

WORLD HERITAGE NOMINATION

IUCN TECHNICAL REVIEW1. IDENTIFICATION NUMBER AND NAME 227 COMOE NATIONAL PARK

2. LOCATION: Comoe National Park is located between latitudes 8° 5' and 9° 6' N and longitudes 3° 1' and 4° 4' E. Its south entrance at Kakpin is 600 km from Abidjan, 220 km from Bouaké, and 150 km from Bondoukou.

3. NOMINATED BY: Ministry of Water and Forests, Ivory Coast

4. DOCUMENTATION:

- (i) Nomination form, including maps
- (ii) Supplementary documentation (IUCN)

- a) Consultations: Dr. M.A. Macdonald; David W. Reynolds; Antoine Cloutier; B. Bosquet.
- b) Geerling, C., and J. Bokdam. 1973. Fauna of the Comoé National Park, Ivory Coast. Biol. Conserv. 5 (4), pp. 251-257.
- c) FGU-Kronberg, 1979. Etat actuel des parcs nationaux de la Comoé et de Tai ainsi que de la Réserve d'Azagny et propositions visant à leur conservation et à leur développement aux fins de promotion du tourisme. Vol. 2: Parc National de la Comoé, Sections 1 and 2, Abidjan.
- d) Lauginie, F. 1975. Composantes du milieu naturel et environnement socio-économique du Parc national de la Comoé: Propositions de schéma d'aménagement. Bureau pour le Développement de la Production Agricole, Abidjan. 97 pp.
- e) Lauginie, F. and G. Sournia. 1977. Essai de zoogéographie d'un milieu naturel protégé: le Parc national de la Comoé. Ann. Univ. Abidjan, series G (Geography) Vol. 7, pp. 146-188.

5. BACKGROUND AND SUMMARY

Comoe National Park (1,150,000 ha) contains a remarkable variety of habitats, including savanna, wooded savanna, gallery forests, riverine forest, and riparian grasslands, providing an outstanding example of an area of transitional habitat from forest to savanna. The habitat variety is reflected in great diversity of wildlife species, including 11 species of monkey, 11 species of carnivore, and 21 species of artiodactyls (grazing animals); the site includes all three species of crocodiles (all of which are Endangered species). (See attached data sheet for additional details).

6. INTEGRITY

Because of the human ecological difficulties in settling the area, it is one of the few remaining areas in West Africa which maintains its ecological integrity. It is large enough to ensure the ecological integrity of the species contained within the site, provided poaching can be brought under control. The boundaries have been clearly established (though not all have been surveyed), and the boundaries were designed in an effort to include entire watersheds or complete ecosystems.; however, if boundaries were

extended to the Gorowi-Kougoli area in the southwest, the ecological value of the site would be greatly improved, as it would provide most appropriate habitat to elephants and would extend protection to additional important species such as chimpanzees, bongo, and bush-pigs.

7. COMPARISON WITH OTHER AREAS

Comoe represents the West African woodland/savanna, a large biogeographic province which covers many other countries in the region; Niokolokoba National Park in Senegal, inscribed on the World Heritage List in 1981, is a larger and better representative of this province. In terms of biomass, Comoe supports some 1.4 tons per sq km, the highest in the country; but this does not compare with the 13,300 tons/sq km in North Bunyoro (Uganda), 4.4 tons/sq km in Tsavo (Kenya), 2.1 tons/sq km in Pendjari (Benin), or 1.8 tons/sq km in Arli (Upper Volta). However, Comoe does contain both forest and woodland species, making it one of the most diversified ecological units within the West African woodland/savanna province. In its visual impact, it compares with Waza National Park (Cameroon), with numerous wading birds; but as Waza's hydrology has been disrupted, Comoe assumes greater importance. Ivory Coast already has two World Heritage natural properties, Tai National Park and Mt. Nimba Nature Reserve (shared with Guinea); both of these are in quite distinct biogeographical zones (forest rather than woodland) and contain different species. In addition, both Tai and Mt. Nimba are threatened by a variety of human factors, while Comoe is well protected against most impacts (other than poaching).

8. EVALUATION

Comoe National Park is an important site for the continuing evolution of the forest-savanna transition in Western Africa (criteria ii), and has sufficient integrity to ensure the survival of the species included in the property.

9. RECOMMENDATION

Comoe National Park should be inscribed on the World Heritage List. The Committee might wish to suggest to the Government of Ivory Coast that it consider extending the park to the southwest to include Mts. Gorowi and Kougoli, thus enhancing the ecological and touristic value of the property.

International Union for Conservation of
Nature and Natural Resources

15 April 1983

IVORY COAST

NAME Comoé National Park
Parc National de la Comoé

MANAGEMENT CATEGORY II & IX (National Park and Biosphere Reserve)
Proposed World Heritage Site (Criteria: ii)

BIOGEOGRAPHICAL PROVINCE 3.4.4 (West African woodland/savanna)

LEGAL PROTECTION Total

DATE ESTABLISHED 8 February 1968 by Decree No. 68-91. Originally protected as the Bouna-Komoé Faunal Reserve by Decree 1605, 4 March 1953, though rudimentary protection existed since 1926.

GEOGRAPHICAL LOCATION Extending from 35km south-west of Bouna in the north-eastern prefectures of Bouna and Ferkessedougou, westwards across the Comoé River to the vicinity of Kong. 600km from Abidjan. 8°05'-9°06'N, 3°01'-4°04'W.

ALTITUDE 119-658m

AREA 1,150,000ha

LAND TENURE State ownership

PHYSICAL FEATURES An interfluvial peneplain of schist and granite between the Comoé and Volta rivers with a mean altitude of 250 to 300m and a series of ridges and granite inselbergs rising to 600m. The River Comoé and its tributaries form the principal drainage, and the Comoé runs through the Park for 230km. Watercourses also drain to the Volta in the east. Permanent and semi-permanent water is found in many places. The soils are infertile and unsuitable for cultivation. Sudan-type humid tropical transitional climate with 1,200mm mean annual precipitation and a single dry season of 6 months in the south and 8 months in the north. Mean annual temperature 26°C.

VEGETATION The Park contains a remarkable variety of habitats and plant associations more often found further south including savanna, forests and riparian grasslands, providing an outstanding example of an area of transitional habitat from forest to savanna. Open forest and savanna woodland characteristic of the Sudano-Guinean zone occupy around 90% of the area, with gallery forest and dense dry forest occupying 10%. All types of savanna occur. The forest is composed of many leguminous trees including Burkea africana, Detarium micranthum, Azalia africana, Daniellia oliveri and Isoberlinia doka. The savanna grasslands consist mainly of Panicum, Ctenium, Andropogon, Elionurus and Cymbopogon species, varied by some Bauhinia, Combretum and Gardenia thicket. The gallery forests are dominated by Cynometra vogelii; the patches of dense dry forest by Isoberlinia doka, Anogeissus leiocarpus, Cola cordifolia, Antiaria africana, Chlorophora excelsa and 'akee', the edible Blighia sapida; and the flood plains by Hyparrhenia rufa. Other forest species recorded include Parkia biglobosa, Pterocarpus erinaceus, Combretum, Terminalia, the shea nut Butyrospermum parkii and Uapaca somon, Lophira lanceolata, Parinari-Terminalia avicenioides, Protea elliotii, Burkea africana, Borassus aethiopum, Myragina inermis and Entada abyssinica, and a grassy ground cover of Andropogon spp. Areas of specialised vegetation

occur on the rocky inselbergs and in aquatic habitats. A list of the species found in the Park is attached to the Biosphere reserve nomination form submitted to Unesco.

NOTEWORTHY FAUNA

Comoé forms the northerly limit for some species including the yellow backed duiker Cephalophus sylvicultor, bongo Boocercus euryceros, guenons Cercopithecus diana, C. mona, C. petaurista and Cercocebus torquatus lunulatus. A large number of species occur including 11 species of monkey (including anubis baboon Papio anubis, green monkey Cercopithecus aethiops and black-and-white colobus Colobus polykomos), 17 species of carnivore (including lion Panthera leo, and leopard P. pardus (V)), giant pangolin Manis gigantea, aardvark Orycteropus afer, rock hyrax Procavia capensis, elephant Loxodonta africana (V), and 21 species of Artiodactyla (including bushpig Potamochoerus porcus, warthog Phacochoerus aethiopicus, hippo Hippopotamus amphibius, bushbuck Tragelaphus scriptus, buffalo Syncerus caffer aequinoctialis, red-flanked duiker Cephalophus rufilatus, waterbuck Kobus ellipsiprymnus, kob K. kob, roan antelope Hippotragus equinus, and oribi Ourebia ourebi). Birds are not abundant but include 10 species of herons (Ardeidae), duck (Anatidae), raptors (Accipitridae), plovers and francolins (Phasianidae), 4 of the 6 West African stork species, and 5 of the 6 West African vultures species. The reptiles include all 3 species of African crocodile; the slender-snouted Crocodylus cataphractus (I), C. niloticus (V) and the dwarf Osteolaemus tetraspis (I) all of which are listed in the IUCN Red Data Book. A list of species found in the park is attached to the Biosphere Reserve nomination form submitted to Unesco.

ZONING

Strict reserve zone where tourism is prohibited. The development of a buffer zone encompassing a contiguous game reserve is currently being studied. 2 tourist zones within the Park: short term and long term.

CONSERVATION MANAGEMENT

A management plan has been produced. 17 patrol posts at 20-30km intervals around the Park boundary are planned.

DISTURBANCES OR DEFICIENCIES

Poaching, particularly of elephant, roan and defassa kob, though the threat is less serious since the implementation of a vigorous anti-poaching campaign in 1974. There is some agriculture, however the ecosystems have been little modified by man principally due to the presence of river-blindness disease which has forestalled any agricultural encroachments or settlements.

TOURISM

Tourist facilities are planned.

SCIENTIFIC RESEARCH

Study during the development of the management plan included formation of inventories of species and habitats. Research under the MAB programme including work on ungulates was planned to start in 1983. A complete inventory of the natural resources of the park was undertaken in 1974, followed by further studies financed by bilateral aid in 1977 and 1980. Work on climate, vegetation, soils, hydrology, plant and animal populations and pollution has been completed.

SPECIAL SCIENTIFIC FACILITIES

A scientific research station is due to be built in 1985. Limited accommodation is available for scientists.

PRINCIPAL REFERENCE MATERIAL

Fgu-Kronberg (1979). Etat actuel des parcs nationaux de la Comoé et de Taï ainsi que de la Réserve d'Azagny et propositions visant à leur conservation et à leur développement aux fins de promotion du tourisme. Tome 2: Parc National de la Comoé, Parties 1 et 2, Abidjan, GTZ.

Feiler. (1981). Memoire, University of Wurzburg 1981: Etudes sur les modifications saisonnieres des preferences d'habitat et des structures sociales del'Antiope Cobe dans le Parc de la Comoe.

Geerling, C. and J. Bokdam (1973). Fauna of the Comoé National Park, Ivory Coast, Biological Conservation, 5(4) 251-257.

Lauginie, F. Inventaire de la faune du P.N. de la Comoé.

Lauginie, F. (1975). Composantes du milieu naturel et environnement socio-economique du Parc National de la Comoé, Propositions de schema d'aménagement; Bureau pour le Développement de la Production Agricole; Abidjan, 97p.

Lauginie F. et Sournia,.G. (1977). Essai de zoogéographie d'un milieu naturel protégé, le Parc National de la Comoé. Ann. Univ. Abidjan, serie G. (Geographie) T 7, pp. 146-188.

Pfeffer, P. Parcs nationaux et aménagement de la faune sauvage en Côte d'Ivoire.

Rahm, U. and Bienek, B. Etude des Parcs Nationaux de Côte d'Ivoire.

Roth, et al. (1979). Etat actuel des Parcs Nationaux de la comoe et de Tai ainsi que de la Reserve d'Azagny et propositions visant a leur conservation.

Biosphere Reserve nomination submitted to Unesco.

STAFF 82 employees including a full time staff of 1 Park Warden, 7 assistant wardens, 26 guards and 34 watchmen.

BUDGET No recent information, but known to be insufficient.

LOCAL PARK OR RESERVE ADMINISTRATION Chef d'Inspection, Conservateur du Parc National de la Comoé, Bouna, Republique de Côte d'Ivoire; or Direction des Parc Nationaux, Ministere des Eaux et Forets, BP V178 Abidjan, Cote D'Ivoire.

DATE November 1982