



Stretching up between Mexico and Baja California, the Sea of Cortez contains an archipelago of 40 desert islands protected under Mexican law.

A Tour of Country Programs

*The Nature Conservancy's International Program
has extended its activities into ten neotropical countries.
In a whirlwind north-to-south tour, we highlight
Conservancy activities in eight of these countries.*

MEXICO

When Hernan Cortez trekked overland from Mexico City to Honduras in 1526, he described an incredibly rich landscape, characterized primarily by expansive forests of many kinds—from highland pines to lowland rain forests. This immense natural diversity coexisted with a large and highly advanced human population that, in many areas, may have been as large as that found today. Even as late as 1926, the *Naturalist's Guide to the Americas* (published by the Ecological Society of America, the Conservancy's precursor organization) reported that "much of Mexico remains in essentially primeval condition."

Unfortunately, this is no longer true. Many traditional social systems that permitted sustainable, rational use of natural resources have simply broken down under the pressures of modernization. According to estimates made by the International Program's Biogeography Project, nearly 45 percent of Mexico's remaining forests have been significantly disturbed. Their conversion, particularly for cattle grazing, proceeds at a rapid rate, and many forest types are not expected to survive this century if current patterns continue.

The Conservancy is taking an active role in supporting and working with Mexican organizations directly involved in land conservation. In the Sea of Cortez (Gulf of California), an archipelago of more than 40 desert islands—many of them harboring endemic species—has been protected under Mexican law. The International Program is helping the National University to complete a

biological inventory of these islands (and of the sea itself) and to design a management plan.

A proposed UNESCO Man and the Biosphere Reserve lies on the opposite side of the country. *Sian Ka'an* (Mayan for "Road to the Sky") embraces more than one million acres of lowland tropical forest, wetlands, and coral reefs on the Caribbean coast of the Yucatan Peninsula. While the International Program is cooperating with "Patronado Amigos de Sian Ka'an" to develop a funding and management program for the reserve, "Amigos" is working closely with local populations of fishermen and Mayan Indians to ensure that their ways of life are taken into account in the management plan.

In addition to forming partnerships with local organizations to create habitat-protection plans, the International Program is engaged in establishing a Mexican conservation data center. It also assists PRONATURA, Mexico's most important national private conservation organization.

PRONATURA supports land-conservation projects carried out by local conservation groups across the country. One such effort is the protection of a "fragmented forest" in the Sierra Madre of Chiapas on Mexico's southern Pacific Coast. Since the few reserves in this region are inadequate to preserve its wealth of species and natural communities, PRONATURA has initiated a program that encourages local inhabitants to create and safeguard an archipelago of "island" habitats connected by corridors of natural and semi-natural lands. Linking these island preserves will improve the ability

Loren McIntyre



Ken Creighton



A spectacular sunset on the beach at Costa Rica's Santa Rosa National Park (top). With Latin America's best park system, Costa Rica may be able to stem the habitat destruction that threatens many of its species, including this woolly possum.

of species to breed with other nearby populations and also may provide a better mixture of habitats. Such a project should serve as a model for additional local conservation projects in Mexico and in other neotropical nations.

COSTA RICA

When the Campaign for Costa Rican Parks was still an idea, in 1982, no private institution existed to assist the country's National Park Service in its goal to preserve Costa Rica's natural heritage. At that time, the National Parks Foundation had a staff of four and very little practical capability. Today, the Foundation's staff numbers 25 and is skilled in environmental education, in acquiring and managing natural lands, and in administering major conservation projects. Through the Costa Rican Conservation Data Center, which it oversees, the Foundation is "filling in the gaps" by targeting for protection species and natural communities not included in the country's existing system of 22 parks and reserves.

The Parks Foundation has used its skills to consolidate the national park system. Since its establishment, 32,000 acres have been added to the system, the training of park employees has been greatly improved, materials and equipment

have been provided, and management plans are now in place or are being formed for all parks and reserves. To accomplish these tasks, the Foundation—with the help of the Conservancy, the World Wildlife Fund-U.S., and other organizations—has raised \$3.8 million toward its \$5.5-million Campaign for Parks goal.

Widely recognized as the best in the neotropics, Costa Rica's park system is an expression of the Costa Rican peoples' concern for the environment, as well as an important part of Costa Rica's image in the world. Moreover, the nation's second largest source of income is tourism (coffee is first), and its parks and reserves attract a significant number of visitors.

The directors of the National Parks Foundation also have established *Fundacion Neotropica* to help deal with the social challenges most closely related to biological diversity conservation and the sustainable use of natural resources: deforestation, poverty, and population growth. *Fundacion Neotropica* marks a new stage of maturity for the Costa Rican conservation movement.

PANAMA

Panama is a pre-Colombian name that might be translated as "place of many birds-fishes-butterflies-trees." Even today, after a great deal of alteration, Panama still hosts some 800 bird species and more than 1,222 known endemic species of plants and



Frans Laming

In addition to being a place of many "birds-fishes-butterflies-trees," Panama is also a place of many mammals, one of which is the endangered spider monkey.



With key nesting sites for many bird colonies, including white ibis and cattle egrets, the Gulf of Panama is a target for conservation efforts.



Tarrence Moore

At 7,000 feet, gracefully fringed palms decorate the Venezuelan jungle.



Giuseppe Mazza

The cotton-top tamarin, called pinche in Colombia, is the symbol for the Fundacion Natura. Endemic to northwestern Colombia, the cotton-top is imperiled by habitat destruction within its small range.

animals—all in an area about the size of South Carolina.

Incorporated in Panama City in August 1985 with the help of the Conservancy's International Program, ANCON (*Asociacion Nacional para la Conservacion de la Naturaleza*) is an indigenous private conservation organization. It takes its acronym-name from *Cerro Ancon*, the forested hill that overlooks Panama City and over which flies a Panamanian national flag the size of a basketball court.

With 60 percent of Panama's forest cover already destroyed—and deforestation continuing at a deadly rate—ANCON is exploring several private conservation projects. It also is well on its way towards initiating a cooperative project with the national government to improve the protection of 55,000-acre Soberania Park, which lies in the watershed that feeds essential fresh water to the Panama Canal. Another potential project is the preservation of key nesting sites for marine bird colonies in the Gulf of Panama.

VENEZUELA

The great German naturalist Alexander von Humboldt wrote of Venezuela in words that would

lure many Europeans to explore its incredibly varied landscape: vast savannas, Amazonian rain forests, coastal lagoons, snowy Andean peaks, and island-riddled shorelines. Today, we can be more specific. For instance, of all the Earth's bird species, Venezuela harbors 15 percent; of crocodiles, 25 percent; and of turtles, 10 percent. In addition, more than 20,000 plant species have been identified, and at least 10,000 others may await description.

Venezuela is fortunate. It boasts a solid scientific community, a sophisticated business sector, and a government sensitive to conservation. Not surprisingly, the Conservancy's efforts there have been welcomed. Only after a few months of its inception, the Venezuela Country Program is playing a key role in the creation of three reserves in three of the nation's major ecosystems—Andes, savanna, and semi-arid coastal areas. These efforts are supported by local communities and are being pursued jointly with scientific institutions, universities, and Venezuelan scientists.

The future of conservation in Venezuela looks promising. Its leaders are committed to seeing that it is one of the few nations in the world where full development is achieved with a minimal loss of species or natural communities.

COLOMBIA

Like other Latin American countries, Colombia possesses an immense cornucopia of species: 50,000 flowering plants, 15 percent of the world's trees, and more species of mammals than are found in Africa south of the Sahara. And, like its neighbors, it also suffers from accelerating environmental degradation.

In 1984, the Conservancy's International Program helped create *Fundacion Natura*, a private indigenous organization. Now, in cooperation with the Cauca Valley Corporation—a regional authority responsible for watershed and park management, urban-growth planning, and development of hydropower—*Fundacion Natura* has established a regional conservation data center to identify the biota of an area encompassing 28 watersheds. The data center already has targeted two sites here in need of protection. One of these, a 1,000-acre tract of forest on the Rio Nima, bears the only unpatrolled entrance to the adjacent 320,000-acre Las Hermosas National Park. By working with the Cauca Valley Corporation and a local municipality to acquire the parcel (early this year), *Fundacion Natura* will help control the numbers of poachers and squatters in Las Hermosas.

Guillermo Mann



The Conservancy's Bolivia program director Maria Teresa Ortiz at Beni Biological Reserve.

The other site is Laguna Sonso, a low-elevation lake of about 1,500 acres that used to be connected by a number of channels to the Cauca River. Now all but one of the channels has been filled, and many of the surrounding wetlands have been drained. As late as 1967, some 220 bird species were using the lake (51 of them migratory); today, only about 100 species are present. *Fundacion Natura* is seeking an international expert in freshwater systems to determine whether or not the lake's natural water regime can be restored. If so, the *Fundacion* will help implement the restoration.

BOLIVIA

Often called the "Tibet of South America," Bolivia is a nation of striking contrasts. Three times the size of California, it takes in tropical, subtropical, and temperate zones. Snowcapped mountains over 20,000 feet in height break the horizon along the Andes Mountain range. Lowland swamps, extensive savannas, and Amazonian forest make up 70 percent of Bolivia's territory.

It was here that legendary civilizations flourished: the Tiwanaku (500 B.C.) and the Incan Empire (1200 A.D.). Today, 85 percent of Bolivia's six million people are of Indian ancestry.

Bordered to the northeast and west by a vast stretch of open, seasonally inundated savannas, the 375,000-acre Beni Biological Reserve in eastern Bolivia hosts diverse forest formations and supports 13 of the country's endangered animal species as well as approximately 600 bird species. (Bolivia harbors one-third of the neotropic's bird species.) The reserve also embraces the ancestral home of the Chimane Indians.

Working with Bolivia's Academy of Sciences and the Institute of Ecology, the Conservancy's International Program has acquired a 6,000-acre ranch adjacent to the Beni Reserve. The property will serve as the sanctuary's administrative headquarters and research station. In addition, the International Program is coordinating a long-term management plan for the reserve.

The International Program also has signed an agreement with the Museum of Natural History (through the Academy of Sciences) and the Institute of Ecology (through the *Universidad Mayor de San Andres*) to create a conservation data center for Bolivia. It will be an invaluable tool for government, academic, and private organizations in identifying conservation priorities and planning for the judicious use of the nation's natural resources.



Through Peru's Conservation Data Center, conservationists are striving to evaluate the country's biological diversity, its existing park system, and its economically important natural resources. Above: Huascarán National Park.



Faring far better than its California cousin, the Andean condor is fairly common in some parts of its range but threatened in others.

PERU

A long, narrow country snaking up the western edge of the South American continent, Peru encompasses major segments of the Andes Mountains and the Amazon Basin, as well as a vast sweep of Pacific coastline. Roughly 60 percent of its original forest cover remains uncut.

With assistance from the Conservancy and the World Wildlife Fund-U.S., Peru's *Fundacion Peruana para la Conservacion de la Naturaleza* was incorporated in 1985. This young organization now has a board of directors, a small staff, and is laying its first plans. Its director will be working out of the Conservancy's International Program office during most of 1986. A private conservation organization, the *Fundacion* is seeking to coordinate the activities of other nongovernmental groups in Peru; its objective is the preservation and wise use of the country's natural resources.

Meanwhile, the Peruvian Conservation Data Center, established in 1983, is gathering and maintaining continually updated information on the nation's critical plant and animal species and community types and providing this data to key decision makers. For example, it has signed an agreement

with Peru's National Park Service stipulating that it will supply all needed biological information to the Park Service. More recently—in cooperation with the United Nations' Food and Agriculture Organization—the data center has completed a study of the status and distribution of 22 commercially valuable timber species. And this year, it will publish an overview of Peru's biological diversity, which will be followed by an evaluation of the country's existing system of parks and reserves.

PARAGUAY

Historically, Paraguay has been neglected by international conservation organizations. Until recently, its low population provided *de facto* protection for many natural areas. However, the recent upsurge in both the nation's economy and population now threatens the untrammelled grasslands and lush forests. The government has shown support for conservation by establishing about 2.4 million acres of national parkland in ecologically significant areas, such as the Gran Chaco region.

Currently, the Conservancy's International Program is putting the finishing touches on a three-year agreement with the government of Paraguay to initiate a program that will focus on strengthening the nation's system of parks and protected areas. This joint effort will include the creation of a private conservation institution and a conservation data center. The International Program also will assist in training conservation officials.

PRESERVATION PROGRAMS throughout the Neotropics are developing at a rapid rate. Nonetheless, they are being outpaced by the destruction of tropical ecosystems, and there is much to do before conservationists can lay claim to the "Greening of the Americas." After five years of intensive efforts, however, The Nature Conservancy can claim that the most productive approach to conservation in the tropics is to build a global capacity for conservation on a country-by-country basis. Using this method, the Conservancy's International Program is constructing a sound foundation for the preservation of biological diversity all over the world.

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