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

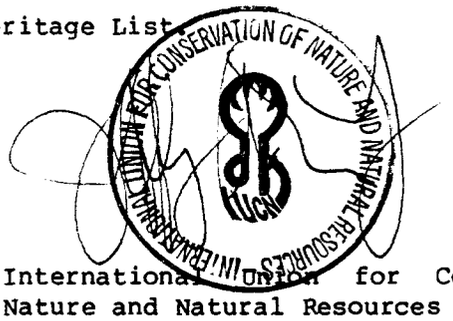
Cayambe-Coca ecological reserve includes many of the same ecosystems, but does not house nearly as many species of plants and animals and has been disturbed by man; Coto Paxi National Park covers only volcanic and peramo areas, thereby protecting many fewer species. Cotacachi Cayapas ecological reserve 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.

Macey, A. et al. (1976). "Sangay" Estudio de las Alternativas de Manejo, Direccion General de Desarrollo Forestal, Proyecto PNUD/FAO, ECU/ 71/527. Quito, Ecuador (includes a species list).

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

Plan de Manejo del Parque Nacional Sangay. 1:200,000.

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.

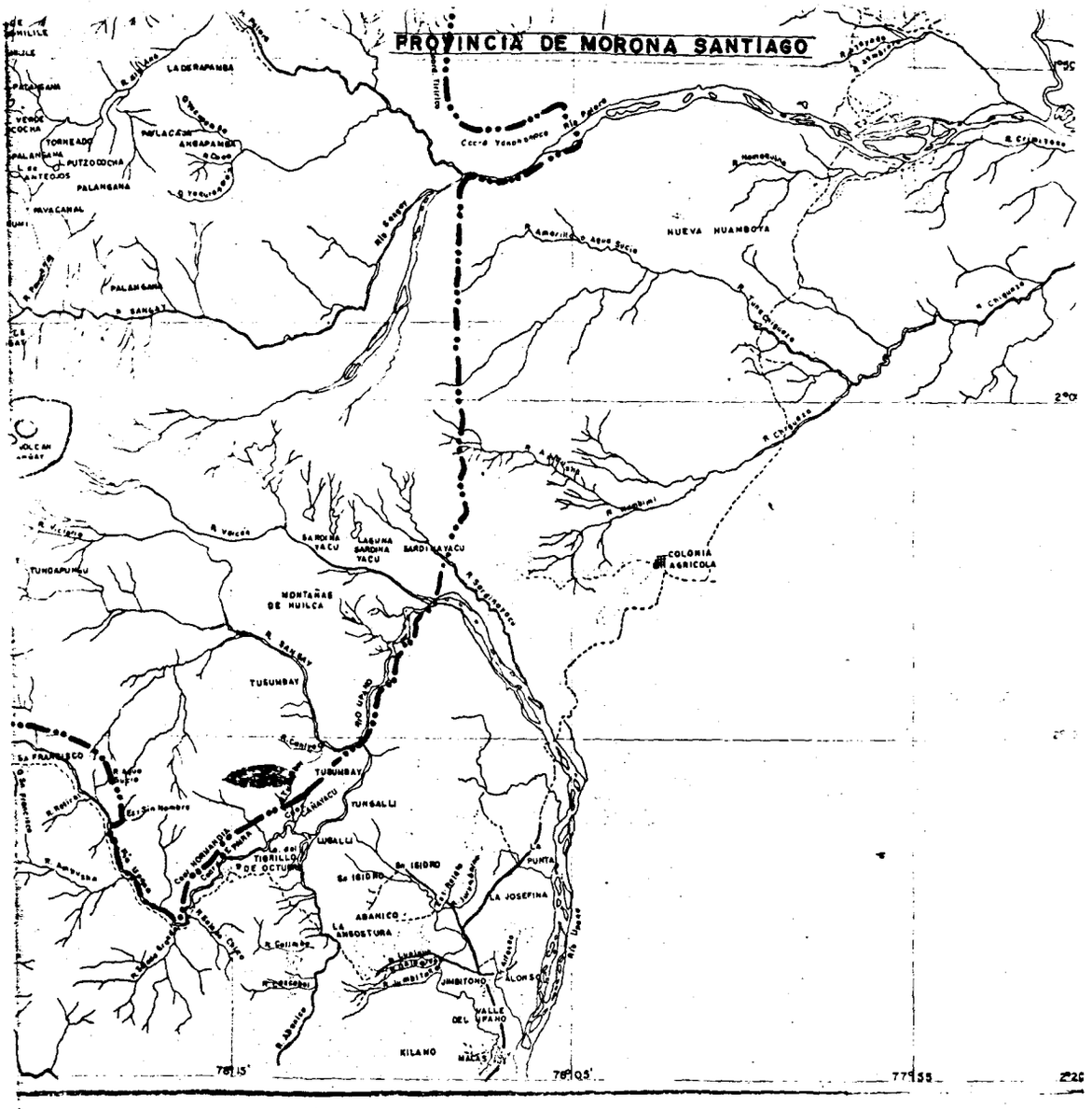
STAFF The staff includes a park intendent, 4 forest experts and 10 forest rangers. Headquarters is at Riobambo and there are four guard posts in Rio Negro, Palora, Alao and Macas.

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

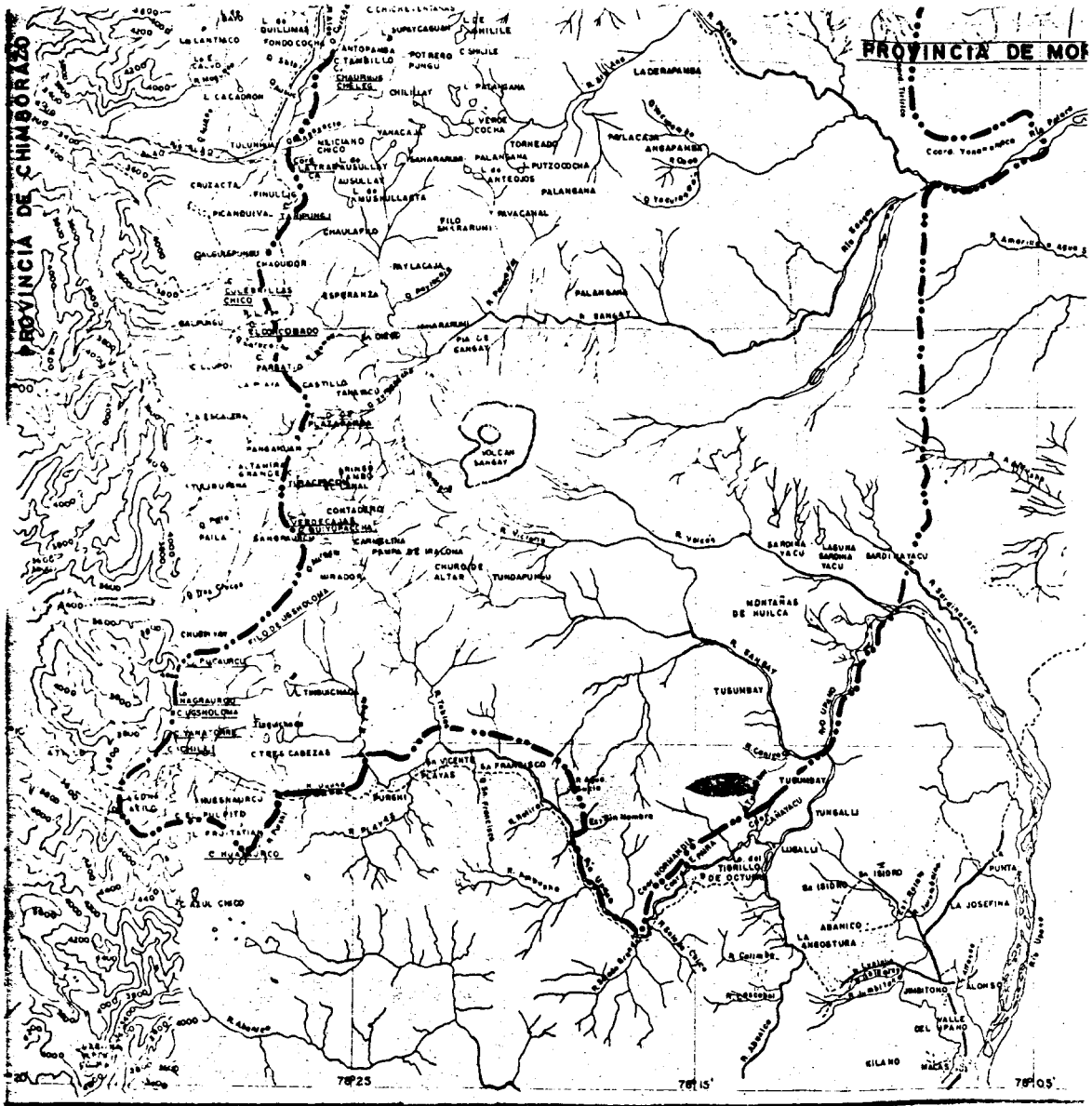
DATE December 1982.



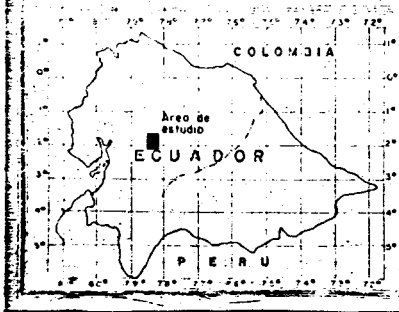
CONSERVACION DE AREAS SILVESTRES DEL ECUADOR

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:
Ing. Arturo Ponce S.
Lcdo. Anc. Proaño M.

APROBO:

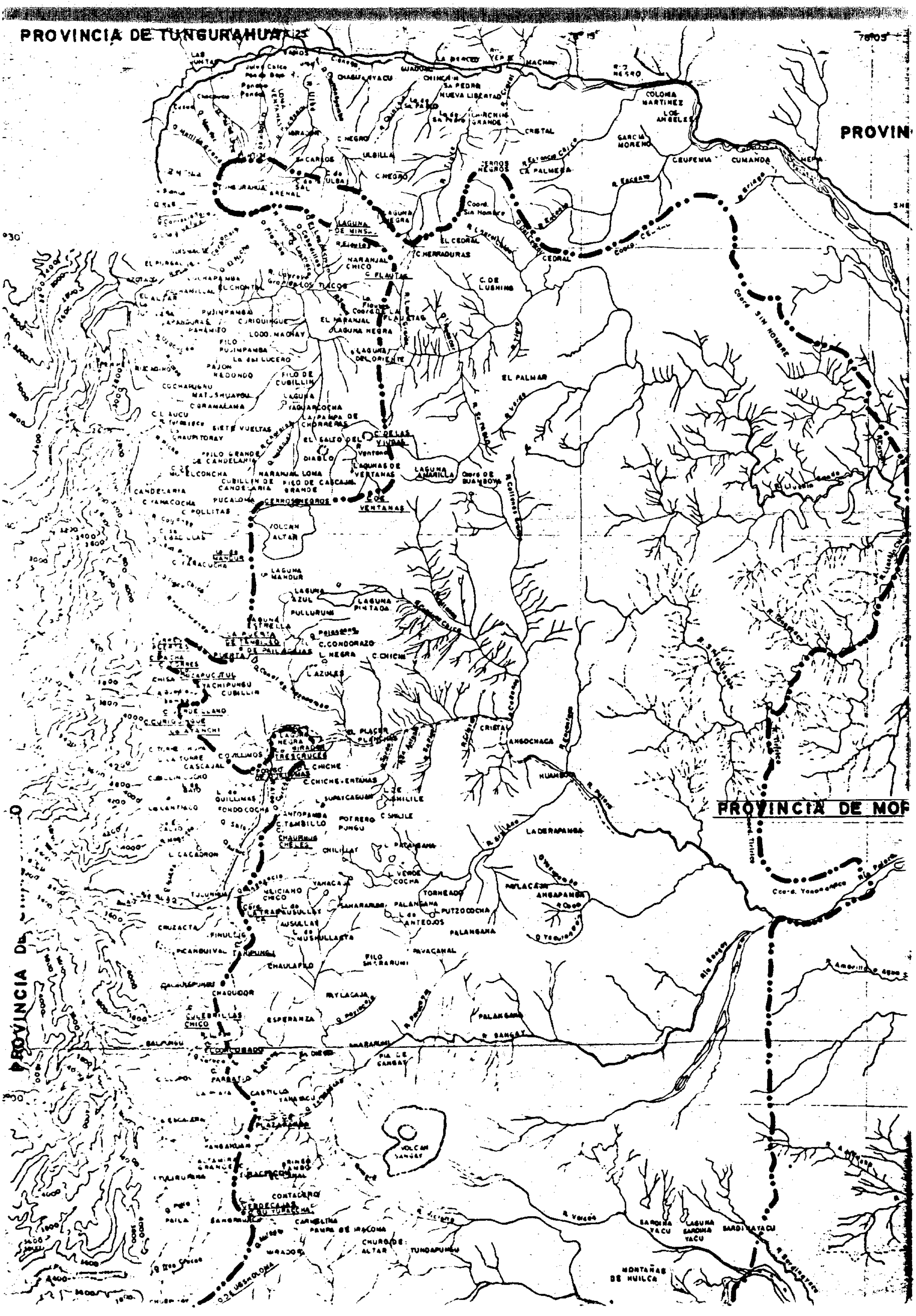
DIBUJO:
Abel Mora Serrano

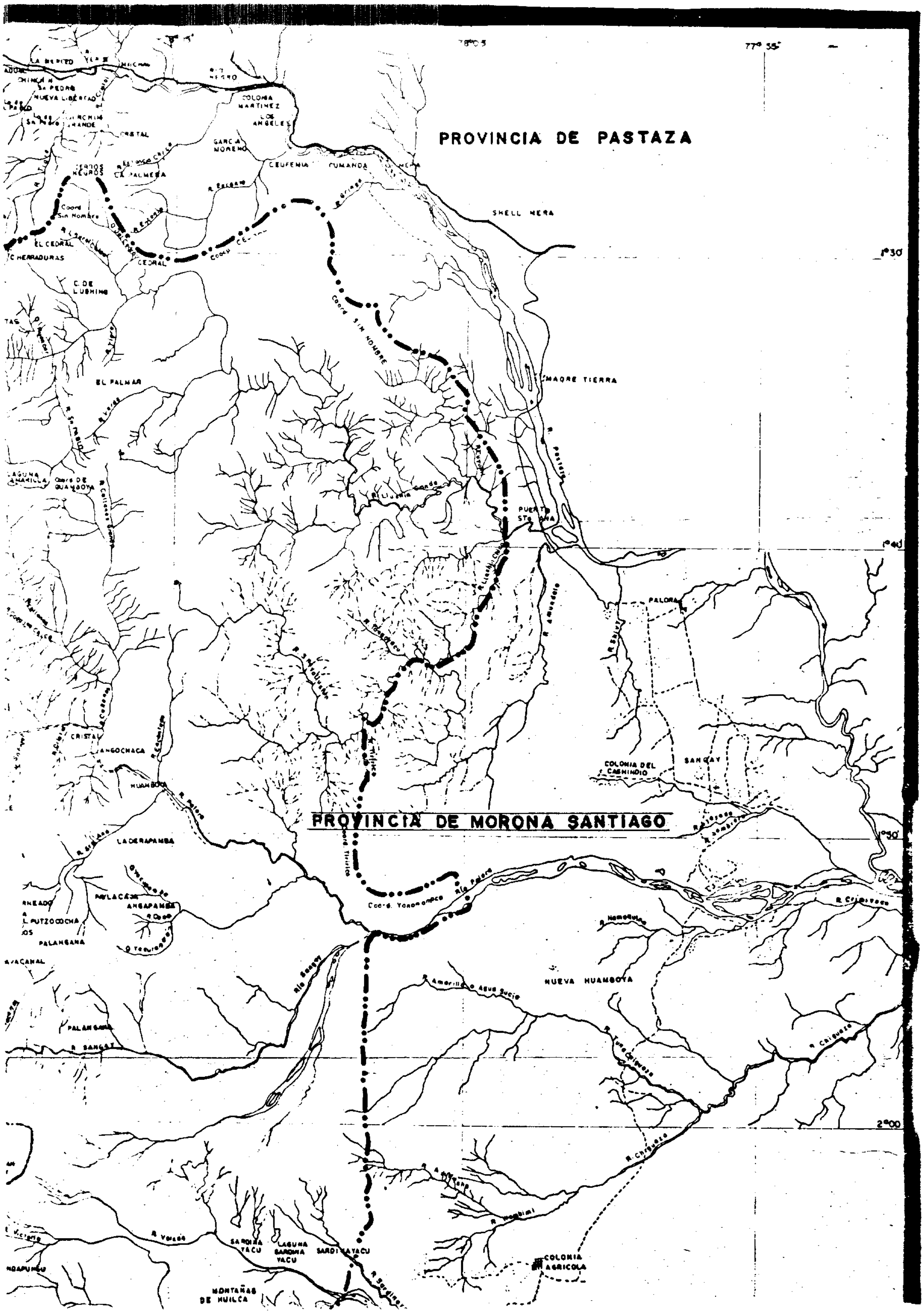
Marzo-1978

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
CEDRAL
EL CEDRAL
C. HERRADURAS
NARANJAL CHICO
C. FLAUTAS
C. DE LUSHINO
LOS TUCOS
EL NARANJAL
LAGUNA NEGRA
LAGUNA DEL ORIENTE
EL PALMAR
FILO DE CUBILLIN
C. DE LAS VIUDAS
LAGUNA AMARILLA
LAGUNAS DE VENTANAS
CERROS NEGROS
C. DE VENTANAS
VOLCAN ALTAR
LAGUNA MANDUR
LAGUNA AZUL
LAGUNA PINTADA
PULLURUMI
L. CONDORAZO
L. NEGRA
C. CHICHE
L. AZULES
EL PLACER
CRISTAL
ANGOCHAGA
HUAMBOYA
LADERAPAMBA
TORNEADO
PUTZOCOCHA
PALANGANA
CHAULAFILO
ESPERANZA
SANGAY
VOLCAN SANGAY
CASTILLO
PLAZA
CONTADERO
TUNGAPUNGU
MONTAÑAS DE HUILCA
SARDINA YACU
LAGUNA SARDINA YACU



PROVINCIA DE PASTAZA
PROVINCIA DE MORONA SANTIAGO
77° 35'
1°30'
1°40'
1°50'
2°00
SHELL MERA
MADRE TIERRA
PUERTO STA. ANA
PALORA
SANGAY
COLONIA DEL CASHINDIO
NUEVA HUAMBOYA
COLONIA AGRICOLA
EL PALMAR
LAGUNA AMARILLA
CRISTAL
ANGOCHACA
HUAMBOYA
LADERAPAMBA
PALANGANA
SARDINA YACU
LAGUNA SARDINA YACU
MONTAÑAS DE HUILCA
EL CEDRAL
CEDRAL
COLONIA MARTINEZ
LOS ANGELES
GARCIA MORENO
CUMANDA
R. Pastaza
R. Palora
R. Chiguaza
R. Sangay
R. Volcan
Coord. Sin Nombre
Coord. Yanamongo