

4.2 CENTRAL AFRICAN REPUBLIC

Introduction

The Central African Republic is a landlocked country of 624 975 km². It is bounded by Zaire and Congo in the south, by Cameroon in the west, by Chad in the north and by Sudan in the east. With a population of 2 520 000 (1983) it has a low mean population density of only 4 persons/km². It extends 1445 km from east to west between longitudes 14°29' and 27°26'E, and 1050 km from south to north between latitudes 2°12' and 11°03'N.

Physiography is dominated by a rolling plateau, trending E-W, over 500 m asl, with two highland blocks exceeding 1000 m in altitude. These are situated at the far eastern and western ends of the country. A continuation of the Massif del'Adoumaoua straddles the Cameroon border in the NW and the Massif des Bongos is close to the Sudan border in the NE. More than 90% of the land surface is above the 500 m contour. A watershed separating the Zaire and Chad Basins runs from west to east across the centre of the country and drainage is predominantly by streams flowing southwards to the Oubangui/ Mbomou River along the Zaire border, and by streams flowing north or northwest towards Lake Chad. Along the eastern border a triple watershed separates the Chad, Zaire and Nile Basins.

Climate

Mean annual precipitation is greatest in the southwest and southeast where it is in the region of 1750 mm. It decreases northwards, having declined to 1400 mm/yr on the parallel 8°N in the west, 6°N in the centre and 8°N in the east. Much of the northern region receives between 1000-1400 mm, while the extreme NE receives only 800 - 1000 mm/yr. Rainfall is seasonal, but more distinctly so in the north, rising to a sharp peak in August, with a 5 month dry season from November to March inclusive. Birao (10°11'N/ 22°49'E) in the northeast, 464 m asl, has a mean annual rainfall of 885 mm, with a mean monthly receipt of 210 mm in August. By contrast, Bangui (4°23'N/18°37'E) in the SW, 380 m asl, receives 1549 mm rain/yr, with a peak of 215 mm in August, and a dry season of 2 months, December and January. Bangassou (4°41'N/22°48'E) on the Mbomou River receives 1756 mm/yr, with 270 mm in August and a December-January dry season.

At Birao, May is the warmest month with a mean daily temperature of 30°C, and mean daily maxima and minima of 39°C and 19°C. January and December are the coolest months, with corresponding figures of 24, 35 and 13°C. At Bangui, March is the warmest month with a mean daily temperature of 28°C, and mean daily maxima and minima of 32 and 21.5°C. Here July is the coolest month with corresponding figures of 25, 30 and 20°C. The data for Bangassou are March 27, 24 and 20.5°C; September 25, 31 and 19.5°C. The northern regions receive about 2800-3000 hours sunshine/yr.

Wetlands

The north of the country is subject to very seasonal rainfall, in a region where drainage is north

or northwest to the Chad Basin. Here slopes are gentle, river valleys tend to be broad, and many rivers meander. Five months of the year are very dry, while 1300 mm may fall in the wet season with as much as 600-850 mm in the July-September period. The intensity of rainfall at this time leads to flooding on almost all streams, and many have broad floodplains, which in the case of the Bahr Aoukale is continuous for over 520 km. The northern rivers carry gallery forest which is inundated during the floods, and these tend to be backed by graminaceous floodplains, with sedges and occasional clumps of woody vegetation, especially on termite mounds.

There are some permanent lakes, swamps and pools on the central plateau along the watershed, and some patches of swamp forest and inundated gallery forest in the headwaters of the Yata River. The streams flowing south in the central region descend steeply over rapids and waterfalls to the Oubangui/Mbomou River. However, in the SW, drainage is to the Sangha River, which carries strips of periodically and semi-permanently inundated forest, and also *Raphia* swamps along its course into Congo. In the SE, rivers descend comparatively gentle slopes from the high land along the Sudan border, and then meander southwestwards over wide floodplains, e.g. the Mbokou River. In this region rainfall is higher, c. 1700 mm/yr, and the dry season lasts only from December-January. There are two seasonal rainfall peaks, and therefore two seasons of flooding. Here the floodplains are forested. The Oubangui River provides an extensive island studded open water surface, for 650 km along the southern border. This is slow flowing for most of the distance, but there are rapids almost midway at Kouimba.

Wetland Flora

The northern floodplain grasses include such species as *Acroceras* sp., *Echinochloa pyramidalis*, *E. stagnina*, *Eragrostis* sp., *Hyparrhenia rufa*, *Jardinea congoensis*, *Oryza barthii*, *Panicum* sp., *Paspalidium* sp., *Setaria anceps*, *S. sphacelata*, *Vetiveria negritana* and *Vossia cuspidata*, distributed according to depth and duration of inundation. *Acacia seyal* occurs on the floodplains, and a variety of trees occur in galleries along the levees, e.g. *Acacia albida*, *A. polyacantha* ssp. *campylacantha*, *A. sieberana*, *Allophyllus africanus*, *Anogeissus leiocarpus*, *Antidesnza venosum*, *Balanites aegyptiaca*, *Bauhinia rufescens*, *Borassus aethiopunt*, *Celtis integrifolia*, *Crateva religiosa*, *Dalbergia melanoxylon*, *Diospyros inespiliformis*, *Ficus gnaphalocarpa*, *Mitragyna inermis*, *Morelia senegalensis* and *Phyllanthus muellerianus*.

In the south, inundated riparian forests are characterised by the presence of *Uapaca heudelotii* and *Cathormion altissimum*, with some *Trichilia retusa*. The more widespread associates, including riverside shrubs, are *Alchornea floribunda*, *Anthocleista liebrechtiana*, *Anthonotha isopetala*, *A. inacrophylla*, *Antidesma venosum*, *Beilschmiedia piya*, *Bersama abyssinica*, *Calpocalyx dinklagei*, *Cercestis congoensis*, *Cynometra mannii*, *Diospyros gillettii*, *Dracaena ovata*, *Ficus anganophila*, *F. asperifolia*, *F. natalensis*, *F. pseudomangifera*, *F. rederi*, *F. vogelii*, *Gaertnera longevaginalis*, *Gardenia imperialis*, *Grewia* sp., *Hytnenocardia heudelotii*, *Ixora guineensis*, *Lecaniodiscus cupanioides*, *Leptaulus daphnoides*, *Memecylonfosteri*, *Mimusops andongensis*, *Mitragyna stipulosa*, *Morelia senegalensis*, *N eoboutonia veloutina*, *Neostenanthera myristicifolia*, *Oleandra distenta*, *Oubanguia africana*, *Pavetta calothyrsa*, *Psychotria*

vogeliana, *Raphia laurentii*, *Rauvolfia macrophylla*, *Securinega virosa*, *Synsepalum dulcificum*, *Treculia africana*, *Vitex ferruginea* and *Xylophia parviflora*. In other places *Guibourtia demeusei* and *Irvingia smithii* are the commonest canopy species.

In some shallow basins, in the SW and SE, away from the rivers, where inundation is more or less permanent and the surface water is semi-stagnant, the forest is characterised by an abundance of *Sterculia ambacensis*. In these sites the soil surface is always muddy, and most arborescent species have either tall flanged buttresses or stilt roots. The buttresses of *Sterculia ambacensis* are narrow and plank-like, but sinuous, and 5-6 m tall at the bole. In this type of forest the most common associates are *Coelocaryon botryoides*, *Englerophytunz oubanguiense*, *Lasiodiscus manni*, *Macaranga staudtii*, *Mimusops warneckei*, *Pauridiantha pyramidata*, *Pseudagrostistachys ugandensis*, *Pseudospondias microcarpa*, *Spondiathus preussii*, *Synzphonia globulifera*, *Treculia africana*, *Xylophia aethiopica*, *X. rubescens*, *X. talbotii* and *X. staudtii*.

In the south, the banks of tributaries to the Oubangui and Mbomou Rivers, which are subject to regular inundation, are colonised by *Alchornea cordifolia*, *Macaranga saccifera* and *Raphia* spp., all heliophilic species. This vegetation tends to be succeeded by *Mitragyna stipulosa* forest. Valley floor raphiales in the south tend to be dominated by *Raphia laurentii* (= *R. monbuttorum*). Riparian raphiales are characterised by the presence of *Raphia hookeri* and sometimes by *R. sese*, while the commonest large trees in the transition zones are typical of the various types of inundated forest.

Again in the south, on the slopes above the Oubangui River, where agriculture is comparatively intense, *Thalia welwitschii* swamps become established along rivers where the gallery forest has been destroyed. The existence of this vegetation depends upon a variable water level and a fairly swift current, at least in the wet season. *Thalia* is an obligate heliophyte, and these swamps, which contain few associates, deteriorate quickly if trees reappear. If the water levels are lower and less variable, and the water movement is sluggish, *Cyrtosperma senegalense* becomes established and is usually quickly succeeded by arborescent species.

In the higher country of the south, between 500-700 m asl, *Loudetia phragmitoides* swamps occur along the edges of gallery forests on poorly drained soils. These swamps include such other species as *Cyclosorus striatus*, *Cyperus halpan*, *Eulophia caricifolia*, *Ludwigia africana*, *Lycopodium cernuum*, *Sauvagesia erecta* and *Torenia parviflora*. The swamps develop where the water table is always high and flooding is periodic, whereas on better drained soils, which are often burned, *Imperata cylindrica* becomes dominant. These are both secondary associations.

In pools and quiet backwaters in the narrow parts of rivers shaded by gallery forest, a *Nymphaea lotus*- *Utriculara thoningii* community develops. By contrast, little depressions along the lowest central parts of valleys which are open to sunlight carry a much richer vegetation. Provided that water movement is minimal, water levels seem unimportant. Here *Nymphaea maculata* is dominant, while *Eleocharis acutangula*, *Fuirena stricta*, *Hydrocharis chevalieri* and *Sabicea africana* are the most common of a dozen or more

associates.

The pioneer species on sandy banks along, and in, the larger southern rivers is *Panicum repens*, which is soon joined by *Acroceras zizanoides*, *Cyperus erectus*, *C. maculatus* and *Hemarthria natans*, leading finally to a sward of *Cynodon dactylon* where inundation is infrequent. By contrast on mudbanks, the pioneers are *Basilicum polystachyon*, *Conzmelina diffusa*, *Eclipta prostrata*, *Ipomoea reptans* and *Ludwigia repens*. Meadows of aquatic grasses develop in deep water along the banks of backwaters, and here *Echinochloa pyramidalis*, *E. stagnina* and *Vossia cuspidata* are the most frequently encountered species, but in shallower places *Phragmites mauritianus* or *Cyperus papyrus* may cover extensive areas in monospecific stands. Little depressions on islands in the river are colonised by *Cyperus longibracteatus* and *Rhynchospora corymbosa* when they fill up, usually with some persistent *Echinochloa pyramidalis*. Open surfaces in quiet backwaters tend to be covered by *Lemna paucicostata*, *Nymphaea caerulea*, *N. lotus*, *Pistia stratiotes* and *Utricularia* spp., but comparatively recently *Eichhornia crassipes* has been introduced and tends to dominate this habitat, and also to invade the areas normally supporting floating grasses. It has become a serious threat to navigation in certain localities. Steep sandy river banks are covered, at water level, by plaques of *Marchantia chevalieri*, and above the water by a tracery of ferns dominated by *Dicranopteris linearis*. On any slips or shelves however, and on the tops of high banks, the forest vegetation quickly takes root, in particular *Anthocleista nobilis*, *Barteria nigritiana*, *Caloncoba welwitschii*, *Vernonia conferta* and occasionally *Alchornea cordifolia*.

As they become more elevated, islands in the Oubangui are colonised by woody species, first by single trees, or little clumps of *Alchornea cordifolia* with *Bridelia micrantha*, *Ficus mucoso*, and *Spondianthus preussii*, often with abundant *Mimosa pigra*. This pioneering woody vegetation is quickly entangled by creepers, and *Alchornea* is usually dominant in the early stages of the succession. However, a tall forest of *Lannea welwitschii*, with *Ceiba thoningii*, *Ficus mucus*, *Oxystignta buchholzii*, *Pseudospondias microcarpa* and *Spondianthus preussii*, quickly replaces the *Alchornea* association. Occasionally *Elaeis guineensis* may be encountered in this vegetation, and the under-storey is rather sparse, with *Leptonychia batangensis* the most characteristic species.

A description of the vegetation of the Central African Republic is given by Boulvert (1970).

Wetland Fauna

Fishes: The fish faunas of the southern rivers, all of which are ultimately tributary to the Oubangui River, are closely related to that of the middle Zaire River, which is briefly described in section 4.6, Zaire. The fish fauna of the Sangha River is virtually identical with that of the middle Zaire/Oubangui River. However, rivers like the Kotto, which are steep and have upper sections isolated by waterfalls, and which share watersheds with the Chad Basin, contain some species with Soudanian affinities.

The rivers draining northwards, via the Chari to the Chad Basin, have typical Chad Basin fish faunas, such as are described in section 1.2, Chad. Over 100 species are known from the upper

reaches of the Chari/Bahr Aoukale/Bamangui System. Common species in the rivers of the north are *Alestes baremose*, *A. dentex*, *A. macrolepidotus*, *Chrysichthys auratus*, *Citharinus citharus*, *Clarias lazera*, *Distichodus rostratus*, *Eutropius niloticus*, *Heteropisus bebe*, *Heterotis niloticus*, *Hydrocynus forskali*, *Labeo senegalensis*, *Lates niloticus*, *Malapterus electricus*, *Micralestes acutidens*, *Mormyrus rume*, *Pollimyrus bane*, *P. isidori*, *Oreochromis galilaeus*, *O. niloticus*, *Polypterus senegalus*, *Schilbe mystus*, *Synodontis batensoda*, *S. clarias*, *S. frontosus*, *S. membranaceus*, *S. schall*, *Tetraodonfahaka* and *Tilapia zillii*. Brief accounts of the Chad Basin fish fauna are given by Beadle (1981) and Lowe-McConnell (1975).

Reptiles: Those found in the rivers and lagoons, on the floodplains, and in the galleries and flooded forests, include *Bitis arietans*, *Crocodylus niloticus*, *Dasypeltis fasciata*, *D. scabra* (N only), *Dendroaspis jamesoni*, *Dispholidus typus* (N only), *Naja melanoleuca*, *N. nigricollis*, *Pelomedusa* sp., *Pelusios* spp., *Philothamnus irregularis*, *P. senzivariegatus*, *Psanzmophis sibilans* (mainly N), *Python sebae* and *Varanus niloticus*.

Birds: The avifauna includes *Alopochen aegyptiacus*, *Anas* spp., *Anhinga rufa*, *Ardea goliath*, *A. purpurea*, *Balaeniceps rex*, *Bias musicus*, *Bubalornis albirostris*, *Bubulcus ibis*, *Chakomitra senegalensis*, *Chloropeta natalensis*, *Ciconia ciconia*, *Cinizyris cupreus*, *Egretta garzetta*, *E. intermedia*, *Ephippiorhynchus senegalensis*, *Hagedashia hagedash*, *Haliaeetus vocifer*, *Hyliota flavigaster*, *Leptoptilos crumeniferus*, *Megaceryle maxima*, *Merops breweri*, *M. nubicus*, *Motacilla clara*, *Muscicapa caerulescens*, *Mycteria ibis*, *Nycticorax nycticorax*, *Pelecanus onocrotalus*, *Phalacrocorax africanus*, *P. carbo*, *Platalea alba*, *Plegadis falcinellus*, *Psittacus erithacus*, *Pteronetta hartlaubii*, *Rynchops flavirostris* (south only?) and *Threskiornis aethiopica*.

Mammals: The following list comprises mammals found on the floodplains, in the gallery forests, in swamp forests and *Raphia* swamps. *Acinonyx jubatus* (N only), *Alcelaphus buselaphus* (N only), *Aonyx capensis*, *Atilax paludinosus*, *Cephalophus monticola* (N only), *C. rufilatus* (N only), *C. sylvicultor*, *Cercocebus albigena* (S only), *Cercopithecus aethiops*, *C. mona denti* (SE only), *C. neglectus*, *C. nictitans*, *Colobus badius oustaleti* (S mostly), *Crocota crocuta* (N only), *Damaliscus lunatus* (N only), *Felis aurata*, *F. lybica* (N only), *Funisciurus pyrrhopus* (S only), *Galago detnidovii* (S only), *G. senegalensis* (N only), *Genetta tigrina*, *Heliosciurus rufobrachium* (S only), *Herpestes ichneumon*, *Hippopotamus amphibius*, *Hippotragus equinus* (N only), *Hyaena hyaena* (N only), *Hystrix cristata*, *Ichneumia albicauda* (N only), *Kobus ellipsiprymnus*, *K. kob* (N only), *Lemniscomys striatus* (N only), *Leptailurus serval*, *Loxodonta africana* (N only), *Loxodonta africana cyclotis* (S only), *Lutra maculicollis*, *Manis gigantea*, *Mungos mungo* (N only), *Nandinia binotata* (S only), *Panthera pardus*, *Papio anubis* (N only), *Phacochoerus aethiopicus*, *Potamochoerus porcus* (uncommon in N), *Potamogale velox*, *Praomys natalensis filmatus* (N only), *Redunca redunca* (N only), *Sylvicapra grimmia* (N only), *Syncerus caffer*, *Taurotragus derbianus* (N only), *Tragelaphus scriptus* (N only) and *Viverra civetta* (N only). Both *Ceratotherium simum* and *Diceros bicornis* are believed to occur in some of the northern reserves, e.g. Yata-Ngaya Faunal Reserve. The aquatic genet, *Osbornictis piscivora*, occurs in the wetlands of the southeast.

List of Wetlands Described

1. Wetlands of the Southern Region
2. Wetlands of the Northern Region

1. Wetlands of the Southern Region

Country: Central African Republic

Coordinates: 2°12'-9°30'N/16°00'-27°30'E

Area: c.1 100 000 ha wetland

Altitude: 340-700 m asl

Nearest Towns: Bangui; Mobaye; Bangassou (on Oubangui/Mbomou River)

General: Flooded forests occur in the extreme SW, on the Sangha River and its headwater tributaries the Kadey and Ekeia Rivers. Forested floodplains extend for 400 km up the Sangha and Ekeia Rivers, between Bomassa (2°10'N/16°10'E) and Carnot (4°59'N/15°56'E), and above this in minor strips along the Mambère and Nana Rivers. Other floodplains extend up the Kadey and its affluents the Boumbe I and II Rivers for a total of 280 km. In this sector there are, in total, at least 120 000 ha of periodically inundated forest and *Raphia* swamp.

Wetlands occur on almost all of the streams flowing south to the Zaire basin, but slopes on the southern side of the central massif are steeper than those on the northern side, and valleys tend to be less wide than they are in the north. Thus floodplains are less pronounced, and on most streams they are only a few metres to a few hundred metres wide. However, a forested floodplain is well developed along the north bank of the Oubangui, and on its tributaries, the Kouma, Tomi and Ombella Rivers, between 19-20°E, and also on the M'Poko, M'Bali, M'bi and Lobaye Rivers which enter the Oubangui below Bangui (4°23'N/18°37'E) at the head of the Cuvette Congolaise. Here the total area of inundated forest amounts to approximately 231 000 ha in major floodplain areas, and perhaps a further 100 000 ha in minor riparian strip swamps.

In passing eastwards up the Oubangui, the valley begins to narrow above the Kouimba Rapids (4°37'N/20°27'E) and the floodplain contracts. Several of the north bank tributaries descend very steep sections above their confluences; the Kotto, for example, descends no less than 5 waterfalls in the section immediately above its confluence with the Oubangui at Toutè (4°13'N/22°02'E). However, the greatest development of riverine wetlands in the south of the country is in the far eastern part of the region, on tributaries of the Mbomou River between longitudes 23°45' and 27°00'E. These are, from west to east, the Chinko River and its affluent, the Vovado; the Ouarra and its affluent the Goangoa; and the Kerre (Kere) and Mbokou Rivers. Floodplains are well developed for a total of 1320 km on these rivers, with widths of 2-10 km, and for a further 1000 km on minor streams in the region. The total area of periodically inundated land here exceeds 650 000 ha.

Human Impact & Utilisation: Several major centres of population including Bangui,

Kouango, Mobaye, Bangassou and Zemio, and many minor centres, are situated along the north bank of the Oubangui/Mbomou River. Although there are major rapids at Kouimba, between Kouango and Mobaye, long stretches of the river are navigable and it is the major communication route along the southern central part of the country. East of Mobaye, a main road connects all the major centres along the border and crosses into Sudan. The river is fished intensively close to the towns, and in these regions the fringes of the floodplain are cultivated. The wetlands in the valley of the Sangha are sparsely populated and were undisturbed until 1970, but subsequently forestry leases were granted in this area and exploitation has begun. Timber is exported from Nola, a centre on the Sangha River. By contrast the wetlands in the SE are more densely populated, and there, locally, the floodplains are exploited for fish and for agriculture. Nevertheless, areas which are deeply and regularly flooded are still comparatively undisturbed.

Conservation Status: The small Basse Lobaye Biosphere Reserve on the Lobaye River (c. 3°40'N/17°50'E) covers 18 200 ha and includes an area of inundated forest. It is situated at the head of the Cuvette Congolaise in an evergreen forest area, where the canopy is 30-35 m high, with emergents exceeding 40 m in height. Mean annual rainfall is 1760 mm and there is a short dry season in December. The area is inhabited by pygmies and is relatively undisturbed, except near some villages in the north.

It has been proposed that the entire southwestern extremity of the country between Cameroon and Congo, south of 3°N, should become a sanctuary area, to be known as the Bongo Sanctuary. This will include a large area of inundated forest and *Raphia* swamp along the Sangha River.

In the far east the Zemongo Faunal Reserve, was first established in 1925 and was for a short time fully protected from hunting, e.g. in 1939. It was extended and redesignated in 1975, despite which it was still open to hunting in 1980-81. The reserve covers 1 010 000 ha and has the approximate co-ordinates 6°10'-7°28'N/24°40'-26°00'E. It includes about 172 000 ha of inundated forest. This is situated on the Vovado River system, principally on an affluent, the Bita, but also on the Goangoa River, a tributary of the Ouarra. A broad forested floodplain extends for 113 km up the Bita from its confluence with the Vovado.

In the northeast, the Yata-Ngaya Faunal Reserve protects the headwater basin of the Kotto River, and this area includes several small wetlands on the southwestern slopes of Mt. Dj Ngaya.

2. Wetlands of the Northern Region

Country: Central African Republic

Co-ordinates: within 5°45'-11°03'N/14°30'-23°30'E

Area: c. 2 050 000 ha wetland

Altitude: 350-520 m asl

Nearest Towns: Bouar; Bozoum; Bossangoa (in the western highlands)

General: Most of the northern rivers have broad floodplains. That on the Bahr Aoukale extends for 522 km from the Sudan border to the confluence with the Chari, and attains maximum widths of 40 km in the NE. About half of the floodplain (362 200 ha) is in the Central African Republic,

together with a conservative estimate of a further 873 000 ha on its tributaries. For example, continuous floodplains extend for 320 km up the Kameur/Bahr Oulouou River, and then in turn along all of its affluents, e.g. for 180 km up the Ouandja. Floodplains also occur on the Gounda/Goro, Kounbala and L6le tributaries. In places the floodplains on the tributaries are over 10 km wide, while their total length exceeds 1746 km. There are at least 1 238 200 ha of floodplain on the Bahr Aoukale system. On the Chari system in the west, into which the Bahr Aoukale flows, there are another 701 250 ha of major floodplains, and perhaps 100 000 ha of minor floodplains, less than 800 km wide, covering a distance of some 2000 km along minor rivers. There are numerous lakes and lagoons along the rivers.

Human Impact & Utilisation: The river courses are mostly covered by gallery or semi-deciduous riverine forest, set in a Soudano-Guinean dry savanna landscape. In the north, the galleries are backed by grassy floodplains for long stretches. The rivers and open floodplains are fished, locally quite intensively, and sheep, goats and cattle are grazed on more open parts during the dry season. Some floodplain areas have been cleared, or semi-cleared, and are cultivated with crops sown as the floods recede, and shifting agriculture is widespread. Timber from the gallery forests is used for fuel, canoes and building. In some places cotton (which is also grown by traditional methods) is grown commercially. The run-off of pesticides has been very detrimental to river and floodplain life; the Bamingui River, for example, has been badly polluted.

Conservation Status: A great deal of floodplain is included in protected areas in the northern region. In the Nana Barya Faunal Reserve in the west, a floodplain extends along the national border for 82 km in the reserve on the Nana Barya River, and another extends 127 km up a tributary, the Bakassa River, of which the first 90 km are in the reserve.

Farther to the east, an area of 2 600 000 ha is protected in a complex of contiguous reserves, the most important of which are the Bamingui-Bangoran National Park and the Gribingui-Bamingui Faunal Reserve. In the latter, the right bank floodplain of the Gribingui River is protected for 116 km and the left bank floodplain of the Bamingui for 150 km. In the former, the left bank floodplain of the Bamingui is protected for 202 km, together with 105 km of floodplain on the Bangoran River, except for a 30 km section on the right bank immediately above its confluence with the Chari River. A floodplain, 52.5 km long, on another affluent of the Chari, is also included in the reserve. In the park centre, a strict nature reserve is bounded by the Vassoko and Bolo Rivers, both ephemeral streams. Lake Avakaba (50 ha) is a small permanent lake within the Avakaba Park (175 000 ha), also contiguous, which is used as a private hunting area under the control of the President.

Still farther east the Saint Floris National Park and the contiguous faunal reserves of Aouk-Aoukale and Ouandja-Vakaga protect further long stretches of floodplain. The left bank floodplain of the Bahr Aoukale is protected for 120 km in the Aouk-Aoukale Faunal Reserve, together with 135 km of the right bank floodplain of the Kameur/Bahr Oulouou River immediately above its confluence with the Bahr Aoukale. The left bank floodplain of the Kameur River is protected in the Saint Floris National Park for 82.5 km upstream of the confluence. In this park, 49.5 km of the lower right bank floodplain of the Goundja River is protected above its confluence with the Kameur River, together with 30 km of floodplain on the Ouandja River above its confluence

with the Kameur. To the south, this floodplain forms the eastern and southern boundaries of the contiguous OuandjaVakaga Faunal Reserve, where the left bank floodplain is protected for a further 150 km. On the other, western side, the Vakaga River forms the boundary, and here, 102 km of its right bank floodplain is protected, while the interior of the reserve contains a further 150 km of floodplain on affluents of the Vakaga and Ouandja Rivers.

In the far east, 69 km of floodplain in the upper basin of the Yata River are protected in the Andre Felix National Park and the Yata-Ngaya Faunal Reserve.

Poaching and fires are serious problems in almost all of the reserves.