



## World Heritage Sites

Protected  
Areas and  
World  
Heritage



## COMOÉ NATIONAL PARK CÔTE D'IVOIRE

*The largest National Park in West Africa, this savanna-woodland Park is characterized by its great plant diversity. Due to the presence of the Comoé river, it contains plants which are normally only found much farther south, such as shrub savannas and patches of thick rainforest.*

*Threats to the Site: The present unrest in Côte d'Ivoire has had a very adverse effect on the site, as has poaching of wildlife and fires caused by poachers, over-grazing by large cattle herds and the absence of effective management over two thirds of the Park.*

### COUNTRY

Côte d'Ivoire

### NAME

Comoé National Park

### NATURAL WORLD HERITAGE SITE IN DANGER

1983: Inscribed on the World Heritage List under Natural Criteria ix and x.

2003: Listed as a World Heritage Site in Danger through collapse under civil conflict.

### STATEMENT OF OUTSTANDING UNIVERSAL VALUE

The UNESCO World Heritage Committee issued the following Statement of Outstanding Universal Value at the time of inscription:

#### Brief Synthesis

Comoé National Park, situated in the north-east of Côte d'Ivoire, with the surface of 1149450 ha, is one of the largest protected areas in West Africa. It is characterized by its great plant diversity. The Comoé River, which runs through the Park, explains the presence of group of plants that are usually found further south, such as the shrub savannas and patches of thick rainforest. The property thus constitutes an outstanding example of transitional habitat between the forest and the savanna. The variety of the habitats engenders a wide diversity of wildlife species.

**Criterion (ix):** The property, due to its geographical location and vast area dedicated to the conservation of natural resources, is an ecological unit of particular importance. Its geomorphology comprises wide plains with deep ridges carved by the Comoé River and its tributaries (Bavé, Iringou, Kongo), allowing humid plant growth towards the north and favouring the presence of wildlife in the forest zone. The property also contains green rocky inselbergs in a north-south line, surmounted by rocky ridges that form in the centre and the north, isolated massifs and small chains of 500m to 600m in altitude. Comoé National Park contains a remarkable variety of habitats, notably savannas, wooded savannas, gallery forests, fluvial forests and riparian grasslands providing an outstanding example of transitional habitats from forest to savanna. Currently, the property is one of the rare sanctuaries for a variety of West-African biological species.

**Criterion (x):** Due to the phytogeographical situation and the crossing of the River Comoé for over 230 kilometres, Comoé National Park teems with a vast variety of animal and plant species. This location in fact makes this property a zone where the areas of division of numerous west-African plant and animal species mingle. The property contains around 620 plant species, 135 species of mammals, (including 11 primates, 11 carnivores and 21 species of artiodactyla), 35 amphibian species and 500 bird species (a little less than 20% of which are inter-African migratory birds and roughly 5% palearctic migratory birds). Several of these bird species enjoy international protection, among which the Denham's Bustard (*Neotis denhami*), the yellow casqued hornbill (*Ceratogymna elata*) and the brown-cheeked hornbill (*Bycanistes cylindricus*). The property also contains 36 of the 38 species of the biome of the Sudo-Guinean savanna inventoried in the country as well as resident populations of species that have become rare in West Africa, such as the Jabiru *Ephippiorhynchus senegalensis*.

The different waters of the Comoé River and its tributaries are the habitat for 60 species of fish. As concerns reptiles, three species of crocodiles are found in the Park - including the dwarf crocodile (*Osteolaemus tetraspis*) - which are on the IUCN Red List. The property also contains three other threatened species which are the Chimpanzee, the African wild dog *Lycaon pictus* and the Elephant *Loxodonta africana*.

#### **Integrity**

Comoé National Park is one of the rare zones in West Africa that has maintained its ecological integrity. The property is sufficiently vast to guarantee the ecological integrity of the species that it contains, on the condition, however, that poaching is reduced. The boundaries have been clearly established and defined to include the watersheds or ecosystems in their entirety. However, if the boundaries were extended to the Mounts Gorowi and Kongoli, the ecological value of the property would be greatly increased, as this area could provide the elephants with a particularly suitable habitat and also enable the protection of other important species. The World Heritage Committee has, therefore, recommended to the State Party to extend the south-west part of the Park to include the Mounts Gorowi and Kongoli.

#### **Protection and Management Requirements**

The property was inscribed on the List of the World Heritage in Danger in 2003 because of the potential impact of civil unrest; decrease in the populations of large mammals due to increased and uncontrolled poaching; and the lack of efficient management mechanisms. The property is protected by various national laws. The main management challenges are combating poaching, human settlements, agricultural pressure and insufficient management and access control. In order to reduce these problems, an efficient surveillance system throughout the property, and the establishment of participatory management with local communities are required to diminish the pressures and impacts associated with the management of areas located on the periphery of the property. These measures shall be reflected in the overall management structure of the property. A sustainable funding strategy is also indispensable to guarantee the human and financial resources required for the long-term management of the property.

#### **INTERNATIONAL DESIGNATION**

1983: Recognised as a Biosphere Reserve under the UNESCO Man & Biosphere Programme (1,150,000 ha).

#### **IUCN MANAGEMENT CATEGORY**

II National Park

#### **BIOGEOGRAPHICAL PROVINCE**

Guinean Rain Forest (3.01.01) / West African Woodland Savanna (3.04.04).

#### **GEOGRAPHICAL LOCATION**

Located in the far northeast of the country, south of the border with Burkino Faso between the towns of Bouna and Kong and 350-450 km north of Abidjan at 8° 32' to 9° 32'N and 3° 01' to 4° 24'W.

#### **DATES AND HISTORY OF ESTABLISHMENT**

1926: Rudimentary protection established;

1953: Originally protected as the *Réserve de Faune de Bouna-Komoé* by Decree 1605;

1968: Comoé National Park established by Decree 68-81;

1977: 850 ha were excised under Decree 77-116 for agricultural purposes;

1983: Designated a UNESCO Biosphere Reserve;

2003+: Listed as endangered because of the poaching of large mammals, overgrazing, deforestation and the breakdown of management owing to civil conflict.

#### **LAND TENURE**

Government, in the prefectures of Bouna and Ferkessedougou. Managed by the *Cellule d'Aménagement du Parc National de la Comoé* within the *Office Ivoirien des Parcs et Réserves*.

#### **AREA**

1,149,250 ha.

#### **ALTITUDE**

From 119m to 658m (Mont Yévelé).

## PHYSICAL FEATURES

The Park is an elevated interfluvial peneplain of schist and granite between the Comoé and Volta rivers, at a mean altitude of 250m to 300m with a series of ridges and granite inselbergs rising to 600m. The River Comoé with its tributaries which forms the principal drainage runs north-south through the Park for 230 kilometres. Watercourses also drain to the Volta river in the east. Permanent and semi-permanent water occurs in several places. The soils are infertile with outcrops of ironstone and are unsuitable for cultivation in many areas.

## CLIMATE

The Park has a transitional Sudan-type humid tropical climate with a mean annual rainfall of 1200mm falling mainly between June and October. There is a single dry winter season of six months in the south and eight months long in the north which is hottest and driest in the spring. The mean annual temperature is 26°C.

## VEGETATION

The National Park is an outstanding example of an area of transitional habitat from forest to savanna and contains a remarkable variety of habitats and plant associations more often found further south, including many types of savanna, forest and riparian grasslands. Open forest and savanna woodland characteristic of the Sudano-Guinean zone covers about 70% of the area with tree cover ranging between 2 to 70%; gallery forest and dense dry forest cover about 30%.

The primary forest is composed of many leguminous tree species over a layer of high herbs and *Andropogon* spp. These include *Isoberlinia doka*, *Detarium microcarpum*, *Azelia africana*, *Daniellia oliveri* and *Burkea africana*. The gallery forests are dominated by *Cynometra megalophylla*, *Cola cordifolia* and *Manilkara multinervis*, the patches of dense dry forest by *Anogeissus leiocarpus*, *Crossoptera febrifuga*, *Terminalia avicennoides*, *Chlorophora excelsa* (VU), the edible akee *Blighia unijugata* and *Antiaris africana*, which is nationally threatened. Other forest species include *Parkia biglobosa*, *Pterocarpus erinaceus*, shea nut *Butyrospermum parkii*, *Uapaca somon*, *Lophira lanceolata*, *Protea elliotii*, *Mitragyna inermis*, the nationally threatened borassus palm *Borassus aethiopum* (VU), *Entada abyssinica*, *Burkea africana* and *Combretum* species.

The savanna grasslands consist mainly of *Panicum*, *Ctenium*, *Andropogon*, *Elionurus* and *Cymbopogon* species varied by thickets of *Bauhinia*, *Combretum* and *Gardenia* species. The flood plains are dominated by *Hyparrhenia rufa*. Areas of specialised vegetation occur on the rocky inselbergs and in aquatic habitats. A species list for the Park can be found with the Biosphere Reserve nomination submitted to UNESCO.

## FAUNA

54 larger mammal species have been recorded in the National Park (Fishpool & Evans, 2001). The most notable are elephant *Loxodonta africana* (EN) and West African chimpanzee *Pan troglodytes verus* (EN: 470 in 2003, WHRC), A survey in mid 2009 in the southwest of the property indicated that these two and other large mammal populations were relatively intact there (UNESCO, 2010). Other species include anubis baboon *Papio anubis*, mona monkey *C. mona*, lesser spot-nosed monkey *C. petaurista*, green monkey *Chlorocebus aethiops*, sooty mangabey *Cercocebus atys lunulatus* (EN), king colobus *Colobus polykomos* (VU) and white-thighed colobus *C. vellerosus* (VU). There are giant ground pangolin *Smutsia gigantea* and 17 species of carnivores including African wild dog *Lycaon pictus* (EN), Gambian mongoose *Mungos gambianus*, aardvark *Orycteropus afer*, lion *Panthera leo* (VU), and leopard *P. pardus*; also and rock hyrax *Procavia capensis*. Among the 21 species of artiodactyl are giant forest hog *Hylochoerus meinertzhageni ivoriensis* (VU), bushpig *Potamochoerus porcus*, warhog *Phacochoerus aethiopicus* and hippopotamus *Hippopotamus amphibius* (VU), red-flanked, black, yellow-backed and Maxwell's duikers *Cephalophus rufilatus*, *C. niger*, *C. sylvicultor* and *Philantomba maxwellii*; also western bongo *Tragelaphus e. euryceros* and bushbuck *T. scriptus* (both at their northern limit of distribution), sitatunga *T. spekei*, western hartebeest *Alcephalus buselaphus major*, waterbuck *Kobus ellipsiprymnus*, kob *K. kob*, roan antelope *Hippotragus equinus*, oribi *Ourebi ourebi* and West African savanna buffalo *Syncerus caffer brachyceros*.

494 species of birds were noted by Fishpool & Evans in 2001. Savanna species predominate but there are also 34 from the Guinean-Congo biome. There are 50 species of raptor, among them five of the six West African species of vulture, rare migrants pallid harrier *Circus macrourus* and lesser kestrel *Falco naumanni* (VU). There are 10 species of herons including grey heron *Ardea cinerea*, goliath heron *A. goliath*, yellow-billed egret *Egretta intermedia* and hammerkop *Scopus umbretta*,

black-winged stilt *Himantopus himantopus*, yellow-casqued and brown-cheeked hornbills *Ceratogymna elata* and *Bicanistes cylindricus*, great snipe *Gallinago media*, plovers and francolins. Reptiles include all three species of African crocodile, Nile *Crocodylus niloticus* (90%), West African long-snouted *Crocodylus cataphractus* (9%), and dwarf crocodiles *Osteolaemus tetraspis* (VU:1%). A species list for the park can be found with the Biosphere Reserve nomination submitted to UNESCO.

## **CONSERVATION VALUE**

The Park is one of the largest protected areas in West Africa. The presence of the Comoé River has resulted in the occurrence of shrub savannah and patches of thick rain forest which are normally only found much further south. The site coincides with a UNESCO MAB Biosphere Reserve.

## **CULTURAL HERITAGE**

One forested area near the village of Gorowi is considered to be sacred. There are other sacred sites in neighbouring villages, but these have not been well located nor registered (CANPC, pers. comm., 1995).

## **LOCAL HUMAN POPULATION**

Ethnic groups around the park include the Lobi, located in Bouna and Téhini; the Koulabgo in Bouna and Nassian; the Dioula in Kong; and the Djimini in Dabakala. These groups mostly rely on agriculture and hunting. Population density remains low, but the north side of the Park around Bouna and Téhini is under increasing population pressure (CANPC, pers. comm., 1995).

## **VISITORS AND VISITOR FACILITIES**

The Park is only open during the dry season between November and April when the 500 kilometres of tracks are accessible. Two tourist zones have been established in the Park for short and long-term visits. There are hotels at Kakpin, Ganse and a safari lodge at Kafola which are popular but expensive. The peak periods for visitors from the south are Christmas and Easter. The loss of control over the northern two-thirds of the park during the past decade has greatly limited tourism.

## **SCIENTIFIC RESEARCH AND FACILITIES**

A complete inventory of the natural resources of the Park was undertaken in 1974 with further studies financed by bilateral aid in 1977 and 1980. Research under the MAB programme including work on ungulates was started in 1983. Work on climate, vegetation, soils, hydrology, plant and animal populations and pollution has been completed. There is a scientific research station where limited accommodation is available for scientists. In 2009, surveys were made of the large animal populations in the southwest by the Wild Chimpanzee Foundation and Max Planck Institute, with OIPR, and of the Park's wildlife, infrastructure and socio-economic conditions by GTZ (UNESCO, 2010).

## **MANAGEMENT**

A management plan has been produced with help from the WWF and EU. Five check points and 17 patrol posts at 20-30 km intervals are located around the park boundary. There is a strict reserve zone where tourism is prohibited. The development of a buffer zone encompassing a contiguous game reserve is being studied. There are also two tourist zones set aside for short and long-term visits. A rehabilitation project for the forest sector was funded by the World Bank in order to help with the management of protected areas (CANPC, pers. comm., 1995). In 2005 the Park management maintained control over the southern third of the property and limited the poaching and illegal forestry there. Although the rest was under rebel control in 2005, apart from poachers, human incursion into the Park was not great (UNESCO, 2006).

In 2004 a 4-year US\$6million UNESCO-UNEP project partly funded by the GEF was set up to study the biodiversity and long-term monitoring and management of the natural resources of six West African biosphere reserves including Comoé. This was also to study the interaction between savannah ecosystems and human activities in the reserves, including agriculture, pastoralism, hunting and fishing; and to support local communities in the fight against poverty with alternative economic activities such as eco-tourism (IUCN/WCPA, 2004). The German NGO GTZ recently commissioned surveys of the wildlife, infrastructure and socio-economic conditions in order to develop a conservation strategy (UNESCO, 2010).

## MANAGEMENT CONSTRAINTS

Site problems have always included the uncontrolled annual dry-season burning over nearly 80% of the Park, overgrazing by cattle, fishing and poaching, particularly of elephant, roan antelope and waterbuck, despite vigorous anti-poaching campaigns. Between 1992 and 1995, a guard and two poachers died during confrontations with poachers. There is agricultural encroachment but the area has been less modified by this due mainly to the presence of blackfly *Simulium* sp. which causes river blindness and tends to discourage settlement (CANPC, pers. comm., 1995). However, the recent civil war in Côte d'Ivoire and the consequent absence of effective management greatly intensified the damage from all three causes and the northern two-thirds of the park were still not effectively controlled in 2009 (UNESCO, 2010).

The danger to large mammals has increased along with poaching from Burkino Faso and by the guards themselves. The Park was declared endangered in 2003 and the WHC urged the development of an Emergency Rehabilitation Plan (UNESCO, 2003, 2004). The management of the Park became less effective, suffering from corruption, lack of funding and supervision, of monitoring, and of communication between the staff and local communities. In 2006 65% of the Park remained beyond the staff's control and the resulting decline of large mammal populations became critical (UNESCO, 2006). Civil conflict elsewhere in the country only aggravated the lack of control. Occupying rebels destroyed a bridge and ferry in the south, making the area inaccessible. It was reported that the Ministry of the Environment still issues licenses to certain companies to log forests within the Park (Anon., 2004); and licenses for mining exploration there were also recently issued by the government (UNESCO, 2010).

## STAFF

53 employees including one director, six assistant wardens and 46 guards (CANPC, pers. comm., 1995).

## BUDGET

66,600,000 CFA (US\$102,900) was granted for vehicle maintenance (CANPC, pers. comm., 1995). Large sums from the World Bank, the EU, GTZ and other agencies were set aside for the period 1996-2003 before the present unrest, to improve the management of the Biosphere Reserve: In 2000 US\$50,000 was granted by UNF for technical cooperation (UNESCO, 2003). In 2006, the UNESCO MAB programme granted US\$20,000 for law enforcement. The World Bank has recently released funding through its Ivory Coast Protected Area Project to improve the management (UNESCO, 2010).

## LOCAL ADDRESS

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## REFERENCES

The principal source for the above information was the original nomination for World Heritage status.

Anon (2004). Ivorian expert denounces illegal exploitation of forests. *Angola Press*, August.

Feiler (1981). Etudes sur les modifications saisonnières des préférences d'habitat et des structures sociales de l'Antiope Cobe dans le parc de la Comoé. *Memoire, University of Wurzburg 1981*.

Fisher, F. (2004). Status of the Comoé National Park, Côte d'Ivoire, and the effects of war. *Parks*. 14(1) *War and Protected Areas*, 17-25.

Fishpool, L. & Evans, M. (eds) (2001). *Important Bird Areas in Africa and Associated islands. Priority Sites for Conservation*. Pisces, Newbury / BirdLife International, Cambridge U.K.

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.

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

IUCN (2009). *The IUCN Red List of Threatened Species*. Gland, Switzerland & Cambridge, U.K.

IUCN/WCPA (2004). US\$ 6million for biosphere reserve study project in West Africa. *IUCN/WCPA News*, July.

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. 97 pp.

Lauginie F. & 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: 146-188.

Roth, H. *et al.* (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. Tome 4*. FGU-Kronberg GMBH, Abidjan.

Roth, H., Merz, G. & Steinhauer, B. (1984). Distribution and status of large mammals in Ivory Coast. 1. Introduction. *Mammalia* 48(2): 207-226.

UNESCO World Heritage Bureau (2003). *Report on the 27th Session of the WH Committee*. Paris.

----- (2005). *Report on the 29th Session of the WH Committee*. Paris.

----- (2006). *Report on the 30th Session of the WH Committee*. Paris.

----- (2010). *Report on the 34th Session of the WH Committee*. Paris.

Woods Hole Research Center (WHRC) (2005). *Mapping and Monitoring the Forests of Central Africa*. Land Cover & Land Use Program, Woods Hole, Mass., U.S.A.

## **DATE**

1982. Updated 10-1995, 8-2003, 10-2005, 2-2007, 8-2010, 5-2011, January 2012.