



World Heritage Sites

Protected Areas and World Heritage



LOS KATIOS NATIONAL PARK COLOMBIA

Los Katíos National Park, in the mountains and forests of the Darién isthmus, is one of Colombia's best preserved protected areas, important for very high biodiversity, high regional endemism and as a filter and major convergence zone of South and Central American taxa. The Park is contiguous with Darién National Park World Heritage site, the parks together protecting a total of 6,400 square kilometres of the region's ecosystems.

Threats to the Site: Completion of the Pan-American Highway through the Darién Gap, will open up the surrounding forests up to development. The surrounding lowland forests are already being extensively logged.

COUNTRY Colombia

NAME Los Katíos National Park (*El Parque Nacional Natural Los Katíos*)

NATURAL WORLD HERITAGE TRANSBOUNDARY SITE

1994: Inscribed on the World Heritage List under Natural Criteria ix and x.

IUCN MANAGEMENT CATEGORY

II: National Park

BIOGEOGRAPHICAL PROVINCE

Colombian Coastal (8.3.1)

GEOGRAPHICAL LOCATION

Los Katíos is located in northwesternmost Colombia between the frontier with Panama and the west bank of the river Atrato. It covers the land between the Cacarica, Perancho and Peyé rivers which flow into R. Atrato from the west and includes the swamps of Tumaradó to the east of it. Los Katíos forms a transboundary protected area with Darién National Park and World Heritage Site in Panama. It is centred on 7°49' N to 77°12' W.

DATES AND HISTORY OF ESTABLISHMENT

1974: Los Katíos National Park created under Executive Decree No.172 (52,000 ha).

1980: Extended to its present size under Executive Decree No. 91.

LAND TENURE

State, in the Provinces of Antioquia and Chocó. Administered by the National Parks Department of the Institute of Renewable Natural Resources and the Environment (INDERENA)

AREA

72,000 ha; contiguous to Darién National Park in Panama (597,000ha).

ALTITUDE

50m to 600m

PHYSICAL FEATURES

The Park covers two main regions: the gently undulating foothills up to 250m high and higher hills up to 600m of the Serranía da Tacarcuna mountains in the west which form 53% of its area; and the floodplain of the Atrato river in the east which forms 47%. This floodplain, the marshes of Ciénaga de Tumaradó, Ciénaga del Cacarica and Tapón del Darién, is composed of alluvial flats with regularly flooded terraces and alluvial plains with rarely flooded high terraces. The Atrato river is said to be the fastest flowing river in the world, emptying 4,900 cubic metres of water into the Caribbean every second (Government of Colombia, 1993). The mountain soils are leached by the heavy rainfall and are poor; alluvial soils are richer. The Park protects outstanding scenery, notably the Tendal (25m) and Tilupo (100m) waterfalls and the Ciénagas de Tumaradó swamp.

CLIMATE

The Park receives a high rainfall of 2000-4500mm per year. The average temperature is 27°C and relative humidity is between 75% and 95%. The months of December to March are slightly drier (Government of Colombia, 1993).

VEGETATION

This is part of one of the most species-rich lowland forest areas in the world, unusual in resembling a mid-elevation cloud forest, with fern cover and epiphytes. It is at the northern end of the Chocó-Darién moist forest ecoregion, one of the world's largest active centres of speciation and endemism (WWF, 2001). Owing to their location at the southern end of the Central American land bridge, the mountains of the Darién isthmus filtered the interchange of flora and fauna between North and South America during Tertiary and Pleistocene periods, a process which continues today. It is thought to be the site of a Pleistocene refuge and is certainly the last refuge in the area for many species which would otherwise become extinct. This is still the only area in South America where large numbers of Central American taxa are found. A total of 669 plant species had been recorded by 1993, 20-25% of which are endemic (Government of Colombia, 1993).

The lowland swamp forests which cover approximately half of the Park are of three types: swamp margins dominated by *Montrichardia arborescens* with *Polygonum acuminatum*, the *Pangana* consociation of *Raphia taedigera*, *Erythrina fusca*, *Pachira aquatica*, *Prioria copaifera*, and *Ficus dendriocida* and the *Cativo*, a floodland vegetation type found only in Colombia, south Central America and Jamaica where *cativo* trees *Prioria copaifera* of up to 50m occur, with epiphytes and ferns. The aquatic vegetation is dominated by the water hyacinth *Eichhornia azurea*. The remainder is lowland to pre-montane tropical rainforest. These are characterised by *Cavanillesia platanifolia*, *Ceiba petandra*, *Hura crepitans*, wild cashew *Anacardium excelsum*, and palma mil pesos *Jessenia polycarps*. The understorey has *Ochroma lagopus*, *Cecropia* spp. and *Cochlospermum vitifolium*. A second main association is of *Brosimum utile* with rubber tree *Castilla elastica*.

FAUNA

The very high rainfall of the area has acted as a barrier to the distribution of many vertebrate species (WWF, 2001). Nevertheless, the region's faunal and avian diversity and endemism are both high. Some 550 species of vertebrates (excluding fish) have been found in the Park. Threatened mammals include giant anteater *Myrmecophaga tridactyla* (VU), bush dog *Speothos venaticus* (VU) and Central American tapir *Tapirus bairdii* (EN) (Government of Colombia, 1993; INDERENA, 1984). A 1981 WCMC description of the National Park cited the presence of jaguar *Panthera onca*, nutria *Myocaster coypus* and spectacled caiman *Caiman crocodylus*. Los Katíos also harbours several Central American species found only here in South America such as the mouse *Heteromys desmarestianus* and several birds. The manatee *Trichechus manatus* (VU) has recently been found in the Ciénaga de Tumaradó and the American crocodile *Crocodylus acutus* (VU) occurs in the Ciénaga de Cacarica.

More than 450 species of birds (representing respectively 25% and 50% of the avifauna of Colombia and Panama) have been recorded in the Park. Threatened lowland species include Baudo oropendula *Psarocolius cassini* (EN), Choco tinamaou *Crypturellis kerriae* (VU) and speckled ant-shrike *Xenornis*

setifrons (VU). The Serranía del Tacarcuna is home to many endemic species such as the Tacarcuna woodquail *Odontophorus dialeucos* (VU), grey-headed chachalaca *Ortalis cinereiceps*, rufous-cheeked hummingbird *Geothalsia bella* and violet-capped hummingbird *Goldmania violiceps*. Most mountain species are not threatened at present but their very small range sizes may leave them vulnerable to disturbance (Stattersfield *et al.* 2000). The number of reptiles and amphibians in the ecoregion is high, but apart from the endemic mountain frog *Rhombophryne acrolopha* no others are listed for the site.

CULTURAL HERITAGE

The region was previously inhabited by the Kunas, an indigenous group which was forced to migrate to Panama because of inter-tribal fighting with the Katío-Embera group which is now established throughout Colombia's Chocó region. The Darién region, including Los Katíos, was historically important for the crossing of the first colonisers from North America some 20,000 years ago, as has been confirmed by the discovery of archaeological remains. The Spanish conquistadors Rodrigo de Bastidas, Alonso de Ojeda and Vasco Núñez de Balboa visited the area in 1501 (INDERENA, 1984).

LOCAL HUMAN POPULATION

Human activities are concentrated in Sautatá. Some 700 ha (1% of the Park) was originally cultivated, mostly for sugar cane, by 700 people. By 1981 some 150 families inhabiting the Park were relocated in the nearby towns of Unguía, Puente América, Tumaradó and Cacarica. Their settlements are now inhabited by timber traders whose activities have threatened the Park for over 20 years. The rest of the Park has never been cultivated, although there has always been occasional felling of timber trees such as *Ceiba petandra* and *Cedrela* (Government of Colombia, 1993). There is commercial fishing and heavy boat traffic on the Atrato River but this does not affect the land area of the Park. Some of the local Kuna, Embera and Wounaan peoples may come under great pressure when the Pan-American Highway is completed.

VISITORS AND VISITOR FACILITIES

Less than 700 visitors reach the Park every year and there have been trails and lodges housing 20 people since 1990. Access to the administrative centre at Sautatá is by boat from Turbo on the Gulf of Urabá which can be reached by air from Medellín. Alternative access is from Quibdó and Riosucio which connect with Sautatá via the Río Atrato (Government of Colombia, 1993).

SCIENTIFIC RESEARCH AND FACILITIES

The Darien Rainforest has been called a Laboratory of Biodiversity as it is the source of great genetic diversity. Universities have carried out research projects on birds, insects, plant communities and the fisheries of the Tumaradó swamps (Government of Colombia, 1993). But the area remains under-examined and more detailed studies of the flora and ecosystem are needed.

CONSERVATION VALUE

The mountains and forests of the Darién isthmus in Los Katíos form one of the best preserved protected areas in Columbia, important for their very high biodiversity, high regional endemism and as a filter and major convergence zone for South and Central American taxa owing to their location. This is still the only area in South America where large numbers of Central American taxa are found. The Park is contiguous with Darién National Park World Heritage site, the two parks protecting a total of 669,000 ha of the region's ecosystems as well as outstanding scenery (Government of Colombia, 1993; Pintor, 1992). The Park lies within a Conservation International-designated Conservation Hotspot, a WWF Global 200 Eco-region, a WWF/IUCN Centre of Plant Diversity and in one of the world's Endemic Bird Areas.

CONSERVATION MANAGEMENT

The management agency is the National Parks Department of the Institute of Renewable Natural Resources and the Environment (INDERENA) under Decrees 2811 of 1974 and 622 of 1977. Los Katíos is very well preserved. This was partly due to a legal decision in the 1970s which blocked US government funding for the Pan-American Highway through the area. It was also due to resources from an agreement between the US Department of Agriculture (USDA) and the Colombian Agricultural Institute (ICA), to the acquisition of private properties completed in 1981; and to having obtained financial support from USDA for the control of foot-and-mouth disease. As this is no longer a problem in Colombia, the US is now willing to fund two-thirds of the construction of the long-held back road link

which is considered necessary to stimulate trade and tourism and to enforce order in the region (TED, 1999). Since 1993, the UNDP GEF-funded Bio-Pacifico Project has examined the environmental consequences of alternative road proposals in the region. A new Management Plan will include arrangements for involving local communities in management as well as a program to promote transboundary co-operation with Darién National Park. On the local scale a number of community education programmes have been carried out and rural extension work is used to identify sustainable alternative uses for the natural resources of the buffer zone (Government of Colombia, 1993).

MANAGEMENT CONSTRAINTS

The Park's status is stable but vulnerable to invasion. 85 kilometers of the only uncompleted section of the Panamerican Highway is to be completed through the Darién isthmus. Two sections of the highway will affect Los Katios: the 11 km Lomas Aisladas - Cacarica section and the 30 km Cacarica - Palo de Letras section. The former will cut through the Tapón del Darién and cross the Atrato river, acting as a barrier to migratory flow and affecting the dispersal of aquatic and terrestrial fauna. When the road is complete, the area will be opened to clearing by large numbers of land-hungry settlers, especially farmers from Cacarica. When the thin soil is exhausted these fields will probably become cattle ranches as the colonists move on. Uncontrolled forestry, mining and hunting, the infiltration of disease, and of Colombian conflicts and trafficking into Central America may follow. Further results of the link will be soil erosion and flooding, and the social disruption of native societies. This has already happened along the road opened into Darién from the north where 60% of the forests had already been lost by 1999 (TED, 1999). The displaced Afro-Colombian communities of the Cacarica Basin, provisionally settled outside the Park, have denounced as illegal and indiscriminate, the deforestation of their lands by a cooperative operating with a major logging corporation. Timber corporations have already made huge inroads into the commercially profitable *cattiva* forests of the basin (Anon., 1999).

Both parks have regulations permitting construction of the Highway. Although an alternative route along the Atlantic coast has been mooted, the road through the centre of Panama has already been paved and Colombia has funded feasibility studies for its continuation. The US government has sanctioned funding through the International American Development Bank for completion of the 115 km Darien Gap Highway, although at present Panama is demurring: the movement of people and goods between Panama and Colombia may involve considerable trafficking of wildlife and drugs which will need strong controls. A further constraint is guerrilla activity and the Park has not always been fully under the control of the management agency (Government of Colombia, 1993, UNESCO, 1999). Despite this, the Park authorities do control several sectors of the Park and there has been a consequent reduction in the illegal extraction of natural resources by local communities.

STAFF

Thirty one, comprising a director and 30 rangers (Government of Colombia, 1993)

BUDGET

41.5 million Colombian pesos in 1980 and 25.5 million Colombian pesos in 1981 (IUCN, 1982).

LOCAL ADDRESS

Director Proyecto ICA-INDERENA-USDA, INDERENA, Turbo, Antioquia, Colombia.

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