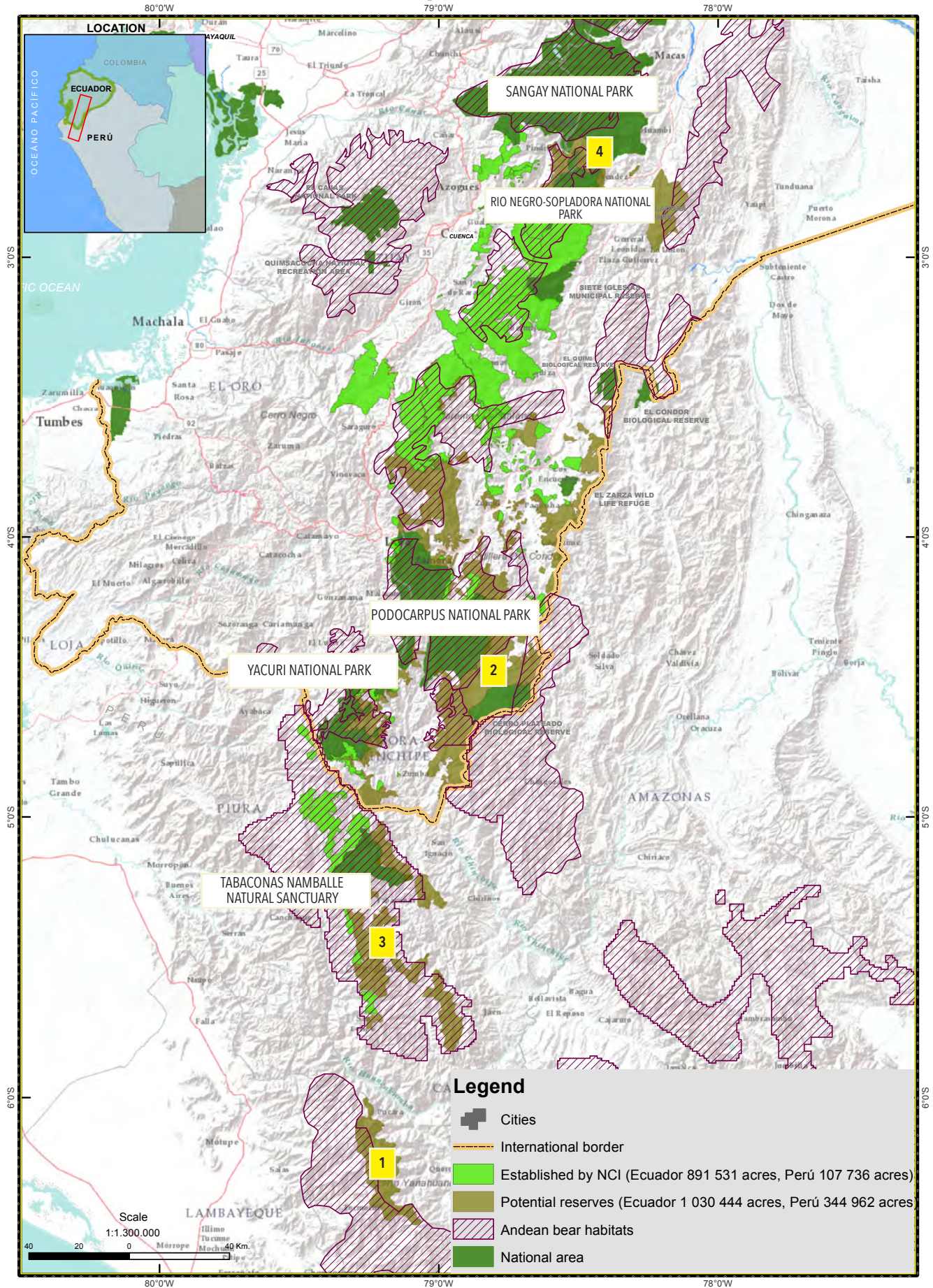
We welcome your continued partnership to protect four priority areas in Ecuador and Peru to further extend the Corridor and the protection of Andean bears. These areas include:

1. Cañaris Forests Private Conservation Area, Peru (21,500 acres)
2. Zamora-Chinchipe Provincial Reserve, Ecuador (864,000 acres)
3. Jaén and Tabaconas Regional Conservation Area, Peru (80,800 acres)
4. Santiago de Méndez and Sevilla de Oro Municipal Reserves, Ecuador (171,555 acres)

See **Bi-National Tropical Andes Corridor** map for locations.

Attached you will find information on each of these areas. Please feel free to contact Christine Andersen, candersen@natureandculture.org, 858-259-0374, if you would like additional information or have questions regarding these key opportunities in the Bi-National Andean Corridor.

Bi-National Tropical Andes Corridor



Protecting 21,000 acres of the home of the last remaining Quechua speakers in northern Peru

Overview

The forests of Cañaris constitute the largest remaining western montane forests in Peru and the only humid forest ecoregion of the western Peruvian Andes. This area is also home to Shin Shin Lagoon, the largest mountain wetlands in the region. Because of its uniqueness, the Peruvian Ministry of Culture is considering declaring the area a Cultural Landscape.



Cañaris girl. Photo credit: Paul Viñas

Northern Peru's last remaining group of indigenous Quechua speakers reside at the edge of the Cañaris forest and are urgently requesting its protection. The proposed area is home to a diversity of endemic species only found in the Western Andes montane forests, including the Inca rainbow hummingbird and gray-headed anteater. It is also critical habitat for the Andean bear, mountain tapir and endemic bearded guan. Cinchona trees, which provide a



Waterfall found in Cañaris montane forests.

source of quinine used to treat malaria, are a part of these forests. The area also houses the main water source for the La Leche low river valley, which is critical for agriculture in Peru's north coast.

Program Description

Nature and Culture, in collaboration with the Spectacled Bear Conservation organization, seeks to support the communities of Cañaris and Incahuasi in establishing a private community protected area to ensure the survival of their indigenous culture and conserve an already extremely threatened biodiverse ecoregion.

Threats

- Potential reactivation of mining operations by the Cañarico Mining Project Company, currently detained due to lack of social support from the Cañaris community.
- Unsustainable grazing and subsistence agriculture techniques.

Goals

1. Achieve the declaration of the Cañaris Private Community Protected Area by 2019.
2. Set up a management system for the effective protection of the forest and biodiversity in the Cañaris Private Community Protected Area.

PROGRAM SUMMARY

GLOBAL BIODIVERSITY RANK #1 (TROPICAL ANDES HOTSPOT)

TOTAL ACRES OF PROTECTION 21,500 ACRES

TIMELINE ESTABLISH END OF 2019

HABITAT TYPES WESTERN MONTANE FOREST, WETLANDS

FLAGSHIP SPECIES ENDANGERED ANDEAN TAPIR, VULNERABLE ANDEAN BEAR, VULNERABLE BEARDED GUAN

PROTECTION STATUS PRIVATE COMMUNITY CONSERVATION AREA

PROGRAM LEADER ALEX MORE

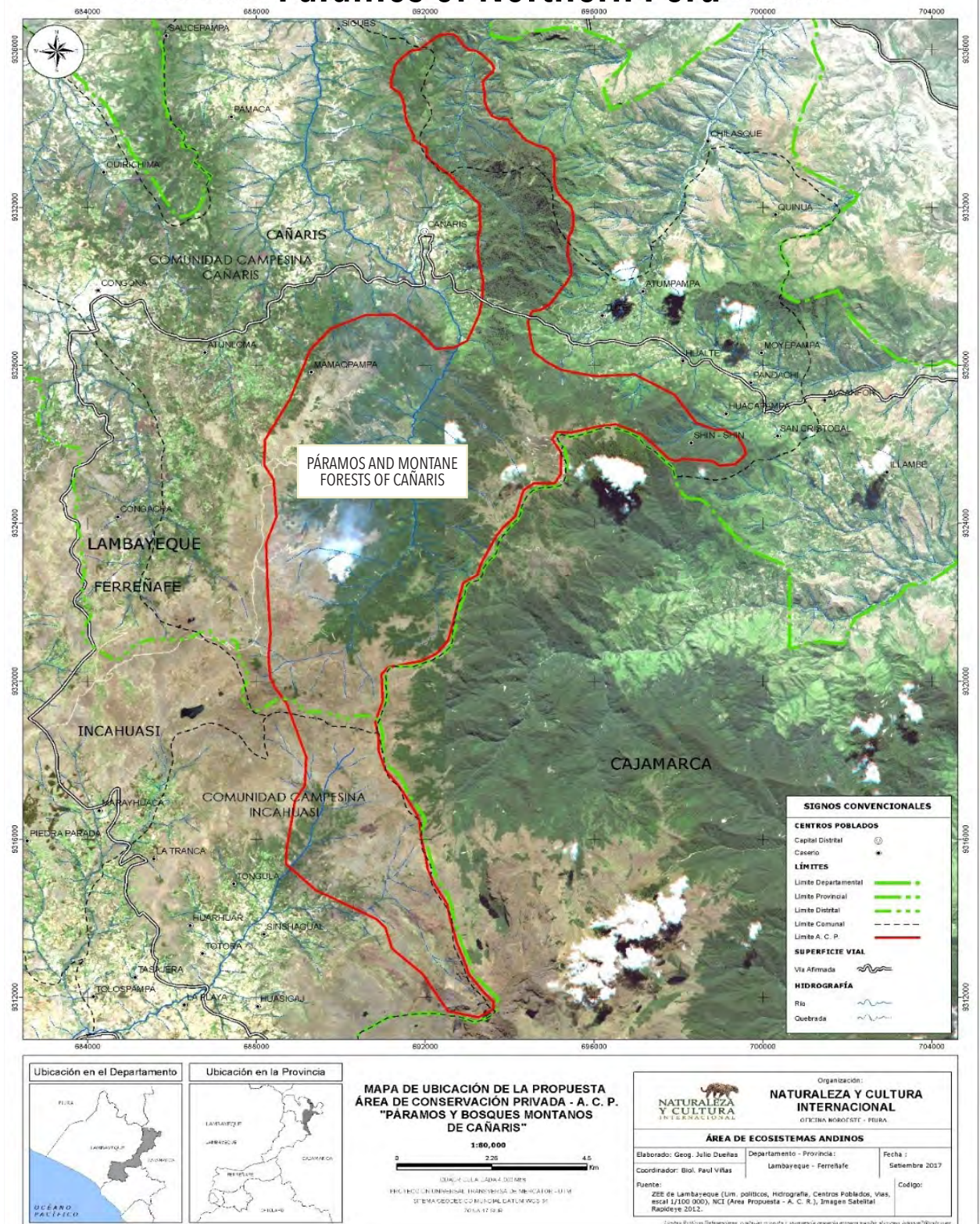
FUNDS NEEDED IN 2018 \$40,000

FUNDS NEEDED IN 2019 \$60,000



Western montane forests in Peru.

Andean Corridor in the Cloud Forests and Páramos of Northern Peru



Protecting 864,000 acres of Andean bear habitat and plant diversity

Overview

The Zamora-Chinchipec Province in southern Ecuador has some of the highest levels of plant diversity in the world. It is home to numerous endemic and endangered species, including the red-faced parrot and flagship species such as the endangered white-bellied spider monkey and vulnerable Andean bear.

The 91,000 people living in the province depend directly on the ecosystem services that are generated in the proposed reserve.

Rivers and streams sourced from the proposed reserve provide drinking water for nine municipalities of the province.



Stream found in the province.

Threats

In the last few decades, Zamora-Chinchipec has suffered the most devastating deforestation process in its history. 29,000 acres on average are deforested per year, the second highest rate of deforestation in Ecuador. In the northeast of the province, the two largest metal mining projects in Ecuador have been established. These projects will significantly modify that area's landscape and change the economic dynamics creating the urgency to establish conservation areas in the rest of the province area, unaffected by mining.

Goals

1. Declare and set up the management structure for the 864,000 acre Zamora-Chinchipec Provincial Reserve.
 - Result 1: Complete the legal requirements for the declaration of the protected area.
 - Result 2: Set up initial management activities to ensure sustainability.
2. Assist researchers from the Technical University of Loja with implementation of an early alert bear monitoring system within the reserve for human-bear conflicts.
3. Implement an education and public outreach campaign on the benefits of ecosystem services (e.g., potable water) and importance of the Andean bear's role in maintaining forest ecosystems.



Shuar family in Zamora-Chinchipec.

15% of the province's population is indigenous, principally members of the Shuar Nation. These communities have preserved and used natural forests sustainably for centuries, with their own production systems and ancestral practices.

Program Description

Nature and Culture together with the Zamora-Chinchipec government has an opportunity to establish the Zamora-Chinchipec Provincial Reserve in the heart of the habitat range of the Andean bear.

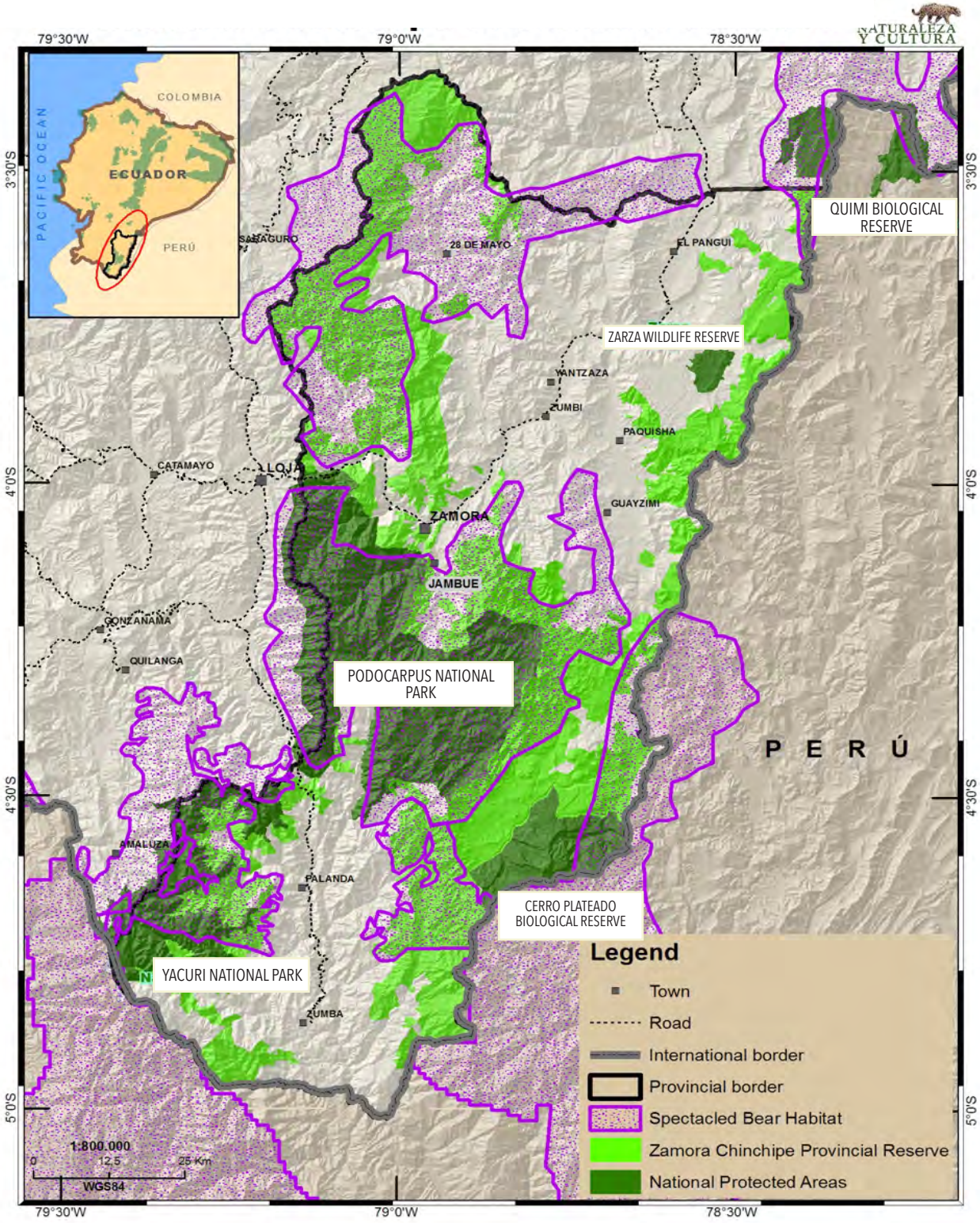
PROGRAM SUMMARY

GLOBAL BIODIVERSITY RANK	#1 (TROPICAL ANDES HOTSPOT)
TOTAL ACRES OF PROTECTION	864,000 ACRES
TIMELINE	ESTABLISH END OF 2018, MANAGEMENT AND OUTREACH THROUGH 2019
HABITAT TYPES	CLOUD AND MONTANE FORESTS, PÁRAMO GRASSLANDS
FLAGSHIP SPECIES	ENDANGERED WHITE-BELLIED SPIDER MONKEY, VULNERABLE ANDEAN BEAR, ENDANGERED MOUNTAIN TAPIR
PROTECTION STATUS	PROVINCIAL RESERVE
PROGRAM LEADER	FELIPE SERRANO
FUNDS NEEDED IN 2018	\$139,725
FUNDS NEEDED IN 2019	\$123,625



Andean bear captured by a camera trap in Jamboé Valley.

Proposed Zamora-Chinchipe Provincial Reserve



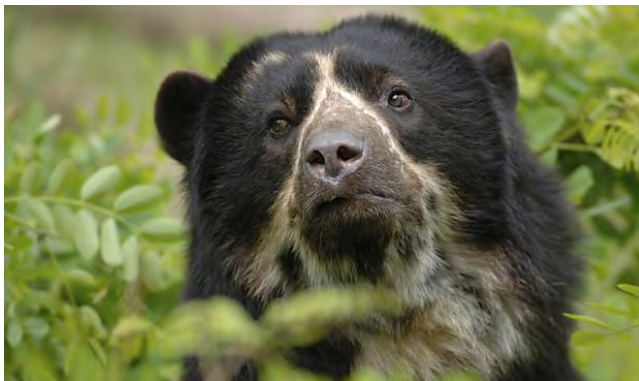
Protecting 80,800 acres of intact habitat for threatened umbrella species



Montane forests in the Tabaconas district.

Overview and Program Description

The proposed Jaén and Tabaconas Regional Conservation Area of northwest Peru is located in the western Andes forests, one of the planet's most biodiverse yet threatened regions. While several conservation areas have already been designated within this portion of the Corridor, this area will protect higher elevation ecosystems that are critical for migrating species to adapt to climate change.



Andean (or spectacled) bear.



Flame-faced Tanager found in montane forests in Peru.

Surrounding the proposed reserve are eight villages with approximately 500 families who will work with Nature and Culture and the regional government to establish the reserve. The communities are in support of the establishment of the reserve as they are facing the threat of large agricultural expansion and deforestation from outsiders.

This extended corridor is home to some of the highest concentrations of endemic species, including the Andean bear and very rare mountain tapir. Creating the Jaén and Tabaconas Regional Conservation Area is particularly important given both the Andean bear and mountain tapir require large territories to maintain viable populations. The surrounding conserved areas are not large enough to ensure their survival, therefore this additional reserve would provide critical habitat needed to sustain these umbrella species.

Threats

- Deforestation caused by agricultural expansion and timber extraction, specifically of the threatened Podocarpus tree species.

Goals

1. Achieve the declaration of the Jaén and Tabaconas Regional Conservation Area by the end of 2019.
2. Set up a management system for the effective protection of the forest and biodiversity in the proposed reserve.



Páramo in the Sallique District, Jaén Province.

PROGRAM SUMMARY

GLOBAL BIODIVERSITY RANK #1 (TROPICAL ANDES HOTSPOT)

TOTAL ACRES OF PROTECTION 80,800 ACRES

TIMELINE END OF 2019

HABITAT TYPES PERUVIAN YUNGAS, MONTANE FORESTS, PÁRAMO GRASSLANDS

FLAGSHIP SPECIES ENDANGERED ANDEAN TAPIR, VULNERABLE ANDEAN BEAR, ANDEAN NIGHT MONKEY

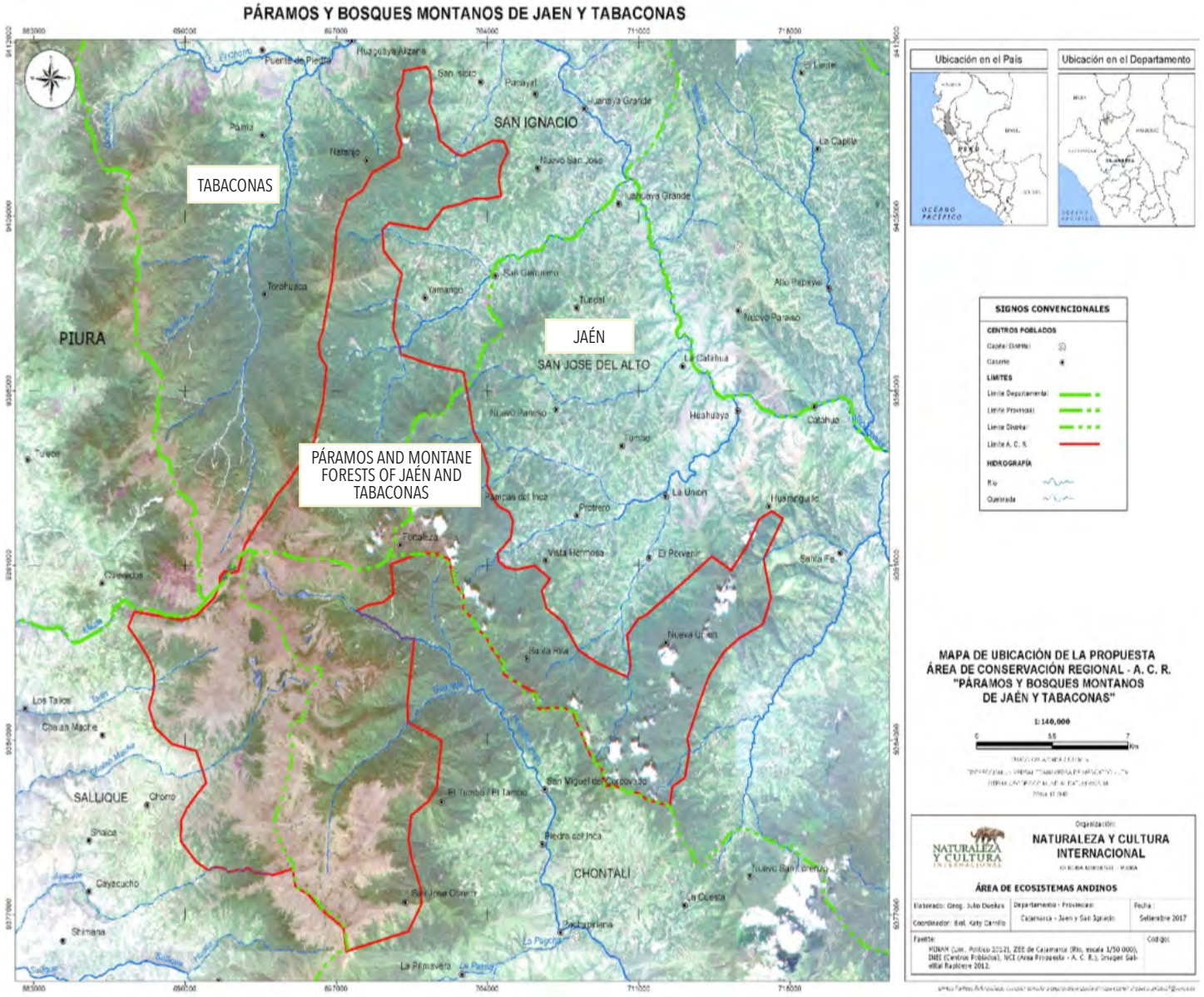
PROTECTION STATUS REGIONAL CONSERVATION AREA

PROGRAM LEADER ALEX MORE

FUNDS NEEDED IN 2018 \$60,000

FUNDS NEEDED IN 2019 \$60,000

Páramos and Forests of Jaén and Tabaconas



Protecting 171,555 acres of Andean bear habitat through the establishment of municipal water funds

Overview

The two proposed municipal reserves, Santiago de Méndez and Sevilla de Oro, are critical buffer areas for the recently established Río Negro-Sopladora National Park. These areas would provide essential connectivity for wildlife and biological resources between Sangay National Reserve and Río Negro-Sopladora National Park (see map).



Both regions have high levels of plant diversity.

Program Description

Water is one of the most valuable ecosystem services provided by the Andes for southern Ecuador’s agricultural sector. In 2008, Nature and Culture developed a regional

PROGRAM SUMMARY

GLOBAL BIODIVERSITY RANK	#1 (TROPICAL ANDES HOTSPOT)
TOTAL ACRES OF PROTECTION	171,555 ACRES
TIMELINE	END OF 2019
HABITAT TYPES	CLOUD AND MONTANE FORESTS, PÁRAMO GRASSLANDS
FLAGSHIP SPECIES	VULNERABLE ANDEAN BEAR, ENDANGERED MOUNTAIN TAPIR, NEARLY THREATENED JAGUAR
PROTECTION STATUS	MUNICIPAL RESERVES
PROGRAM LEADER	FABIÁN RODAS
FUNDS NEEDED IN 2018/2019	\$57,500
FUNDS NEEDED FOR MANAGEMENT (2020-2021)	\$50,000/YEAR



Water from the Andean Corridor is crucial for nearby communities.

water fund in collaboration with municipal governments to establish reserves in the Andean Corridor. Through the water fund, municipalities pass ordinances allowing the declaration of municipal reserves for both watershed and biodiversity conservation. The water fund collects a fee for conservation as part of a family’s household water bill, which supports the management of the reserve. The reserves we are proposing will implement this water fund mechanism to provide long-term conservation and sustainable measures for the proposed reserves.

Threats

The two proposed municipal reserves are greatly threatened by a road and continuing expansion of livestock, logging, and mining activities. These threats along with a high deforestation rate in the Corridor create the imminent urgency to protect these connecting reserves.

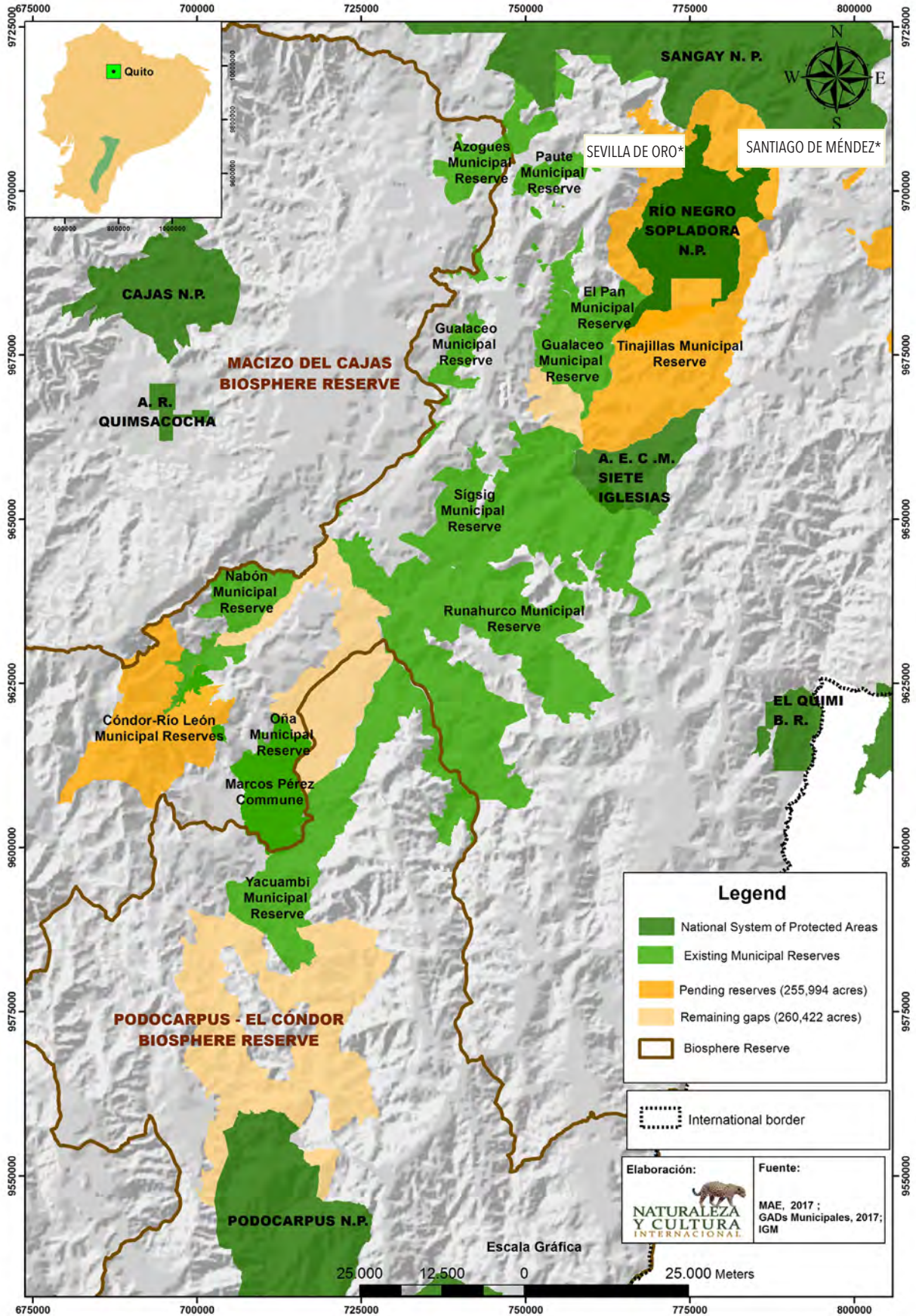
Goals

Our goal by 2019 is to establish two municipal reserves totaling 171,555 acres to safeguard both watersheds and other important ecosystems. The Cuenca, Ecuador, staff will also work to implement a sustainable water fund mechanism as they have successfully done with 13 municipalities throughout the Corridor.



Girls playing in the water in the Andean Corridor.

Proposed Two Municipal Reserves, Ecuador



*Sevilla de Oro (55,445 acres) and Santiago de Méndez (116,110 acres)