

World Heritage Sites

Protected Areas and World Heritage



MANOVO - GOUNDA - ST FLORIS NATIONAL PARK CENTRAL AFRICAN REPUBLIC

The importance of this park is in its wealth of flora and fauna. Its vast savannas shelter a wide variety of species: black rhinoceros, elephant, cheetah, leopard, wild dog, red-fronted gazelle and buffalo; a wide range of waterfowl species also occurs in the northern flood-plains.

Threats to the Site: The site was listed as endangered because of illegal grazing and poaching by heavily armed hunters, who may have harvested as much as 80% of the Park's wildlife. The shooting of four members of the park staff in early 1997 and a general state of deteriorating security brought all development projects and tourism to a halt. The government aided by the WHC and ECOFAC have begun to contain poaching but constant incursions from the troubles in Chad and the Sudan, internal civil conflict and banditry mean that in 2007 the Park remains largely out of control.

COUNTRY

Central African Republic

NAME

Manovo-Gounda St. Floris National Park
(*Le Parc National de Manovo-Gounda St. Floris*)

NATURAL WORLD HERITAGE SERIAL SITE IN DANGER

1988: Inscribed on the World Heritage List under Natural Criteria ix and x.

1997+: Listed as a World Heritage site in Danger because of uncontrolled invasion by armed poachers, illegal grazing and deteriorating security.

IUCN MANAGEMENT CATEGORY

II National Park

BIOGEOGRAPHICAL PROVINCE

West African Woodland-Savanna (3.4.4)

GEOGRAPHICAL LOCATION

The Park occupies most of the eastern end of Bamingui-Bangoran province in the north of the country. Its boundary on the north is the border with Chad on the Bahr (River) Aouk and Bahr Kameur; on the east, it is on the Bahr Vakaga, on the west on the Bahr Manovo about 40km east of Ndéle, and in the south on the ridge of the Massif des Bongo. The Ndéle-Birao road bisects the Park. Its central coordinates are 8° 05' to 9° 54'N x 20° 38' to 22° 22'E.

DATES AND HISTORY OF ESTABLISHMENT

1933: Part of the area originally designated Oubangui-Chari National Park (13,500 ha), renamed Matoumara National Park in 1935;

1940: Renamed St. Floris National Park (40,000 ha);

1960: St. Floris National Park enlarged to 100,700 ha, and to 277,600 ha in 1974;

1979: Manovo-Gounda St. Floris National Park designated, including St. Floris National Park and the former Safaratic hunting/tourism concession.

1997+: Site listed as because of lack of security, very heavy poaching and illegal grazing.

LAND TENURE

Government property. In 1984 a renewable twenty-year agreement between the government and Manovo S.A made that company responsible for managing the park and exploiting its tourist potential.

AREA

1,740,000 ha. Contiguous on the north with the *Réserve de faune de l'Aouk-Aoukalé* (345,154 ha), and on the east to the *Réserve de faune de l'Ouandjia-Vakaga* (480,000 ha). A proposed *Réserve de faune du Bahr Oulou* lying between these two reserves would also be contiguous if designated.

ALTITUDE

400m to 940m.

PHYSICAL FEATURES

The Park comprises three main zones: the wide grassy floodplain of the Bahr Aouk and Bahr Kameur rivers in the north, a gently undulating transitional plain of bushy or wooded savanna with occasional small granite inselbergs, and the Chaîne des Bongo plateau in the south. The seasonally flooded lowlands have fine, deep, alluvial soils, where the drainage may be poor. The plain has coarse, well-drained, generally ferruginous and relatively infertile soils. Particularly in depressions, these develop a lateritic pan on which woody vegetation is sparse or absent. The massif is chiefly highly dissected sandstone, rising from the plain in a 100-200m escarpment. Five major rivers thread through the Park from the massif in the south east to the Bahr Aouk - Bahr Kameur floodplain in the north: the Vakaga on the eastern boundary, the Goro, Gounda, Koumbala, and the Manovo on the western boundary. The basins of the three central rivers all lie within the Park. However, their flow may be intermittent near the end of the dry season, and may only reach the Bahr Aouk and Bahr Kameur during the wettest months.

CLIMATE

The area has a tropical, semi-humid Sudano-Guinean climate, with a mean annual rainfall of between 950 and 1700mm, mainly falling between June and November, rainfall being much higher in the upland areas. December to May is hot and dry and grass fires are common in the late winter. Temperatures are much higher in the northern flood plain than on the plateau.

VEGETATION

The Park is the largest savanna park in west and central Africa. It covers a broad range of habitat types ranging from Sudano-Sahelian grassy savanna on the northern floodplains through bushy savanna, treed savanna and Sudanese wooded savanna, over the undulating land in the south threaded by gallery forest, to Sudano-Guinean savanna-woodland on the plateau in the southeast. Wooded savannas cover 70% of the area (CAR, 1992).

From riverside swamps the vegetation grades from perennial grass communities of the sandy grassland, sedges and annual forbs covering the most heavily flooded areas, to seasonally flooded flat river valleys where the trees and shrubs are confined to patches of higher ground and have to be both flood and fire resistant. Predominant grassland species include perennials such as *Vossia cuspidata*, *Echinochloa stagnina*, *Jardinea congoensis*, *Setaria anceps*, *Hyparrhenia rufa*, and *Eragrostis* sp., their distributions depending on the duration and depth of seasonal flooding. In this impeded drainage tree savanna *Pseudocedrela kotschyi* and *Terminalia macroptera* with *Combretum glutinosum* grow in soil of varying depths over ironstone. In less wet soils mixed open wooded savanna with a sparse shrub layer carries the same species plus *Terminalia laxiflora*, *Combretum glutinosum* and *Anogeissus leiocarpus* around seasonal streams and isolated low points. All the grassy savannas are heavily used by wildlife, especially ungulate herds. They are interspersed with less common types of savanna which form a mosaic related to soil and topography. These include *Combretum* scrub or ironstone meadow, ringed by stunted vegetation, where the laterite pan is close to the surface, bare isolated inselbergs and termite mounds which can shelter quite dense growth.

Wide stretches of the transitional plains are covered by wooded savanna of *Terminalia laxiflora* with *Crossopteryx febrifuga* and *Butyrospermum parkii*, heavily used by the larger mammals such as elephant, during the dry season. South of this is *Isobertinia doka* - *Monotes kerstingi* woodland with little shrub layer or grass that is less used by animals. A dense dry forest of *Anogeissus leiocarpus* and *Khaya senegalensis* grows along the edges of the plains, particularly along the Gounda and Koumbala

Rivers, and in small islands within the plains. This forest is under threat: *Anogeissus leiocarpus* is not fire resistant, which, with low rainfall, contribute to its decline. The gallery forests in deep high-banked valleys are attractive to monkeys and birds. In the south, the range of habitats is extended. There are broken rocky areas used by baboons, wooded savanna on the plateau, bamboo open savanna and clear forest with dense understorey around the sources of the rivers, used by shy ungulates.

FAUNA

The fauna of the Park reflects its transitional position between east and west Africa, the Sahel and the forested tropics. It contained the richest fauna in the country, including some 57 mammals, which have been well protected in the past. In this it resembles the riches of the east African savannas. 33 of the 44 Sudan-Guinea savanna biome bird species and 38 of the 185 bird species of the Guinea-Congo forests biome that occur in the Central African Republic have been recorded here (Dowsett, 2001). Faunal studies include those by Spinage (1976), Buchanan & Schacht (1979), and Barber *et al.* (1980), as well as aerial studies reported by Loevinsohn (1977) and Loevinsohn *et al.* (1978). However, their reports cover mainly the northern area and around St. Floris.

Several mammal species of particular concern to conservationists in the Park have suffered: poaching of rhinoceros and elephant has been very heavy indeed. By 2005 the northern white rhinoceros *Ceratotherium simum cottoni* (CR) was regionally extinct and of the thousands of small forest elephant *Loxodonta africana cyclotis* (VU), only 74 were seen by Fay in 2005. The Kordofan giraffe *Giraffa camelopardalis antiquorum* (EN) population had declined from 1,492 to 223 and the buffalo population from 8,078 to 1,489 (Fay, 2008). The Park's huge populations of Buffon's kob *Kobus kob*, Defassa waterbuck *Cobus defassa*, topi *Damaliscus lunatus* and lelwel hartebeest *Alcephalus bucephalus lelwel* (EN) had been nearly extinguished. The numbers of leopard *Panthera pardus*, cheetah *Acinonyx jubatus* (VU) and wild dog *Lycaon pictus* (EN) were reduced. Snares catch species like lions *Panthera leo* (VU) and hyaenas indiscriminately.

Within the St Floris region, the most common primate recorded by Barber *et al.* in 1980 was baboon *Papio anubis*, with lower numbers of patas and tanzania monkeys *Erythrocebus patas* and *Cercopithecus tanzaniae*, and low numbers of western guereza monkey *Colobus guereza occidentalis* in the dry forest. Conspicuous large mammals included lion and giraffe. Previously the most abundant large mammals were kob, hartebeest and common duiker *Sylvicapra grimmia*. Other fairly abundant ungulates included waterbuck *Kobus ellipsiprymnus*, oribi *Ourebia ourebi*, topi *Damaliscus lunatus*, bohor reedbuck *Redunca redunca*, roan antelope *Hippotragus equinus* and eastern giant eland *Tragelaphus gigas*; also desert warthog *Phacochoerus aethiopicus*, hippopotamus *Hippopotamus amphibius* (VU) and central African savanna buffalo *Syncerus caffer aequinoctialis*. Less common animals included African golden cat *Caracal aurata*, aardvark *Orycteropus afer*, red river hog *Potamochoerus porcus*, yellow-backed duiker *Cephalophus silvicultor* and red-fronted gazelle *Eudorcas rufifrons* (VU), the only gazelle now found in the park, on its northeastern edge. Few nocturnal species have been studied, but serval *Leptailurus serval* may be common, also De Brazza's monkey *Cercopithecus neglectus*, putty-nosed monkey *C. nictitans* and northern lesser galago *Galago senegalensis*, discovered here since 1980. Buchanan also recorded rock hyrax *Procavia ruficeps* more than 200 km west of the nearest known population

Some 320 species of birds have been identified, with at least 25 species of raptor including bateleur *Terathopius ecaudatus* and African fish eagle *Haliaeetus vocifer*. There are large seasonal populations of marabou stork *Leptoptilos crumeniferus* and great white and pink-backed pelicans *Pelecanus onocrotalus* and *P. rufescens*. The flood plains of the north of the Park are fairly important for both waterbirds and shorebirds. Shoebill *Balaeniceps rex* (VU) might nest there. On the plains, ostrich *Struthio camelus* seem fairly common, moving to woodland to lay their eggs. Several species of bee-eater and kingfisher are present along the rivers. Together with the neighboring reserves of Aouk-Aoukalé and Ouandjia-Vakaga, 418 species, were recorded for the area by BirdLife International in 2004, 307 being breeding species. These included the pallid harrier *Circus macrourus*, lesser kestrel *Falco naumanni* (VU) and black-winged pratincole *Glareola nordmanni*.

CULTURAL HERITAGE

The local tribes suffered from 19th century slavers who depopulated the east of the country.

LOCAL HUMAN POPULATION

Most of the area has been sparsely inhabited since the beginning of the century having been a no-man's-land between opposing sultanates. However, nomadic cattle herders from the Nyala area of

Sudan and from Chad, with between 30-40,000 head, enter the park during the winter as part of their dry season range, in a traditional transhumance (CAR, 1992). In the past, drought has also driven them there. There is sparse and limited agriculture around the park boundaries.

VISITORS AND VISITOR FACILITIES

Access to the southern part of the Park is relatively easy though there are few facilities for visitors. The infrastructure may be improved if it is agreed between the Government and the concessionaire, Manova S.A. This had responsibility for managing tourism within the park, and hunting in the buffer zones for 20 years from 1984, under an agreement with the government. However, in 1996, tourism ceased because the Park was no longer safe for travellers. The poor level of security in the area continued to discourage tourists from visiting the park in 2009,

SCIENTIFIC RESEARCH AND FACILITIES

An aerial count of larger mammals in parts of the Park was carried out by Loevinsohn (1977) for FAO and again the next year (Loevinsohn *et al.*, 1978) as part of a larger project to improve management of fauna in the north of the country. An ecological survey of the St. Floris National Park was carried out by U.S. Peace Corps biologists in 1977 and 1978. The report of this survey (Barber *et al.*, 1980) includes both general descriptions and species lists, and makes several recommendations. Further research was carried out in the newly-designated Park in 1979 to extend much of the work to cover also the Gounda-Koumbala region (Buchanan & Schacht, 1979). Between 1981 and 1984, Peace Corps biologists studied the ecology of elephants in the centre of the Park, with special reference to diet, distribution and the impact of poaching (WWF/IUCN Project 3019). Other activities by the research team included observations on poaching and other illegal activities, a botanical survey, noting rare or previously unidentified in the Park species, and monitoring rhinoceros activity. A research centre is planned at Camp Koumbala.

CONSERVATION VALUE

The Park is one of the major biogeographic crossroads of central Africa and is designated a WWF Global 2000 Freshwater Ecoregion and lies within a WWF Global 200 Eco-region. A remarkable range of north-central African savanna ecosystems shelter the country's richest variety of animals, including black rhinoceroses, elephants, cheetahs, leopards, wild dogs, red-fronted gazelles and buffaloes, and the northern flood-plains harbour several species of waterfowl.

CONSERVATION MANAGEMENT

The Park was said in the past to be the best protected area in the country (CAR, 1987) and over several years, FAO worked within the Central African Republic to improve wildlife management. As part of this work, Spinage (1976) made a preliminary survey of the St Floris National Park, producing a number of recommendations for improving its management. Recommendations were also made by a series of subsequent studies (Temporal, 1985; Barber *et al.* 1980). Until 1985, development was supported by the *Fonds d'Aide et Coopération*. Much investment was made to improve the tourist infrastructure. The tourism concessionaire, Manova S.A. also carried out limited park management such as grading tracks and burning to improve game-viewing, but it is unclear how much this was coordinated with the Park management. Nearly all the management effort went into limiting the very heavy poaching and preventing grazing within Park boundaries. Some army support was provided for anti-poaching work, but was sporadic and of short-term value (IUCN, 1988).

In 1988 the EEC and FED started a ten-year project costing US\$27 million to enhance the integrity of the Park, and the access into it, also to aid research and develop staff and facilities. Nevertheless, marauding continued (UNESCO, 1997) but by 1998 the project showed few tangible results. In 1997, the government of the Central African Republic gave site responsibility to a private foundation which was trying to raise funds to provide much needed staff and equipment for the park (IUCN, 1997). In 2001 an IUCN mission visited the site to prepare for fund-raising and produce a realistic work plan for the next two years plan for the Park's rehabilitation, and the integration of local communities in participatory management. The government was also encouraged to seek the cooperation of local communities and of neighboring states in limiting poaching (UNESCO, 2002). A government report in 2003 emphasised the threats posed by poaching, transhumance and illegal settlement; also the need for the inventory and monitoring of key fauna, and the improved infrastructure, management and communications needed to develop ecotourism as an alternative source of income for local people (IUCN, 2003). However, in March 2009, after years of depredations an assistant for the Central African Armed Forces was posted to the north-east to work with the conservation teams and interface between the Ministry for Water, Forestry, Hunting and Fishing and the Ministry of National Defence on anti-

poaching. Military equipment was provided. In October 2009, 60 newly trained Water and Forestry agents were to be posted to the protected areas of the north-east to support the 60 ECOFAC guard-patrollers already there. And in January 2010, a Network of Local Associations for the Management of Village Hunting Zones was set up by the ECOFAC IV project (UNESCO,2010)

MANAGEMENT CONSTRAINTS

Until recently the most significant impact on the Park has been the professional poaching of large mammals, particularly rhinoceros and elephant for their ivory and horn, facilitated by the main national route which crosses the Park, by civil conflict in the C.A.R itself and by the profitability of the illegal easily 'certified' market in ivory. By 1997 uncontrolled poaching reached emergency levels, with groups heavily armed with automatic weapons from the civil wars entering the park, setting up camp, and transporting bushmeat out by camel train. Park staff were killed, and there was no effective anti-poaching force. 80% of the Park's wildlife was said to have been taken by 1998 (UNESCO). Some poachers came from within the country but most were from Chad and Sudan, The state's tolerance during the 1980s and 1990s of exploitative poaching for ivory and food by the Janjaweed militia from Sudan led inevitably to the exploitation of the native Doharis by the same militia (Fay,2008). A result of the well-funded government campaigns against the rebels in southern Sudan and Darfur, led from 2005 onwards to the invasion of Darfuri refugees pursued by the Janjaweed. By 2006, the fleeing refugees were threatening the integrity of the Park and the guards were neither paid nor patrolling. By then the large elephant population had fallen by 95% and the Park's huge topi, kob and waterbuck populations were nearly extinguished (UNESCO, 2006). The few remaining rhinoceros became extinct by 2005, and the populations of all the large animals had fallen sharply (Fay, 2008). In fact, neighboring hunting zones, protected by safari hunting and anti-poaching activity, have higher populations of most species than the national parks nearer the borders.

Three other factors cause concern: fire, whether initiated by illegal grazers, poachers, hunters or guards, clear-felling for agriculture and grazing by Chadians who have settled in the northwest of the Park, and recent mining along the Manovo river. Most illegal grazing occurs during the dry season, with huge numbers of transhumant cattle moving from the Nyala region of Sudan and from Chad which compete with the Park's wildlife and can introduce disease. This also affects the composition of grasslands, with perennial species giving way under grazing pressure to annuals and herbs. Invasion for illegal fishing and grazing remain serious threats (UNESCO, 2006). Civil conflict between the central government and villagers suspected of aiding rebels have also destroyed dozens of villages; bandits and Chadian gunmen also target them. Some 150,000 villagers have fled into Chad. The conflicts have made it impossible to assert much control within the Park where the staff was already extremely short of the manpower and equipment needed to manage so large an area. Despite an Emergency Rehabilitation Plan and aid from WHF, IUCN and ECOFAC (*Conservation et Utilisation Rationnelle des Ecosystèmes Forestières de l'Afrique Centrale*) the Park remained largely out of control (UNESCO, 2005).

By 2005, according to Fay (2008) the park had become a 'no-man's land'. The devastation to wildlife caused by the conflict made it imperative for the State Party to develop with the World Heritage Centre, IUCN and others, an emergency plan to restore the integrity of the property and protect its remaining claims to possessing outstanding universal value. Its main features were to be: restructuring of the Park management, strengthening both supervisory and ground staff, zoning to conserve the most valuable areas, restoration of security, a provisional budget and transboundary cooperation with Chad and Sudan to control the threats from armed poaching and other illegal exploitation of natural resources. In late 2007 the country's civil conflict was acute in the northeast of the country, and not far across the border in Chad, very destructive invasions and poaching by the Janjaweed were destroying the remaining elephant population of Zakouma National Park 150 km to the northwest (Fay, 2007; 2008). In 2009 the property was still suffering from cross-border poaching, the disrupting effects of the conflicts and droughts in Sudan and Chad, the arrival of Lord's Resistance army rebels and inadequate transboundary cooperation in controlling incursions. But that year, the government was began to restore the park's integrity by supplementing the guard force, providing military equipment to conservation teams and by promoting inter-Ministry cooperation and the management of peripheral village hunting zones (UNESCO,2010).

STAFF

In 1997 the Park was under the administration of one Manager and one assistant with five guards, supplemented on occasions by army personnel for anti-poaching patrols (IUCN,1997). The then concessionaire employed ten people on management oriented tasks (undated information). However,

in 2009, after a decade of disruption, 60 newly trained Water and Forestry agents joined 60 existing ECOFAC guard-patrollers in order to begin restoring order (UNESCO,2010).

BUDGET

Little site-specific information is available. The 1988 EEU/FED grant of US\$27million to control poaching and grazing for ten years was to be succeeded in 1997 by funding from a private foundation to continue the work (UNESCO,1998,2000). In 2001 the World Heritage Bureau approved a grant of US\$150,000 for an Emergency Rehabilitation Plan (UNESCO, 2002). An additional US\$146,650 was later granted for emergency assistance and technical cooperation (UNESCO,2010).

LOCAL ADDRESSES

M. le Directeur, Direction de Protection & Developpement, Ministre des Eaux, Forêts, Chasses, Pêches et Tourisme, BP 830, Bangui. Republique Centrafricaine.

M. le Conservateur Principal, Manovo-Gounda St. Floris National Park, Gounda-Pont, Republique Centrafricaine.

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DATE: 1988. Updated 11-1988, 8-1997, 3-2002, 10-2007, August 2010, May 2011.