WORLD HERITAGE NOMINATION

IUCN TECHNICAL REVIEW

1. IDENTIFICATION NUMBER AND NAME: 260 SANGAY NATIONAL PARK

2. LOCATION: Between latitudes 1° 27'S and 2° 15'S and longitudes 78° 04'W and 78° 31'W, in the provinces of Morona Santiago, Chimborazo and Tungurahua

3. NOMINATED BY: Government of Ecuador

4. DOCUMENTATION:

(i) Nomination form, with bibliography
(ii) Supplementary documentation (IUCN)

a) Consultations: Dr. Goetz Schuerholz; Mr Allen Putney; Yolanda Kakabadse.

b) Macey, A. et al., 1976. "Sangay" Estudio de la Alternativas de Manejo-Direccion General de Desarrollo Forestal Proyecto PNUD/FAO, ECU/71/527 - Quito, Ecuador.

c) Departamento de Areas Naturales y Vida Silvestre, 1982. Parque Nacional Sangay. Plan de Manejo.

d) Project files IUCN/WWF Project 1541 Management of the Sangay National Park.

5. BACKGROUND AND SUMMARY

Sangay National Park covers within its 270,000 ha all major ecological systems of Ecuador, including glacial and volcanic systems, the Peramo system, cloud forest, and Amazonian tropical rainforest. It represents one of the few places in the Andes which has been unaltered by man. Geologically, the area is also of outstanding interest, as Sangay is said to be the volcano which has been continuously active for the longest period of time in the world.

6. INTEGRITY

The area is sufficiently large and undisturbed for its natural ecosystems to continue to evolve naturally. A management plan has been adopted in 1982 and, if implemented, would provide the necessary management guidance to assure the continued integrity of the area.

7. COMPARISON WITH OTHER AREAS

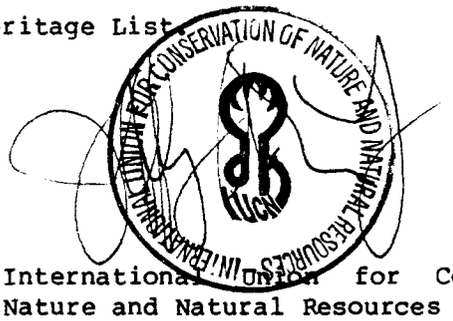
Cayambe-Coca ecological reserve includes many of the same ecosystems, but does not house nearly as many species of plants and animals and has been disturbed by man; Coto Paxi National Park covers only volcanic and peramo areas, thereby protecting many fewer species. Cotacachi Cayapas ecological reserve contains similar habitats, but contains specific tropical rainforest rather than Amazonian forest; therefore the species composition is quite different.

8. EVALUATION

The site contains a constantly evolving landscape of outstanding universal significance (criteria ii). The volcano is also of superlative aesthetic beauty, particularly when taken in conjunction with the surrounding grasslands, forests, and other significant habitats (criteria iii). It also contains significant natural habitat for a number of endangered species including the spectacled bear and the mountain tapir, both found only in the northern Andes.

9. RECOMMENDATION

Sangay be inscribed on the World Heritage List.



International Union for Conservation of Nature and Natural Resources

15 April 1983

NAME Sangay National Park

MANAGEMENT CATEGORY II (National Park)

BIOGEOGRAPHICAL PROVINCE 8.5.1/8.35.12 (Amazonian/Yungas)

LEGAL PROTECTION Total.

DATE ESTABLISHED Protected as a Wildlife Reserve 16 June 1975 (interministry Agreement no. 190); status changed to national park on 26 July 1979 (Interministry Agreement no. 322).

GEOGRAPHICAL LOCATION In the provinces of Morono Santiago, Chimborazo and Tungurahua, central Ecuador; 1°27'55"-2°15'37"S, 78°04'29"-78°31'05"W.

ALTITUDE 800-5,140m.

AREA 272,000 ha.

LAND TENURE State owned.

PHYSICAL FEATURES The park includes the Oriental Cordillera, from which several major rivers originate and drain towards the coast or the Amazon basin. Tungurahua and Sangay are active volcanos; Sangay (5140m) is thought to have been continuously active for longer than any volcano in the world. The park has a great variety of volcanic soils, glaciers and other important metamorphic formations. There is an extremely high precipitation and annual temperatures remain fairly constant.

VEGETATION The diversity of life zones permits the presence of a wide range of vegetation types, including paramo systems typical of the high Cordillera with many lichens and bryophytes, cloud forest on the eastern slopes of the Andes with Polylepis sp., Buddleia incana, Miconia salicifolia and Myrtus communis, piedmont with Podocarpus oleofoiluys, Alnus jurullensis and Cedrela odorata and lowland subtropical rainforest with Cordia alliodora, Nectandra sp., Ocotea sp., Cedrela rosei, Inga sp. and Ochroma lagopus. Due to the proximity of the equator forest associations are found up to 4000m.

NOTEWORTHY FAUNA The park supports good population densities of animals. Noteworthy species of mammals include spectacled bear Tremarctos ornatus, both woolly mountain tapir Tapir pinchaque and South American tapir T. terrestris, jaguar Panthera onca and three other cat species, F. pardalis, F. wiedii and F. concolor, white-tailed deer Odocoileus virginianus, brocket Mazama rufina and pudu Pudu mephistophiles. There is a wide range of birds including cock of the rock Rupicola peruviana ecuatorialis, Ara sp., Buteo[sp. and condor Vultur gryphus.

ZONING The park has been divided into a number of zones which define the status of the area, and the character of management activities. The zones are entitled Intensive Use Zone, Special Use Zone, Natural Recuperation Zone, Primitive (Scientific Aone) and Primitive Zone. These zones are defined by the management plan.

DISTURBANCES OR DEFICIENCIES Most of the subtropical lowland forest on the eastern park boundary has been converted into cattle pasture and agricultural lands. Spontaneous and organised colonisation of the lower

slopes of the Andes around the periphery of the park is causing destruction of vegetation and contributing to erosion. This in turn could threaten the important watersheds, as has happened elsewhere in Ecuador.

SCIENTIFIC RESEARCH Two months fieldwork and a feasibility study were carried out by a multidisciplinary team in 1975. National scientific expeditions have investigated the vulcanism and geology of the area.

SPECIAL SCIENTIFIC FACILITIES None available at present.

PRINCIPAL REFERENCE MATERIAL

Direccion General de Geologia y Minas (1867). Mapa Geologico de la Republica de Ecuador (1:1,000,000). Quito.

Holdridge, L.R. (1964). Ecologia basada en Zonas de Vida; Instituto Interamericana de Ciencias Agricolas. San José, Costa Rica.

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Mann, G. (1969). Die Oekosysteme Suedamerikas. In Biogeography and Ecology in South America, Vol. 1. Junk Publishers, The Hague.

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Schuerholz, G. et al. (1979). Preliminary Assessment of Environmental Concerns in Ecuador. U.S. Agency for International Development - Ecuador Classified Report.

Schuerholz, G. et al. (1980). Plan de Manejo del Parque Nacional Sangay. Direccion de Desarrollo Forestal, World Wildlife Fund. Quito.

Smith, E. and Stroelcin, J. (1975). Land use problems and Research Needs in the High Altitude Zone of Ecuador, Office of Science and Technology. Technical Assistance Bureau, A.I.D., Quito, Ecuador.

Reports for IUCN/WWF Project 1541 Sangay National Park.

STAFF The staff includes a park intendent, 4 forest experts and 10 forest rangers. Headquarters is at Riobambo and there are four guard posts in Rio Negro, Palora, Alao and Macas.

BUDGET 1,850,000 sucres in 1980/81.

LOCAL PARK OR RESERVE ADMINISTRATION Provincial Head, Office of the Ministry of Agriculture, Riobambo, Ecuador.

NAME OF CNPPA COORDINATOR

DATE December 1982.

Ecuador

NAME Sangay National Park

MANAGEMENT CATEGORY II (National Park)
World Heritage Site (Criteria: ii, iii, iv)

BIOGEOGRAPHICAL PROVINCE 8.05.01/8.35.12 (Amazonian/Yungas)

GEOGRAPHICAL LOCATION Situated in the Cordillera Oriental region of the Andes in central Ecuador, and covering portions of Morono Santiago, Chimborazo and Tungurahua provinces. Approximately 140km of the boundary have been marked and the boundaries with population centres near the park have been defined. An official boundary definition is given in the Government Registro Oficial No.69 of 20 November 1979. 1½27'-2½15'S, 78½04'-78½31'W

DATE AND HISTORY OF ESTABLISHMENT Established as a Wildlife Reserve on 16 June 1975 under Interministry Agreement No. 190. The status was changed to National Park on 26 July 1979 under Interministry Agreement No. 322. Inscribed on the Unesco World Heritage List in 1983.

AREA 271,925ha

LAND TENURE State ownership

ALTITUDE 1,000-5,140m

PHYSICAL FEATURES The park, dominated by Sangay Volcano (5,140m), can be divided into a number of geomorphological zones, viz: alluvial fans, Eastern foothills and the High Andes. Large alluvial fans dominate the area east of to the Andes, with elevations ranging from approximately 800m to 1,300m, typically with an easterly slope. Most of this topographic unit lies beyond the eastern boundary. The younger parts of these fans are only slightly dissected, while canyons up to 200m deep have been cut into older segments, for example near the lakes of the River Volcan. The Eastern foothills are low, irregular mountains, between 1,000 and 2,000m high, that are adjacent to the alluvial fans in the north-east and south-east of the park. They are principally developed upon less resistant cretaceous sedimentary rocks that outcrop along the east flank of the Andes. The High Andes zone represents the intermediate and upper parts of the Cordillera Oriental. A rugged topography with deep, steep-sided valleys, abundant cliffs and many rocky jagged peaks is typical. Most of this zone is underlain by metamorphic and plutonic rocks. The elevation range is approximately 2,000m to 5,000m. Three subzones can be distinguished. First, a subglacial subzone, ranging from 2,000m to 3,000m, comprising intermediate levels that did not experience past glacial activity. Second, a glaciated subzone, between 3,000m and 5,300m, comprises areas that have been glaciated. Characteristic features include glacial cirques, U-shaped valleys with long meadows and meandering rivers and peaks

with aretes and narrow rocky ridges. Third, a volcanic subzone characterised by the presence of lava and volcanic ash, deposited during Pleistocene and recent times. Examples include the cone and surrounding flanks of Tungurahua and Sangay volcanoes and the eroded volcano of Altar. The major rivers, draining eastwards to the Amazon Basin, are the Llushin, Palora, Volcan, Upano and the two Sangay rivers. They are characterised by rapid and dramatic variations in level. Run-off is extremely rapid, due to high rainfall and steep slopes, and erosion is substantial, although controlled by thick forest vegetation. Numerous waterfalls occur, especially in the hanging valleys of the glaciated zone and along the eastern edge of the Cordillera. Numerous lakes are present, including Laguna Pintada which measures 5km in length.

Several soil associations can be distinguished. Rocky lithosols, comprising stony and rocky soils, are found above 4,500m in limited areas around the principal volcanoes. Sangay ash is found around Sangay Volcano, and more extensive to the east of Sangay, comprising very young soils forming on recent ash falls. A thin layer of organic matter covers ash base material. Black Andean soils of the Paramo occur extensively in the east at 3,000m to 4,500m altitude, comprising volcanic base material. Black Andean soils of the cloud forest are found on the upper exterior slopes of the Andes, in a variable, north-south oriented band, particularly in areas of high rainfall and cloud cover. Moist reddish hydrolitic latosols cover much of the east where subtropical forest occurs. These are generally acid and heavily leached (Macey et al., 1976).

CLIMATE Although the park is situated in the Tropics just south of the **Equator**, the elevation is such that it has a subtropical and temperate climate. Rainfall is strongly influenced by orographic effects. The eastern side of the Cordillera receives the greatest rainfall as air masses from the Amazon Basin move up over the Andes. The mean annual rainfall at Pastaza, to the immediate north-east of the park, is 4827mm, whilst Macas, to the south-east receives 2414mm annually. Conversely, a mean annual rainfall of only 633mm has been recorded at Penipe beyond the western boundary, due to rain shadow effects. Seasonal variation is more marked in the west, with only 122 days of rain recorded in Riobamba. The driest period varies from site to site, but in general July and August are driest and February to April the wettest months. Temperatures remain relatively constant throughout the year, although there is considerable diurnal variation. The mean annual temperature on the east is 20½C, with a mean maximum and minimum of 25.4½C and 16.4½C, respectively. Absolute maximum and minimum temperatures recorded are 31½C and 10½C, respectively. Progressively lower temperatures are recorded at increasing altitudes and at the highest elevations temperatures never rise above 0½C. The permanent snow line occurs at about 4,800m above sea level.

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VEGETATION A high diversity of vegetation types are present, ranging from snow and alpine zones of the high paramo, to the subtropical rain and wet forests of the upper Amazon Basin. The principal physical factors influencing vegetation are altitude and rainfall, with more luxuriant vegetation growing on the wetter eastern slopes. At the highest levels below the snow line, an alpine rain tundra has formed, dominated by lichens and bryophytes. A subalpine rain Paramo zone occurs below this, characterised by three main vegetation types: Festuca tussock grassland; areas dominated by cushion plants and other low-growing species; and undisturbed areas dominated by bamboo Nuerolepsis. The lower altitudinal limit of this zone has been lowered in the west by anthropogenic burning. Montane wet forest is found in valleys in the west, in pure stands of Polylepsis or Gnoxys associated with Buddleia incana where undisturbed. At lower elevations there is greater variety of small trees and shrubs, including Senecio vaccinoides, Diphostephium sp., Vaccinium spp., Miconia salicifolia, Brachyotum spp., Myrtus communis, Osteomeles spp. and Monnina crassifolia. Montane rain forest has developed on the wetter eastern slopes, and occurs below about 3,750m. The upper half of this zone attains approximately 5m, and is dominated by Nuerolepsis and Myrtus communis associated with Monnina crassifolia, Baccharis teindalensis, Disphostephium lavandulaefolium and Gnoxys spp. Below 3,000m, the vegetation develops into forest up to 12m high, dominated by Weinmania and Oreopanax. Between 2,000m and 3,000m lower montane rain forest occurs in steep-sided valleys. The canopy attains 40m and includes Podocarpus oleofolius, Oreopanax sp., Weinmania sryadifolia. An understorey layer is formed by small trees such as Miconia and a third layer by Piper ecuadorensis, Cyathea, Bocconia and others. Ferns, epiphytes and orchids are abundant. Pure stands of aliso Alnus jorullensis are found in disturbed areas, and towards 2,000m Cecropia sp., cedro Cedrela odorata, palms and Rubiaceae are present. Subtropical rain forest occurs below 2,000m where temperatures range from 18½C to 24½C and rainfall may reach 5000mm annually. Species diversity is very high and members of the Lauraceae and Moraceae such as Ficus spp. and Chlorophora spp., palms, Cedrela odorata and wild avocado Persea sp. are present. Undergrowth species such as Selaginalla sericea and brightly coloured flowers of the Gesneraceae and Lobeliaceae families are common. This formation receives less rainfall in the south, forming a subtropical wet forest, although there is no clear distinction, and many species in common, with wetter areas. Centropogon trachyanthus is endemic to this area (Macey et al., 1976). Partial species lists for the various formations are given in Macey et al., 1976).

FAUNA The fauna is not well-studied, although it is known to be rich in species. Species distributions correspond with vegetation zones and there is a distinct altitudinal zonation. At the highest altitudes mountain tapir Tapirus pinchaque (V), puma Felis concolor, guinea pig Caria sp. and Andean fox Dusicyon culpaeus

occur. Elsewhere spectacled bear Tremarctos ornatus (V), jaguar Panthera onca (V), ocelot F.pardalis (V), margay F. wiedii (V), white-tailed deer Odocoileus virginianus, brocket deer Mazama rufina, pudu Pudu mephistophiles (I) and giant otter Pteronura brasiliensis (V) are found. A partial species list is given in Macey et al. (1974). Some 400-500 bird species may be present, although comprehensive inventories have not been compiled. Noteworthy species include condor Vultur gryphus, seen particularly around the mountain area of Altar, Cubillin and Quilimas, cock of the rock Rupicola peruviana ecuatorialis, which exists in substantial populations in inaccessible areas in the upper forest of the eastern Andean slopes, giant humming bird Patagona gigas, the largest humming bird in the world, torrent duck Marganetta armata, king vulture Sarcoramphus papa and swallow-tailed kite Elanoides porficatus. A preliminary species list is given in Macey et al. (1974).

CULTURAL HERITAGE The area was inhabited by 30,000 Indian Huamboyas before 1500. The Spanish were active in the area from the 16th century onwards, motivated by the search for gold (Macey et al., 1974).

LOCAL HUMAN POPULATION Areas to both east and west are populated, with a number of cooperatives located close to the eastern boundary (Macey et al., 1974). There is also increasing human activity along the western and southern boundaries of the park (J. Thorsell, pers. comm., 1989). In 1987 there were approximately 400 people living at Atillo, in the park, 70% of whom were resident. In general, the park has been closed to human exploitation by virtue of difficult access (Macey et al., 1974).

VISITORS AND VISITOR FACILITIES Visitor facilities are not well developed (Ham, 1986) and access into the park is limited. Nature trails, visitor centres, camping grounds with small overnight sleeping structures, and an intensive recreation area were proposed in the 1982 management plan (Schuerholz et al., 1980), although the degree of implementation is not known. Approximately 1,000 tourists visit annually, mostly in the Tunurahua Volcano area (J. Thorsell, pers. comm., 1989), and there were 1,438 in 1987. One of the major attractions of the park lies in the mountaineering on the major peaks of Tungurahua, El Altar, Cubillin, Quilimas and Sangay (Macey et al., 1974).

SCIENTIFIC RESEARCH AND FACILITIES A study of management alternatives (Macey et al., 1976) examined natural, social, cultural and historic resources in the area, and reviewed management alternatives such as agriculture, forestry, economic potential of minerals and management as a wildland area. This led directly to the establishment of Sangay National Reserve. The 1980 management plan (Schuerholz et al., 1980) analysed biophysical, socio-economic, cultural and biological-ecological aspects of the park, to provide the foundation and justification for the different

management programmes (Salazar and Huber, 1982). However, at present there are no research or monitoring programmes, and relatively little is known about the natural resources of the park (J. Thorsell, pers. comm., 1989).

CONSERVATION MANAGEMENT Sangay National Park is considered to have an extremely complex ecological composition and tt has received the highest resource analysis rating of any park in Ecuador. Its natural regions, terrestrial ecosystems, aquatic ecosystems, physiographic formations, geology, history and other unique characteristics make it the outstanding protected area in Ecuador (FAO, 1976). The management plan (Schuerholz et al., 1980) was designed to be implemented over five years from 1982. The principal management objectives were to protect the integrity of the site by zonation, applying appropriate management to each zone, delimitation of boundaries and an education/awareness programme. The zones include: core, where there are no human activities; recuperation; extensive use; special use; primitive; intensive; and a recreation zone. The location and activities permitted and prohibited in these zones is detailed in Macey et al., 1976. The administrative headquarters of the park is at Riobamba. Guard posts have been constructed at Aloa in the north, San Isidro in the south and at Macas, Palora, Rio Negro, Candelaria, Atillo Purshi and Tunguruhua. Management equipment includes two jeeps, six motorcycles and six horses (J. Thorsell, pers. comm., 1989).

MANAGEMENT PROBLEMS Most of the subtropical lowland forest on the eastern park boundary has been converted into cattle pasture and agricultural land. Overgrazing by cattle an sheep livestock has occurred in the east of the park (Filo de Plazapamba and Culebrillas Chico sectors) where there has also been soil compaction. In 1987 fires burnt approximately 500ha in Naranjal Chico and 1,000ha in Atillo, destroying native vegetation. There is little evidence that native aniamls have been adverely effected by fire or the introduction of livestock. However, there is subsistence poaching in the Filo Plazapambo and in the Altares areas. There has been sporadic confrontation between the residents of Atillo and the park guards. Spontaneous and organised colonisation of the lower slopes of the Andes around the periphery of the park is causing destruction of vegetation and contributing to erosion which could threaten the important watersheds. Illegal hunting by Shuar indians still occurs as these people lost the majority of their lands, the lowlands next to the park, to colonists who migrated from Sierra. There are incursions into the forests along the western and southern boundaries of the park and into the Llushin River area (J. Thorsell, pers. comm., 1989). there is a potential threat following the discovery of gold ore in the Llushin Grande and Huamboya areas. There is a general inadequaacy in the number of staff nad in the budget.

STAFF Comprises one park superintendent, one assistant park superintendent and 24 forest rangers.

Infobase produced by WCMC, January 1992

BUDGET 4,000,000 sucres (US$ 8,000) in 1988. External funding, totalling more than US$ 100,000 by 1985, has been provided by WWF for the establishment and management of the park (Anon., 1985).

LOCAL ADMINISTRATION Provincial Head, Office of the Ministry of Agriculture, Riobamba

REFERENCES

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Ham, S.H. (1986). Review and recommendations for interpretive planning, programming and training Ecuadors national parks and equivalent areas. Idaho Forest, Wildlife and Range Experiment Station. Publication No. 309. University of Idaho. 9 pp.

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Salazar, A.P. and Huber, R.M. (1982). Ecuador's Active Conservation Program. Parks 6(4): 7-10.

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DATE December 1982, revised May 1989; September 1989

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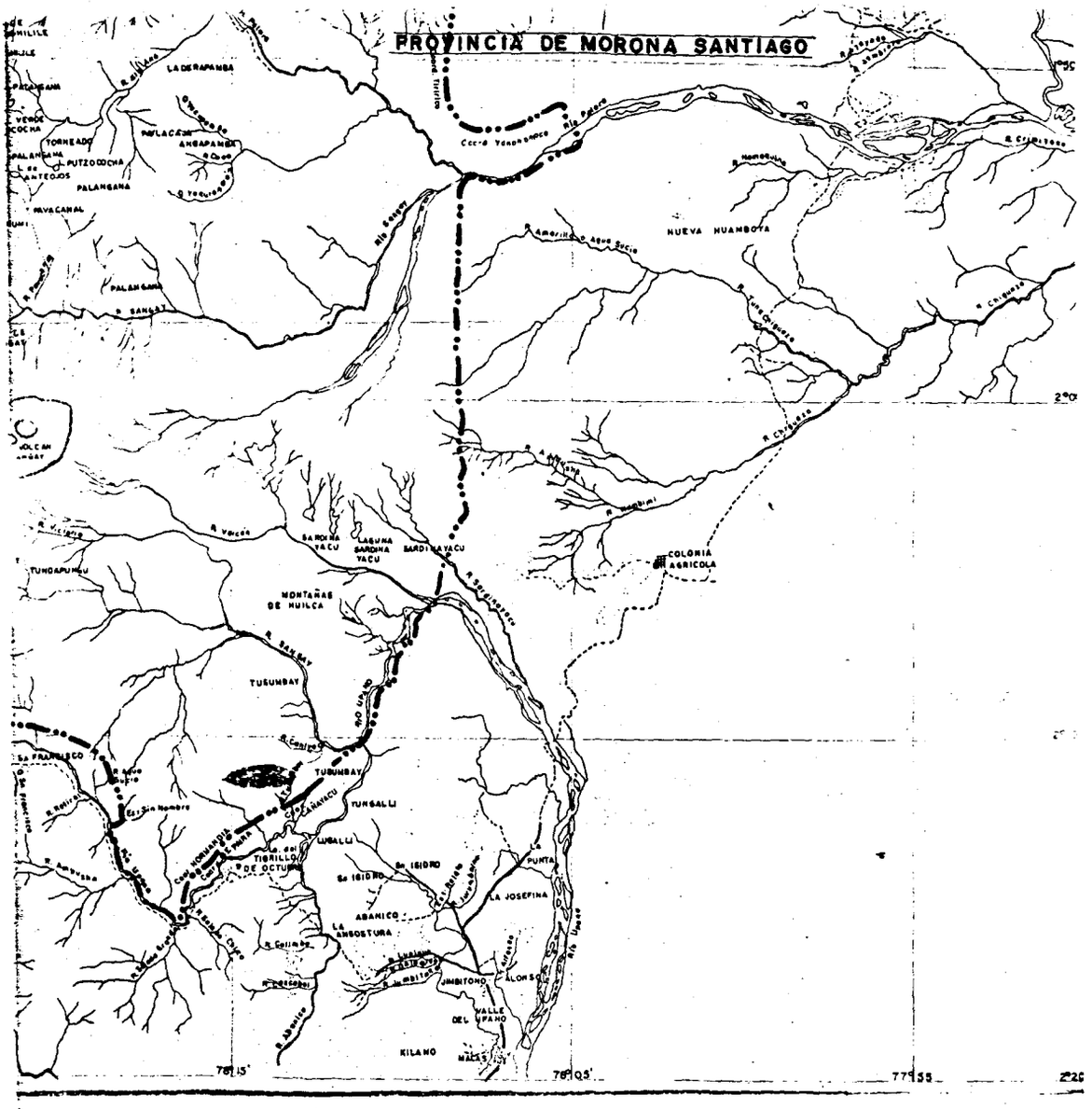
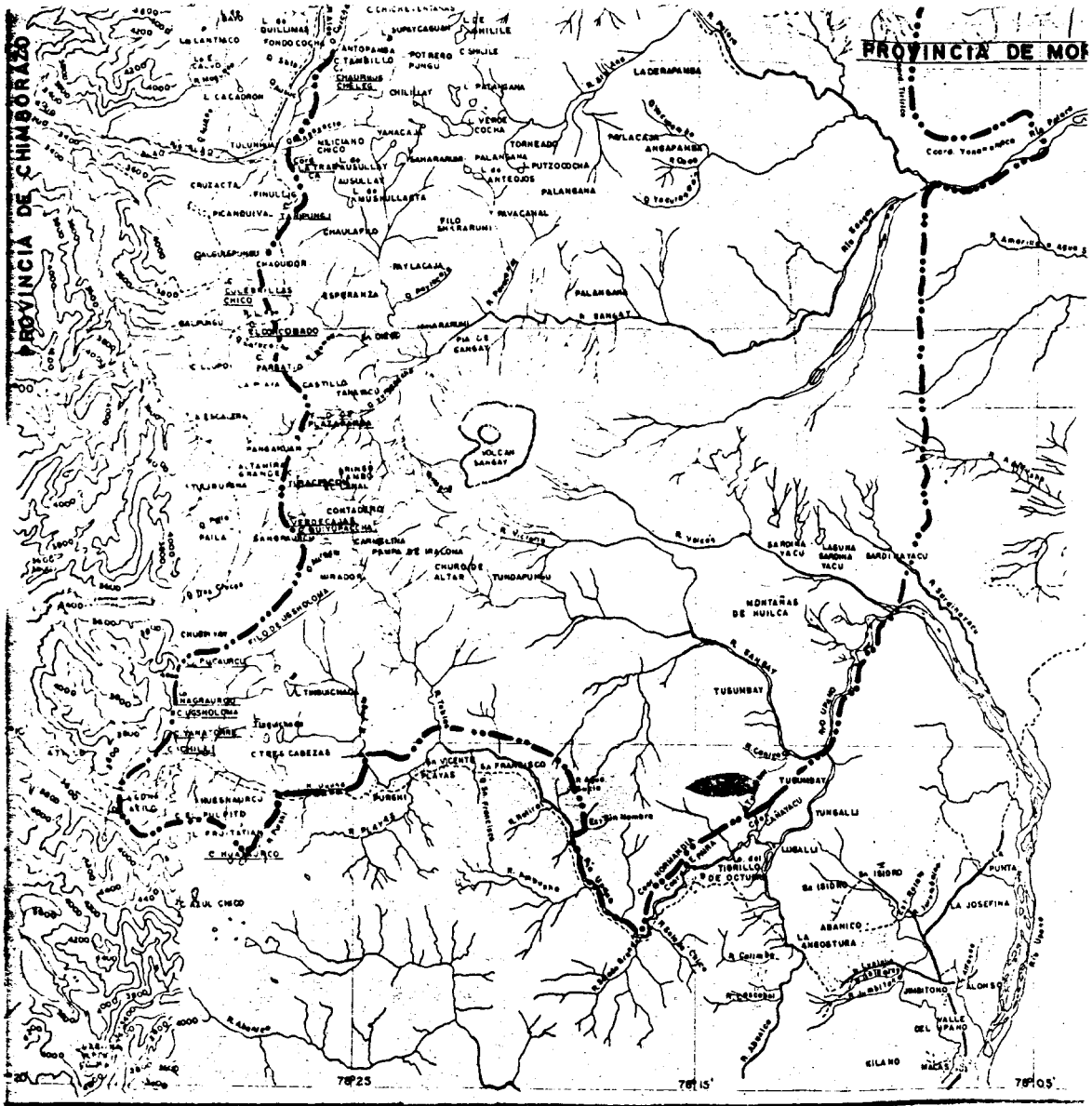


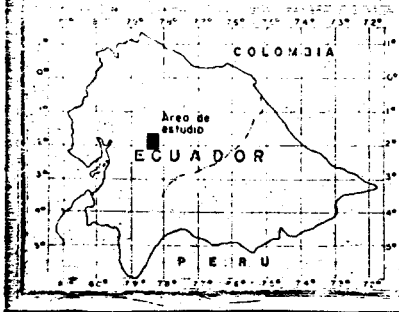
CONSERVACION DE AREAS SILVESTRES DEL ECUADOR

CONTENIDO	AUTORES: Ing. Arturo Ponce S. / Lcdo. Ang. Paucar M.	SIMBOLOGIA	Lámina
Parque Nacional "SANGAY" Limites.	APROBO: DIBUJO: Abel Mora Serrano	Limites de área.	de

Ministerio de Agricultura y Ganadería.	Dirección General de Desarrollo Forestal.	Departamento de Administración de Areas Naturales y Vida Silvestre.	Mapa Base I. G. M. de Esc. 1:50.000	Superficie - Has.	Escala 1: 200.000



SISTEMA DE CONSERVACION
NATURALES SOBRESALIENTES



CONTENIDO

Parque Nacional "SANGAY"

Limites.

AUTORES:
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Lcdo. Anc. Proaño M.

APROBO:

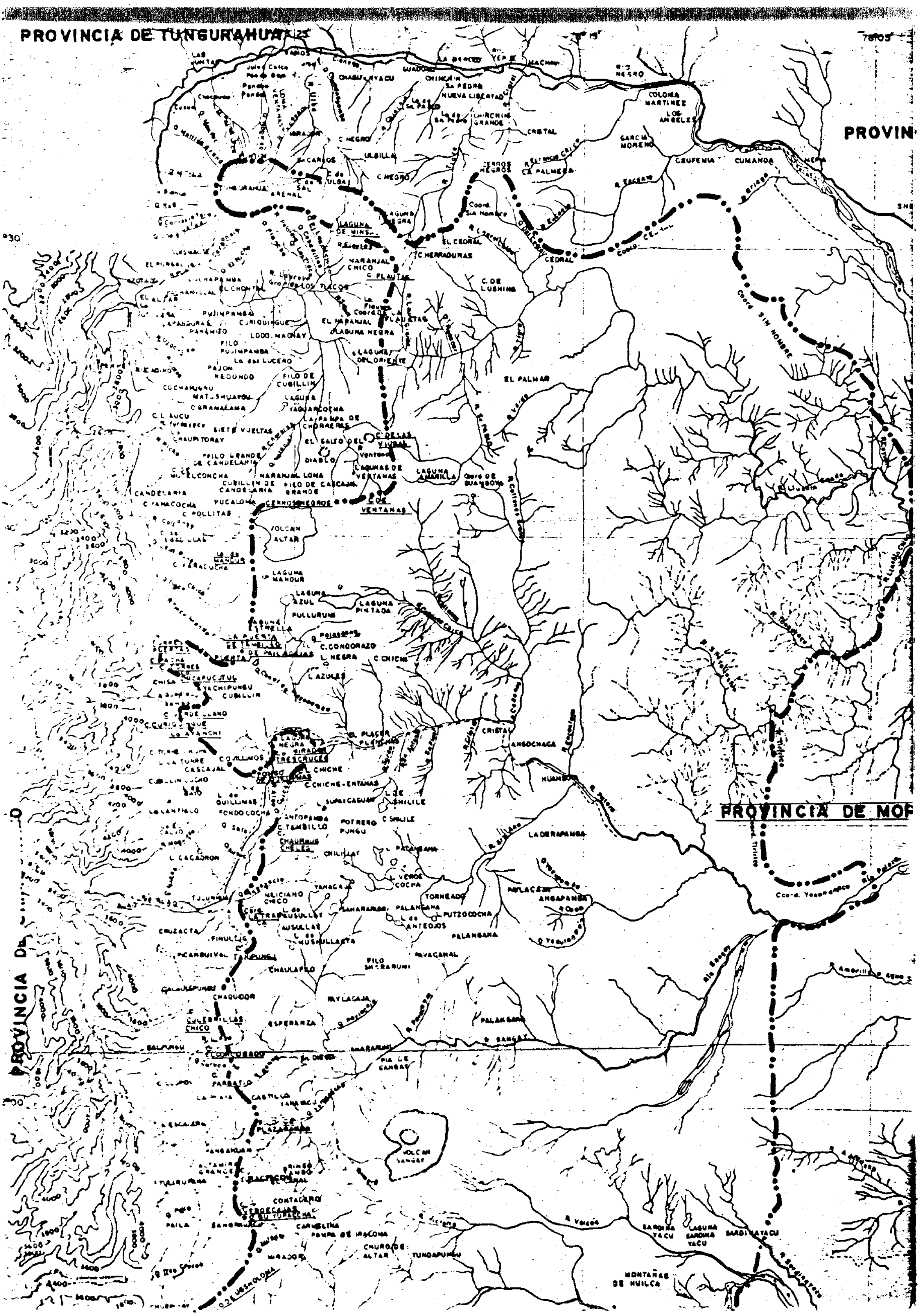
DIBUJO:
Abel Mora Serrano

Marzo-1978

Ministerio de Agricultura y Ganadería.

Dirección General de Desarrollo Forestal.

Departamento de Administración de Areas Naturales y Vida Silvestre.



PROVINCIA DE TUNGURAHUA
PROVIN
PROVINCIA DE MOR
PROVINCIA DE
COLONIA MARTINEZ
LOS ANGELES
GARCIA MORENO
CEUFEMIA
CUMANDA
LA PALMERA
CRISTAL
NUEVA LIBERTAD
SAN PEDRO
LAGUNA NEGRA
EL CEDRAL
CEDRAL
C. HERRADURAS
NARANJAL CHICO
C. FLAUTAS
C. DE LUSHINE
EL PALMAR
LAGUNA DEL ORIENTE
PUJINPAMBA
EL ALTAR
LOGO MACHAY
FILO DE CUBILLIN
PAJON REDONDO
SIETE VUELTAS
EL SALTO DEL DIABLO
C. DE LAS VIGAS
LAGUNAS DE VENTANAS
LAGUNA AMARILLA
CERROS NEGROS
C. DE VENTANAS
CANDELARIA
POLLITAS
VOLCAN ALTAR
LAGUNA MANDUR
LAGUNA AZUL
LAGUNA PINTADA
PULLURUMI
C. CONDORAZO
L. NEGRA
L. AZULES
CUBILLIN
EL PLACER
CRISTAL
ANGOCHACA
HUAMBOYA
TRES CRUCES
C. CHICHE ENTANAS
SHILILE
LAGUNA TRES CRUCES
LADERAPANGA
CHAUPIRUGUAS
PALANGANA
TORNEADO
ANGAPANGA
PUTZOCOCHA
ANTEOJOS
FILO SHIGRARUMI
PAVACANAL
CHAULAFILO
CUZACTA
TANPUNGI
CHAQUIDOR
CULEBRILLAS CHICO
ESPERANZA
CONCORADO
CASTILLA
PLAZAPAMBA
VOLCAN SANGAY
R. SANGAY
CONTADERO
CARMELINA
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TUNDAPUNGU
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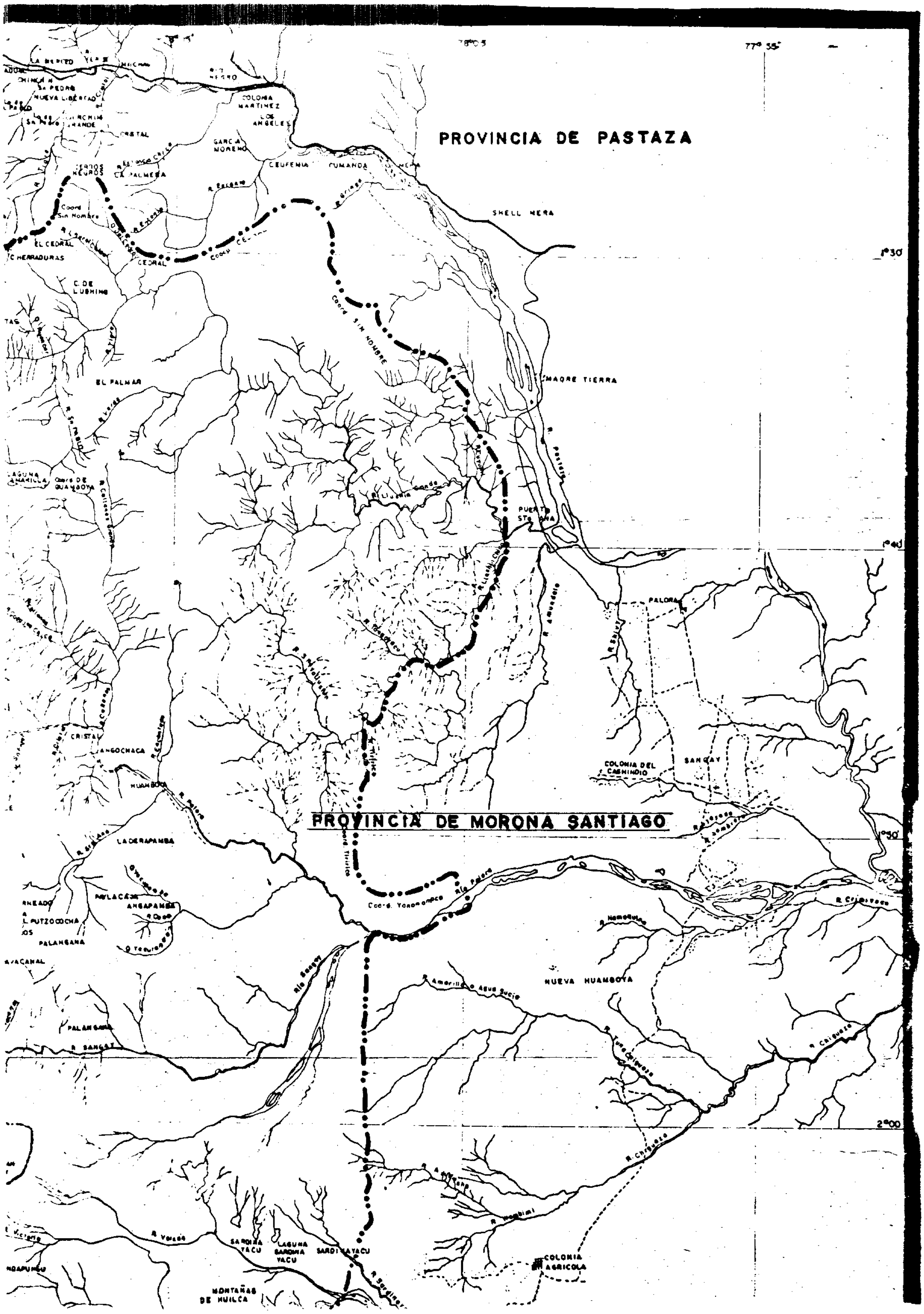
SARDINAYACU



PROVINCIA DE PASTAZA
PROVINCIA DE MORONA SANTIAGO
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SHELL MERA
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NUEVA HUAMBOYA
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LOS ANGELES
GARCIA MORENO
CUMANDA
R. Pastaza
R. Palora
R. Chiguaza
R. Sangay
R. Volcán

PATRIMOINE MONDIAL: CANDIDATURE

EXAMEN TECHNIQUE PAR L'UICN

1. NUMERO D'IDENTIFICATION ET NOM: 260 PARC NATIONAL SANGAY

2. SITUATION GEOGRAPHIQUE: Situé entre 1°27' et 2°15' de latitude sud et 78°04' et 78°31' de longitude ouest dans les provinces de Morona-Santiago, du Chimborazo et du Tungurahua.

3. CANDIDATURE PROPOSEE PAR: Gouvernement équatorien

4. DOCUMENTATION:

(i) Formulaire de candidature, et bibliographie
(ii) Documentation supplémentaire (UICN)

a) Consultants: Goetz Schuerholz, Allen Putney, Yolanda Kakabadse

b) Macey, A. et coll., 1976. "Sangay" Estudio de las Alternativas de Manejo-Direccion General de Desarrollo Forestal Proyecto PNUD/FAO, ECU/71/527 -- Quito, Equateur

c) Departamento de Areas Naturales y Vida Silvestre, 1982. Parque Nacional Sangay. Plan de Manejo.

d) Dossiers de projets UICN/FMN, Projet no. 1541, Gestion du Parc national du Sangay.

5. DESCRIPTION ET RESUME

Avec une superficie de 270 000 ha, le Parc national Sangay représente les principaux systèmes écologiques de l'Equateur, y compris les systèmes glaciaires et volcaniques, le système des paramos (hauts plateaux désertiques), la forêt tempérée humide, et la forêt tropicale humide amazonienne. C'est l'un des rares sites andins qui n'ait pas été modifié par l'homme. Du point de vue géologique, la zone présente également un intérêt exceptionnel dans la mesure où le volcan Sangay est, dit-on, actif de façon permanente depuis la plus longue période connue dans le monde. (Pour plus de détails, voir la fiche descriptive ci-jointe)

6. INTEGRITE

La région est suffisamment grande et est demeurée suffisamment intacte pour que ses écosystèmes naturels continuent de se développer normalement. Un plan de gestion a été adopté en 1982 et, s'il est exécuté, il fournira les directives nécessaires en matière de gestion pour maintenir l'intégrité de la région.

7. COMPARAISON AVEC D'AUTRES REGIONS

La réserve écologique du Cayambe-Coca comprend nombre d'écosystèmes analogues mais elle est loin d'abriter autant d'espèces végétales et animales et de plus, elle a été perturbée par l'homme. Le Parc national du Coto Paxi ne renferme que des zones volcaniques et des paramos et de ce fait protège beaucoup moins d'espèces. La réserve écologique de Cotacachi Cayapas recèle des habitats analogues, mais elle est davantage composée de forêts de type spécifiquement ombrophile que de forêts de type amazonien. C'est pourquoi la combinaison des espèces y est totalement différente.

8. EVALUATION

On trouve, sur le site, un paysage en évolution constante qui présente une valeur universelle exceptionnelle (critère ii). Le volcan est également d'une beauté éminemment remarquable, notamment lorsqu'on le considère dans le cadre des prairies, des forêts et d'autres habitats importants qui l'entourent (critère iii). Il contient également d'importants habitats naturels pour un certain nombre d'espèces en danger, y compris l'ours à lunettes et le tapir des Andes, que l'on ne trouve précisément que dans le nord de ces montagnes.

9. RECOMMANDATION

Il faudrait inscrire le Parc national Sangay sur la Liste du patrimoine mondial.

Union internationale pour la conservation
de la nature et de ses ressources

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