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En répondant, veuillez rappeler:

IUCN REVIEW

World Heritage Nomination

1. NAME: Virunga National Park, Zaire
2. LOCATION: Kivu Province, Eastern Zaire
3. NOMINATED BY: Government of Zaire,
Mr. Lessedjina, Kiaba Leka
November 2, 1978
4. DOCUMENTATION:
 - i) Nomination form
 - ii) Supplementary appendices

Note: The nomination form received was not comprehensive -
supplementary information has been collected from other IUCN
sources.

5. BACKGROUND and SUMMARY DESCRIPTION:

Virunga National Park (809,000 ha.) was the first national park created in Africa (Albert National Park, 1925); "straddling the equator, the Park embraces large and small lakes at various levels, marshes, bogs, rivers, different types of savannas and forests, all montane vegetation belts, extinct and active volcanoes, hot springs, lava plains and non-volcanic mountains.

"The two largest lakes in the Park belong to different water systems: Lake Kivu to the Congo Basin and Lake Adi Amin to the Nile system."

Curry-Lindahl, Harroy. p. 42, Vol. II,
National Parks of the World.

"I do not know any other park in Africa or southern Asia with such a variation in biotopes. The volcanoes in the south; the hot springs habitat of the hippos near Rutshuru, the enormous plains, herds of elephants, antelopes, rhinos, the bird life of Lake Edward, the mountain gorilla."

Personal communication 18 January 1979
Jhr. Mr. Van der Goes Van Naters

"The diversity of the environment in the Park is a consequence of the range of altitudes from equatorial forest at 798 metres to eternal glaciers and snow on Mt. Ruwenzori at 5,119 metres".

appendix to Nomination Form

6. JUSTIFICATION:

The Virunga National Park has been evaluated against the "operational guidelines for the implementation of the World Heritage Convention" as amended at its 2nd Meeting.

Item 10 Outstanding universal value

ii) Geological and biological processes

- active volcanoes: Karisimbi 4,407 m
Nyamulagira 3,068 m
Nyiragongo 3,470 m
- dormant volcanoes: Mikenno 4,437 m
Visoke 3,711 m
Sabinio 3,647 m
- glaciation: Mt. Ruwenzori - perpetually covered with glacial ice
- flora: The Park covers all of the main habitats of tropical Africa (except deserts, semi-deserts and marine biotopes).

iii) Unique, rare or superlative natural phenomena

- "Rivers are lined with date palms and inhabited by thousands of hippopotamuses (Virunga N.P. has Africa's densest populations."

Lindhahl, Harroy (p.43)

iv) Habitats where rare or endangered species survive

- 1) Mountain gorilla Gorilla gorilla beringei (p.6-10)
- 2) Colubus monkey Colubus polykomos (p.17-18)
- 3) Leopards Panthera pardus (p.36)

Reference - Exploration du Parc National des Virunga. Bourlière et Verschuren: 1972.

Also note the works of Coolidge, Schaller, Curry-Lindhahl, Harroy, etc.

In brief, there is no doubt that the Parc National des Virunga meets criteria (ii), (iii) and (iv) of the natural properties criteria.

INTEGRITY

The nomination form item 4(a) notes a continuous problem related to poaching from neighbouring countries and local peoples. It also notes potential problems from growing populations in adjacent countries.

The Park is well staffed. The announced policies of the Government give a high priority to conservation. The financial resources to execute these policies are extremely limited. A proposal for technical assistance has been submitted. IUCN does not endorse the proposal as submitted however, we have no doubt that substantial financial assistance is necessary and desirable.

RECOMMENDATION:

Parc National des Virunga should be placed on the World Heritage List.



International Union for Conservation of Nature and Natural Resources

March 1979

ZAIRE-Parc national des Virungas

ZAIRE

NAME Parc national des Virungas

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

BIOGEOGRAPHICAL PROVINCE 3.20.12 (Central African Highlands)

GEOGRAPHICAL LOCATION North-east Zaïre, on the border with Uganda and Rwanda, 95% in Kivu Province and 5% in Haut-Zaïre. 0°55'N-1°35'S, 29°10'-30°00'E.

DATE AND HISTORY OF ESTABLISHMENT Established in 1925 as Albert National Park (809,000ha); revised by Decree No. 69-041 of 22 August 1969 as **Virunga** National Park. Designated as a World Heritage site in 1979.

AREA 790,000ha. This was reduced from the original area when a small area of the park was incorporated into Rwanda. The boundaries have undergone slight modifications on several occasions, but these have affected under 2.5% of the park area. Contiguous to the Gorilla Sanctuary (2,900ha) in Uganda and the Volcanoes National Park (23,000ha) in Rwanda.

LAND TENURE Government

ALTITUDE 798m in the extreme north to 5,119m in the Ruwenzori range

PHYSICAL FEATURES The park includes: part of Lake Edward (Idi Amin), the Semliki River valley, parts of the Rwindi, Ishasha and Rutshuru valleys south of the lake, the **Virunga** area within Zaïre, and part of the Ruwenzori range. Lake Edward belongs to the Nile river system and Lake Kivu to the Congo Basin river system. Features include hot springs in the Rwindi plains and the **Virunga** Massif volcanoes, some such as Nyamulagira and Nyiragongo are still active. The areas of lowest and highest rainfall in Zaïre are in **Virunga** National Park - under 75km apart and ranging from 500mm at Lake Edward to over 3,000mm on the west slope of Mt Ruwenzori. The considerable altitudinal range results in marked climatic variations which affect the overall biological and geographical diversity of habitats. Habitat types include: lakes at various altitudes, marshy deltas and peat bogs, savannas and lava plains, low altitude equatorial forest, high altitude glaciers, and snow fields (the Ruwenzori peaks have permanent snow cover).

VEGETATION Located at the border between several biogeographical zones, the park protects both tropical rain forest and eastern steppe species, and its range of altitudes adds to the habitat variety. The diversity includes: bamboo and Hagenia forest on the mountains; equatorial forest along the Semiliki; wooded savanna of the Rwindi; steppes of Carissa, Capparis, Maerua and Euphorbia calycina; various low savannas including Themeda, Imperata, Pennisetum, Hyparrhenia, Acacia sieberana, A. hebeclada

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and Combretum; swamps and transitional habitats including Craterostigma prairies and Sporobolus savanna; dry thick forest of Euphorbia dawai; Neoboutonia macrocalyx forest on the lava plains; wet thick forest; white heath of Erica, Philippia, Podocarpus milanjanus, Hypericum ruwenzoriense, Hagenia abyssinica and Rapanea pellucidostriata; alpine forests of Dendrosenecio and giant Lobelia; and sparse vegetation above 4,300m comprising mainly lichens and spermatophyta, although Graminae have been found growing at over 5,000m.

FAUNA Some of the largest wild animal concentrations in Africa occur along the rivers of the park. Mammals in the savanna of the Rwindi area include: elephant Loxodonta africana (T) (numbering, in the southern part of the park, 3,000 in 1960, 674 in 1971, 800 in 1972, 780 in 1973, 631 in 1980 and 500 in 1988; the total was around 830 in 1988) (Verschuren, 1988), hippopotamus Hippopotamus amphibius (over 20,000), buffalo Syncerus caffer, numerous antelope including kob Kobus kob, defassa waterbuck K. ellipsiprymnus defassa and topi Damaliscus lunatus, warthog Phacochoerus aethiopicus, lion Panthera leo, which have increased in numbers from 1960 to the late 1980s in contrast to many other large mammal species, and various monkeys. Large numbers of pelicans Pelecanus sp. occur on the lower Rutshuru. In the Semiliki Valley and on the slopes of the Virunga mountains are gorilla Gorilla gorilla berengei (T) (about 140 were recorded in the Zaire Virungas in 1980 and 280 in 1986 (Verschuren, 1988), chimpanzee Pan troglodytes (T), and okapi Okapia johnstoni. In the extreme north are forest hog Hylochoerus meinertzhageni and bongo Tragelaphus euryceros. Birds include: Nahan's francolin Francolinus nahani (R), forest ground thrush Turdus oberlaenderi (R), shoebill Balaeniceps rex (of special concern) and probably papyrus yellow warbler Chloropeta gracilirostris (R).

LOCAL HUMAN POPULATION Virtually none when the park was created but a population explosion occurred in the late 1950s and local tribes came to settle on the park borders. 60% of the park boundaries are now densely populated. Small administrative posts and villages of the past have become large cities and are sometimes populated by outsiders, for example, the Bakiga from Uganda, Banyarwanda etc. They provide the poachers but have never "officially" occupied park territory. Within the park there are three fishing villages, Vitshumbi, Kiavinonge and Nyakakoma, with 20,000 inhabitants in total, and camps at Rwindi and Lulimbi (Verschuren, 1988).

VISITORS AND VISITOR FACILITIES Accommodation is available at Rwindi and Djomba. Modest accommodation is also available at Mabenga and Kanyabayonga. 7,160 people visited the park in 1988 of which 2,324 were from Zaire. Verschuren (1988) makes several recommendations concerning visitor reception and activities.

SCIENTIFIC RESEARCH AND FACILITIES This park is exceptional in Africa in that it was set up primarily for scientific research during Belgian Colonial rule. Much detailed work has been carried out on specific taxa, from insects to mammals, particularly in the 1930s and 1950s, largely by Belgians. A 1981 census of the gorilla population, funded by WWF and the New York Zoological Society, showed that numbers are declining and it recommended international co-operation to improve protection measures.

Other current studies deal with the ethology of chimpanzees and ethno-palaeontology of Ishango. A laboratory is located at Lulimbi.

CONSERVATION MANAGEMENT An 'integral conservation policy' has been in operation for over 50 years. Savanna fires, which maintain the fire-climax vegetation, are managed by the park authorities. IUCN/WWF Project 1941 aims to carry out a survey of the status of the gorilla and provide necessary data for their improved preservation and protection of their habitat. There are approximately 50 guard posts throughout the park. Verschuren (1988) discusses park management in more detail.

MANAGEMENT PROBLEMS Poaching of elephant and gorilla has been stopped, although there remains localised poaching of hippopotamous, buffalo and certain antelopes (Verschuren, 1988). Fishing is a potential threat, and 20,000 people live in the fishing villages of Vitshumbi, Kiavinonge and Nyakakoma. There is also a potential future threat from the construction of the Semliki and Rutshuru dams.

STAFF Three major stations (Rwinda, Rumangabo and Mutsora) and 2 subsidiary stations with at least 250 forest guards. About 15 senior staff (1981)

BUDGET State subsidised

LOCAL ADMINISTRATION Parc National des Virunga, Station de la Rwinda, Rwinda, D/S Goma, Kivu, Institut Zairois pour la Conservation de la Nature (IZCN), BP 868, Kinshasa 1

PRINCIPAL REFERENCE MATERIAL

Many publications obtainable through L'Institut Royal des Sciences Naturelles de Belgique, rue Vautier 29, B-1040 Bruxelles.

Bourlière and Verschuren, J. (1972). Exploration du Parc national des Virunga.

IUCN/WWF Project 1941. Conservation of Gorillas.

IUCN/WWF (1985). Rapport d'une mission au Zaïre et Rwanda. IUCN/WWF, Gland, Switzerland.

Verschuren, J. (1988). Problèmes scientifiques et techniques au parc national des Virunga (Zaïre). Institut Zairois pour la Conservation de la Nature/Administration Générale Belge pour la Coopération au Développement. 135 pp.

DATE 1984, updated May 1990
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