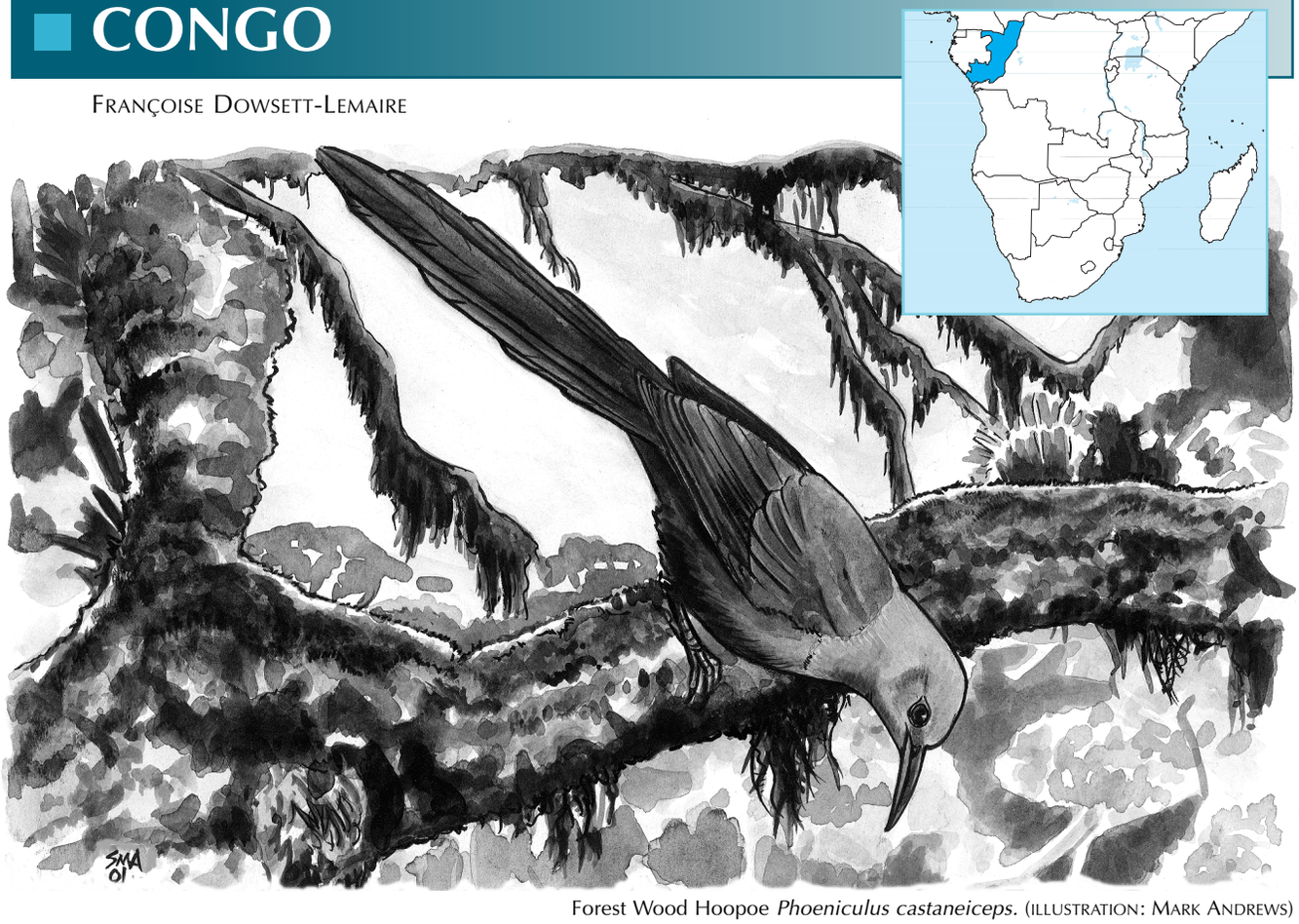
CONGO

FRANÇOISE DOWSETT-LEMAIRE



Forest Wood Hoopoe *Phoeniculus castaneiceps*. (ILLUSTRATION: MARK ANDREWS)

GENERAL INTRODUCTION

The Republic of Congo is bordered by the Atlantic Ocean and Gabon to the west, Cameroon and the Central African Republic to the north, Democratic Republic of Congo (hereafter DR Congo) to the east and south and Cabinda (Angola) to the south-west. It has a land area of 342,000 km², with a relatively short coastline of 170 km. Congo straddles the Equator from 03°40′N to 05°S and extends from 11°10′E to 18°40′E. More than half of the total population (2,745,000 in 1997) is concentrated in the three southern cities of the capital Brazzaville, Pointe-Noire and Loubomo (Dolisie). Much of rural Congo has fewer than four inhabitants/km², especially the north (1–3 inhabitants/km²); population growth is said to be 3% per annum. There are nine administrative regions.

Away from the narrow coastal plain (up to 150 m above sea-level), most of the country lies at 300–500 m, but there are three areas of higher elevation: the south-west is crossed by two parallel ranges of hills (running north-west–south-east and also parallel to the coast), the Mayombe and the Chaillu massif further inland, with peaks of 670–760 m and 800–940 m, respectively. North of Brazzaville, the Téké Plateau forms a fairly extensive area of undulating grassland at 350–700 m, with peaks at 750–850 m.

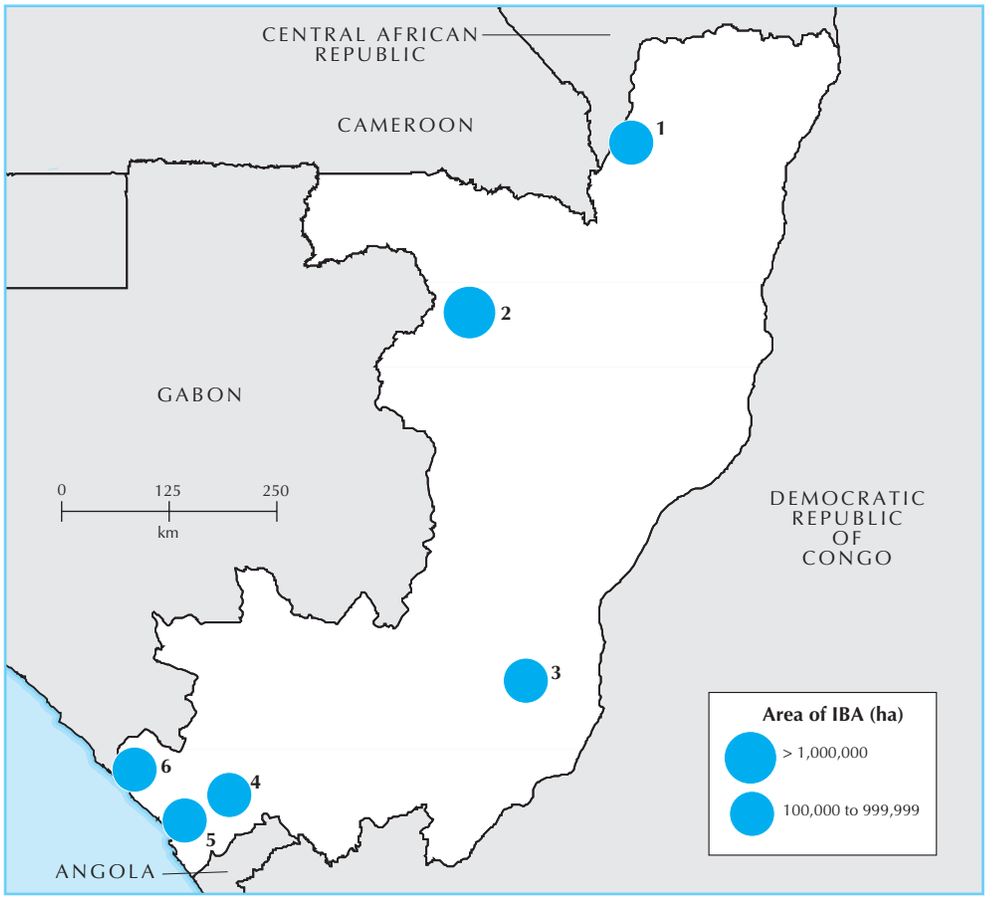
The climate is warm and humid, with little seasonal fluctuation in temperature—monthly means vary from 23–27°C, with July and August the coolest months. Rainfall regimes depend on latitude: in the south (03–04°S) the country experiences a single rainy season from October to mid-May. North of the Equator (e.g. Ouesso, Impfondo), the process is reversed, with the single dry season centred on the months of December to February. On the Equator itself (e.g. Odzala), the rainfall regime is bimodal, with the main rains falling in September to November or December, and shorter rains in April–May. Total annual rainfall varies between 1,200–2,000 mm. For example, in the coastal zone it rises from c.1,200 mm (Pointe-Noire) to 1,800–1,900 mm in the high Mayombe and decreases again in the rainshadow to the east (Niari valley). Rainfall figures in the north (Odzala, Nouabalé–Ndoki) also range between 1,500–1,900 mm. In the forest zone, the dry seasons are characterized by high atmospheric humidity and considerable cloud cover.

About 60% of Congo is covered by rainforest. The main forest areas are the Mayombe and Chaillu massifs in the south-west (which represent the southern extension of the Lower Guinea forest block, or 'Domaine Camerouno–Gabonais'), and the Sangha and Likouala regions in the north (which are part of the Congo basin). A large proportion of the Likouala forest is flooded and contains extensive *Raphia* swamps.

The rest of the country is occupied by savanna or a forest-savanna mosaic—mainly in the coastal plain, the Niari valley and the Téké Plateau. Savanna vegetation consists of various types of grassland, including extensive, open *Loudetia simplex* prairies on the Téké Plateau, wooded grassland (frequently with 10–30% tree-cover and dominated by *Hymenocardia acida* from Brazzaville to Odzala, much more open and with *Annona senegalensis* as the main small tree on the coastal plain) and seasonally wet dambos and bogs (locally termed 'izobé', especially extensive in the region of Oyo-Owando, just north of the Téké Plateau).

Finally, there is some well-developed *Rhizophora* mangrove on the coast, especially around the mouth of the Kouilou river and the Conkouati lagoon.

Petroleum is one of the two main foreign-exchange resources, but is essentially exploited offshore; however, some lagoons south of Pointe-Noire, and the beaches around the city, are polluted through mismanagement of refineries and faulty pipelines. Timber is the other main resource and is selectively exploited wherever dryland forest is accessible; some of the forests of the north have remained unlogged so far because of poor road infrastructure, but this is changing and today many of the remaining pristine forest management units have been attributed to logging companies. Selective logging leaves most of the forest standing (and thus has a limited impact on birds), but new forestry roads increase access to hunters. For the rural population the main source of income is the hunting of wildlife to supply the bush-meat markets.



Map 1. Location and size of Important Bird Areas in the Republic of Congo.

Table 1. Summary of Important Bird Areas in the Republic of Congo. 6 IBAs covering 30,060 km²

IBA code	Site name	Administrative region	Criteria (see p.11; for A3 codes, see Table 2) A1	A2 s043	A3 A05	A4ii
CG001	Nouabalé–Ndoki National Park complex	Sangha, Likouala			✔	
CG002	Odzala National Park complex	Cuvette, Sangha			✔	
CG003	Léfini Faunal Reserve	Plateaux, Pool	✔		✔	
CG004	Dimonika Biosphere Reserve	Kouilou	✔		✔	
CG005	Lower Kouilou basin	Kouilou	✔	✔	✔	
CG006	Conkouati National Park	Kouilou			✔	✔
	Total number of IBAs qualifying:		3	1	6	1

ORNITHOLOGICAL IMPORTANCE

Through the lack of resident ornithologists the avifauna of Congo is still incompletely documented and large sections of the country remain almost unexplored, including the Chaillu massif and the Likouala swamp-forests. After some recent research however, the national bird list now numbers 640 species (Dowsett-Lemaire and Dowsett 1998a, see also Bulens and Dowsett 2001), including 237 proven to breed (or 496 likely to). Eight species of global conservation concern are known, four of which are Palearctic migrants: *Falco naumanni* (VU), *Crex crex* (VU) and *Glareola nordmanni* (NT) occur as rare passage migrants and *Gallinago media* (NT) is regular in small numbers on both passages. *Sterna balaenarum* (NT) is a non-breeding visitor to the coast from southern Africa, but with few dated records (e.g. May). The three resident species are *Zoothera crossleyi* (NT), of which a small population occurs in the Mayombe, *Ploceus nigrimentum* (VU), which is common and widespread across the Téké Plateau, and *Ploceus subpersonatus* (VU), recently discovered in the coastal region (Bulens and Dowsett 2001). *Ploceus subpersonatus* is also a species of restricted range, the distribution of which defines the Gabon–Cabinda coast Secondary Area (s043).

Wetlands are mainly in the form of (seasonally) flooded forests and these are not attractive to migratory waterbirds, while coastal or inland mudflats are very small. In general, the position of the country on the southern edge of the Guineo–Congolian forest block means that Congo is of very little importance as a refuge for migratory species. By contrast, the resident avifauna has a large and varied forest component, on a par with that of neighbouring Gabon and western DR Congo; some 200 species of the Guinea–Congo Forests biome (A05) occur. In addition, the southern savannas bring in woodland and grassland species with a Zambezian influence (e.g. *Lanius souzae*, *Cisticola rufilata*)—these forest-savanna mosaics are, in fact, part of the Guineo–Congolian/Zambezian transition zone of White (1983). The Téké Plateau, in particular, harbours several species of interest within this zone, including *Francolinus finschi* and *Myrmecocichla tholloni*, as well as *Ploceus nigrimentum*.

CONSERVATION INFRASTRUCTURE AND PROTECTED-AREA SYSTEM

Wildlife conservation in Congo is the responsibility of the Ministère de l'Economie Forestière (Ministry of Forest Economy). The main laws dealing with wildlife conservation and utilization are No. 48/83 and 49/83 of 21 April 1983, and the Décret No. 85/879 of 6 July 1985. Protected areas fall into three categories:

- Parc national—National Parks (three sites) are areas of tourist or scientific interest in which permanent residence is not allowed. Activities necessary for the conservation or restoration of the reserve are allowed, and public access may be prohibited. Until 1992, there was much poaching of large mammals in Odzala National Park (especially elephant *Loxodonta africana*), but this and Nouabalé–Ndoki National Park (created in 1993) are presently managed by foreign-funded projects and poaching has considerably decreased. Conkouati National Park was gazetted in 1999, but contains many villages and logging concessions (in contradiction of the law).
- Réserve de faune—Faunal Reserves (five sites) are areas in which all hunting is prohibited. In practice the legislation is not respected and the forestry staff allocated to the control of poaching is insufficient and not paid on a regular basis (the

Table 2. The occurrence of biome-restricted species at Important Bird Areas in the Republic of Congo. Sites that meet the A3 criterion are highlighted in **bold**. Species with a restricted range are highlighted in blue.

A05 – Guinea–Congo Forests biome (200 species in the Republic of Congo; all six sites meet the A3 criterion)

IBA code:	001	002	003	004	005	006
Tigriornis leucolophus	✔	✔		✔	✔	✔
Bostrychia rara	✔	✔	✔	✔	✔	
Pteronetta hartlaubii	✔	✔				✔
Dryotriorchis spectabilis	✔	✔		✔	✔	✔
Accipiter castanilius		✔		✔		
Accipiter erythropus	✔	✔			✔	✔
Urotriorchis macrourus	✔	✔		✔	✔	✔
Spizaetus africanus	✔	✔		✔	✔	✔
Francolinus lathami	✔	✔		✔	✔	✔
Francolinus finschi			✔			
Agelastes niger	✔	✔		✔		✔
Guttera plumifera	✔	✔		✔	✔	
Sarothrura pulchra	✔	✔	✔	✔	✔	✔
Himantornis haematopus	✔	✔		✔	✔	
Canirallus oculeus	✔	✔		✔	✔	
Columba unicincta	✔	✔	✔	✔	✔	✔
Columba iriditorques	✔	✔	✔	✔	✔	✔
Turtur brehmeri	✔	✔		✔	✔	✔
Psittacus erithacus	✔	✔	✔	✔	✔	✔
Agapornis swindernianus	✔	✔				
Tauraco persa	✔	✔	✔	✔	✔	✔
Tauraco macrorhynchus		✔		✔	✔	✔
Cercococcyx mechowi	✔	✔	✔			
Cercococcyx olivinus	✔	✔	✔	✔	✔	✔
Chrysococcyx flavigularis	✔	✔		✔	✔	✔
Centropus anselli	✔	✔	✔	✔	✔	✔
Otus icterorhynchus	✔					
Bubo poensis	✔	✔		✔	✔	
Bubo shelleyi				✔		
Bubo leucostictus	✔	✔		✔	✔	
Scotopelia bouvieri	✔	✔	✔	✔	✔	✔
Jubula lettii				✔	✔	
Glaucidium tephronotum	✔	✔		✔	✔	
Glaucidium sjostedti				✔		✔
Caprimulgus binotatus	✔					
Caprimulgus batesi	✔	✔		✔	✔	✔
Telacanthura melanopygia	✔	✔				
Rhaphidura sabini	✔	✔		✔	✔	✔
Neafrapus cassini	✔	✔		✔	✔	✔
Apus batesi	✔	✔				
Apaloderma aequatoriale	✔	✔		✔	✔	✔
Alcedo leucogaster	✔	✔	✔	✔	✔	✔
Ispidina lecontei	✔	✔	✔	✔	✔	
Halcyon badia	✔	✔	✔	✔	✔	✔
Merops gularis	✔	✔	✔	✔	✔	✔
Merops muelleri	✔	✔		✔		
Merops breweri		✔	✔		✔	✔
Merops malimbicus			✔	✔	✔	✔
Eurystomus gularis	✔	✔	✔	✔	✔	✔
Phoeniculus castaneiceps	✔	✔				
Tockus albocristatus	✔	✔	✔	✔	✔	✔
Tockus hartlaubi	✔	✔		✔	✔	✔
Tockus camurus	✔	✔		✔	✔	✔
Tockus fasciatus	✔	✔	✔	✔	✔	✔
Ceratogymna fistulator	✔	✔		✔	✔	✔
Ceratogymna subcylindricus	✔	✔				
Ceratogymna albotibialis	✔	✔	✔	✔		✔
Ceratogymna atrata	✔	✔		✔	✔	✔
Gymnobucco calvus		✔		✔	✔	✔
Gymnobucco peli		✔		✔		✔
Pogoniulus scolopaceus	✔	✔	✔	✔	✔	
Pogoniulus atroflavus	✔	✔		✔	✔	✔

IBA code:	001	002	003	004	005	006
Pogoniulus subsulphureus	✔	✔	✔	✔	✔	✔
Buccanodon duchaillui	✔	✔		✔	✔	✔
Tricholaema hirsuta	✔	✔		✔	✔	
Trachyphonus purpuratus	✔	✔		✔	✔	✔
Indicator maculatus	✔	✔		✔		
Indicator willcocksi	✔	✔				
Melichneutes robustus	✔	✔		✔		✔
Melignomon zenkeri	✔					
Prodotiscus insignis	✔	✔		✔		
Sasia africana	✔	✔			✔	
Campethera nivosa	✔	✔		✔	✔	
Campethera caroli	✔	✔	✔	✔	✔	✔
Dendropicos gabonensis	✔	✔		✔	✔	
Dendropicos xantholophus	✔	✔		✔	✔	✔
Smithornis sharpei		✔				
Smithornis rufolateralis	✔	✔		✔	✔	✔
Pitta reichenowi		✔				
Pseudochelidon eurystomina		V		V	✔	✔
Riparia congica						
Phedina brazzae						
Hirundo nigrita	✔	✔	✔	✔	✔	✔
Hirundo fuliginosa		V				
Psalidoprocne nitens	✔	✔	✔	✔	✔	✔
Anthus pallidiventris		✔			✔	✔
Coracina azurea	✔	✔		✔	✔	✔
Campephaga petiti					✔	✔
Campephaga oriolina		✔				
Andropadus gracilis	✔	✔	✔	✔	✔	✔
Andropadus ansorgei	✔	✔		✔		
Andropadus curvirostris	✔	✔		✔	✔	✔
Calyptocichla serina	✔	✔		✔	✔	✔
Baeopogon indicator	✔	✔	✔	✔	✔	✔
Baeopogon clamans	✔	✔		✔	✔	
Ixonotus guttatus	✔	✔		✔	✔	✔
Chlorocichla simplex	✔	✔		✔	✔	✔
Chlorocichla falkensteini		✔		✔		
Thescelocichla leucopleura	✔	✔	✔	✔	✔	✔
Phyllastrephus scandens	✔	✔	✔		✔	✔
Phyllastrephus albigularis	✔	✔		✔		
Phyllastrephus icterinus	✔	✔		✔	✔	✔
Phyllastrephus xavieri	✔	✔				
Bleda syndactyla	✔	✔		✔	✔	✔
Bleda notata	✔	✔	✔	✔	✔	✔
Nicator chloris	✔	✔	✔	✔	✔	✔
Nicator vireo	✔	✔		✔	✔	✔
Criniger chloronotus	✔	✔		✔	✔	✔
Criniger calurus	✔	✔		✔	✔	✔
Criniger ndussumensis	✔	✔		✔	✔	✔
Dryoscopus senegalensis	✔	✔		✔	✔	✔
Dryoscopus sabini	✔	✔		✔	✔	✔
Laniarius leucorhynchus	✔	✔	✔	✔	✔	✔
Telophorus bocagei	✔					
Malaconotus cruentus	✔	✔		✔		
Prionops caniceps	✔	✔		✔	✔	✔
Neocossyphus fraseri	✔	✔	✔	✔	✔	✔
Neocossyphus poensis	✔	✔		✔	✔	✔
Alethe diademata	✔	✔		✔	✔	✔
Stiphrornis erythrothorax	✔	✔		✔	✔	✔
Sheppardia cyornithopsis	✔	✔		✔	✔	
Cossypha cyanocampter	✔	✔				
Illadopsis cleaveri	✔	✔		✔	✔	✔
Illadopsis fulvescens	✔	✔		✔	✔	✔

Table 2 ... continued. The occurrence of biome-restricted species at Important Bird Areas in the Republic of Congo. Sites that meet the A3 criterion are highlighted in **bold**. Species with a restricted range are highlighted in blue.

A05 – Guinea–Congo Forests biome ... continued (200 species in the Republic of Congo; all six sites meet the A3 criterion)

IBA code:	001	002	003	004	005	006
Cisticola anonymus	✔	✔		✔		
Apalis nigriceps		✔				
Apalis rufogularis	✔	✔	✔	✔	✔	✔
Apalis goslingi	✔	✔				
Camaroptera superciliaris	✔	✔	✔	✔	✔	✔
Camaroptera chloronota	✔	✔		✔	✔	✔
Eremomela badiceps	✔	✔		✔	✔	
Sylvietta virens	✔	✔	✔	✔	✔	✔
Sylvietta denti	✔	✔			✔	
Macrosphenus flavicans	✔	✔		✔	✔	
Macrosphenus concolor	✔	✔		✔	✔	✔
Hylia prasina	✔	✔	✔	✔	✔	✔
Phylloscopus budongoensis		✔				
Hyliota violacea	✔	✔		✔		
Fraseria ocreata	✔	✔	✔	✔	✔	✔
Fraseria cinerascens	✔	✔	✔		✔	✔
Muscicapa infuscata	✔	✔		✔	✔	✔
Muscicapa olivascens	✔	✔		✔	✔	✔
Muscicapa epulata		✔		✔		
Muscicapa sethsmithi	✔	✔		✔		✔
Muscicapa comitata	✔	✔		✔		
Muscicapa cassini	✔	✔	✔	✔	✔	✔
Myioparus griseigularis	✔	✔				
Bias flammulatus	✔	✔				
Batis occulta	✔	✔				
Platysteira castanea	✔	✔	✔	✔	✔	✔
Platysteira tonsa	✔	✔				
Erythrocercus mccallii	✔	✔		✔	✔	✔
Trochocercus nigromitratus	✔	✔				
Trochocercus nitens	✔	✔	✔	✔	✔	
Terpsiphone rufiventer	✔	✔		✔	✔	✔
Terpsiphone rufocinerea		✔	✔	✔	✔	
Anthoscopus flavifrons	✔	✔		✔	✔	
Parus funereus	✔	✔				
Anthreptes fraseri	✔	✔	✔	✔	✔	✔
Anthreptes gabonicus				✔	✔	✔
Anthreptes aurantium	✔	✔	✔		✔	✔
Anthreptes rectirostris	✔	✔		✔	✔	✔
Nectarinia seimundi	✔	✔		✔	✔	
Nectarinia batesi		✔				
Nectarinia reichenbachii	✔	✔			✔	✔
Nectarinia cyanolaema	✔	✔	✔	✔	✔	✔
Nectarinia fuliginosa				✔	✔	✔
Nectarinia rubescens	✔	✔		✔		✔
Nectarinia minulla	✔	✔		✔		✔
Nectarinia congensis			✔			
Nectarinia johannae	✔	✔	✔	✔	✔	
Nectarinia superba	✔	✔		✔	✔	✔
Pholidornis rushiae	✔	✔		✔		
Parmoptila woodhousei	✔	✔		✔	✔	
Nigrita fusconota	✔	✔	✔	✔	✔	✔
Nigrita bicolor	✔	✔	✔	✔	✔	✔
Nigrita luteifrons	✔	✔	✔	✔	✔	
Spermophaga poliogenys	✔					
Spermophaga haematina	✔	✔	✔	✔	✔	✔
Lagonosticta landanae					✔	
Ploceus subpersonatus					✔	
Ploceus aurantius	✔	✔			✔	
Ploceus nigerrimus	✔	✔		✔	✔	✔
Ploceus tricolor	✔	✔		✔	✔	
Ploceus albinucha	✔					
Ploceus preussi	✔					
Ploceus dorsomaculatus	✔	✔				
Malimbus coronatus	✔	✔				
Malimbus cassini	✔	✔		✔	✔	✔
Malimbus erythrogaster	✔	✔		✔	✔	
Malimbus nitens	✔	✔	✔	✔	✔	✔
Malimbus malimbicus	✔	✔	✔	✔		✔
Malimbus rubricollis	✔	✔		✔	✔	✔
Brachycope anomala						
Poeoptera lugubris		✔				
Onychognathus fulgidus	✔	✔	✔	✔	✔	✔
Lamprotornis purpureiceps	✔	✔		✔	✔	✔
Oriolus brachyrhynchus	✔	✔		✔	✔	✔
Oriolus nigripennis	✔	✔		✔	✔	✔
Dicrurus atripennis	✔	✔		✔	✔	✔
Number of species recorded:	**168**	**177**	**56**	**147**	**138**	**117**

V Recorded only as occasional migrants.

payment of civil servants in Congo has experienced chronic delays over the past few years). A GEF (World Bank) project was set up to help manage some of the reserves, but came to the end of its remit in 1999. Illegal hunting has seriously depleted mammal populations, but the effects on birds are much less significant.

- Domaine de chasse—Hunting Reserves (two sites) are areas set aside for trophy hunting, for which a big-game hunting permit is required.

There are other kinds of land-use categories (e.g. 'Protection forest'), but since these do not offer any guarantee of long-term protection they are not considered here.

National Parks and Faunal/Hunting Reserves cover 33,850 km² (excluding the marine section of Conkouati National Park), i.e. 9.9% of the country. This system includes all major habitats in the country, both in the forest and savanna zones.

INTERNATIONAL MEASURES RELEVANT TO THE CONSERVATION OF SITES

Congo ratified the Convention on Biological Diversity, CITES, the Convention on Climate Change, the World Heritage Convention (but no sites have been inscribed), the Convention on Migratory Species, the African–Eurasian Waterbird Agreement, the Convention to Combat Desertification and the Ramsar Convention, under which one site, Lac Télé-Likouala aux Herbes, has been designated. It also participates in the UNESCO Man and Biosphere Programme and two sites have been declared Biosphere Reserves, Odzala and Dimonika. Regionally, it is a signatory to the African Convention of Nature and Natural Resources.

OVERVIEW OF THE INVENTORY

The inventory contains six Important Bird Areas (IBAs), covering a total area of 30,060 km² or 8.8% of the land area of the country (Map 1, Table 1). These represent all the major habitats for birds, including the semi-evergreen rainforest of the north (Congo basin, two sites) and the south-west (Mayombe, three sites), swamp-forest (including extensive flooded forest in the Kouilou basin) and the extensive open savannas of Moyen–Congo on the Téké Plateau (one site, with *Loudetia* grassland and wooded grassland). Almost all breeding/resident species are represented in the sites, with the exception of three of the 200 species restricted to the Guinea–Congo Forests biome that are known from the country, *Phedina brazzae* (its range is poorly known, but it could occur in site CG003), *Riparia*

congica (found locally on the Congo, Oubangui and Sangha rivers) and *Brachycope anomala* (Table 2). The latter is a commensal species of secondary grassland recorded from Impfondo, and also Ouesso where it is very common.

Five of the six sites are legally protected, three as National Parks, two only partially, as a Faunal Reserve and a Biosphere Reserve. It is likely that the newly-designated Faunal Reserve and Ramsar Site (Lac Télé-Likouala aux Herbes, 4,400 km²) merits IBA status, but its avifauna has not been studied and almost nothing has been published on its vegetation.

All the information on the avifauna of the various sites has been obtained in recent years (1989–1997), during rather brief surveys, apart from CG002 (Odzala, a one-year survey) and CG005 (Lower Kouilou basin, six-month survey). The coverage is therefore fairly uneven. It should be noted that, in addition to the Likouala swamps, the Chaillu massif has also remained almost unexplored; it consists of semi-evergreen rainforest at low to medium altitudes (higher than the Mayombe) and all of it has been selectively logged.

COMMENTS ON THE INVENTORY

Sources of data on birds, other fauna and flora are essentially those of the compiler and R. J. Dowsett, except for site CG006 (Cruickshank n.d., Doumenge 1992, Maisels and Cruickshank 1997).

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SITE ACCOUNTS

Nouabalé–Ndoki National Park complex — CG001

Admin region Sangha, Likouala
Coordinates 02°30′N 16°30′E — A3 (A05)
Area c.420,000 ha **Altitude** 340–570 m — National Park

Site description

The site, in the far north of the country, comprises the Nouabalé–Ndoki National Park *sensu stricto* (386,600 ha) plus some of the peripheral zone from its western border, the Ndoki river, to Bomassa and the immediate surroundings, including sandbars on the Sangha river, south to the village of Bounda and north to the international border with the Central African Republic, where it is contiguous with Dzanga–Ndoki National Park (CF008). The park contains 3,866 km² of undisturbed forest within the basin of the Nouabalé and Ndoki rivers, mainly between 340–400 m. The forest is of three types: swamp-forest along the main rivers, closed-canopy monodominant *Gilbertiodendron dewevrei* forest (often in narrow strips bordering the swamp-forest) and dryland forest, by far the most extensive. The latter is semi-evergreen with an open, mixed canopy (Sterculiaceae and Ulmaceae are important) and the understorey is usually very dense and dominated by Marantaceae and Zingiberaceae. This Sterculiaceae/Ulmaceae forest-type is characteristic of the northern fringes of the Guineo–Congolian forest block. There is also some secondary forest around Bomassa camp (the park headquarters) and village; human impact in the buffer zone is minimal today. Most of the peripheral zone to the west and south of the park has been logged once, at an intensity of about one tree per hectare. Finally, there are some small natural clearings in the forest in marshy depressions dominated by various types of herbaceous vegetation, including Cyperaceae swamps, locally called 'bai'.

Birds

See Box and Table 2 for key species. So far, 314 species have been recorded, of which c.260 are proven or suspected breeders. The potential list (excluding vagrants) should be nearer 330. Species of special interest include *Glaucidium capense* (not uncommon in semi-evergreen forest with an open canopy), the little-known or relatively rare *Bostrychia olivacea*, *Otus icterorhynchus*, three species of forest nightjars (*Caprimulgus batesi*, *C. binotatus* and one yet to be identified), *Phoeniculus castaneiceps*, *Melignomon zenkeri*, *Ploceus preussi* and *P. dorsomaculatus*. *Caprimulgus binotatus* and *C.* sp. hold non-overlapping territories in semi-evergreen forest; the voice of the latter is identical to that of a forest nightjar taped in 1996 in the Itombwe mountains of eastern DR Congo (CD014) whence the only known specimen of *C. prigoginei* has been collected, thus it will more likely turn out to be *C. prigoginei* than a new species. *Ploceus albinucha*, a species of the northern fringes of the Guineo–Congolian forest block, may not occur much further south in Congo. *Spermophaga poliogenys* is probably near the western limit of its range. *Stiphrornis sanghensis* has been described as a new species from the adjacent Dzanga–Ndoki National Park in Central African Republic (site CF008). However, independant field research there, in Congo, and in neighbouring Cameroon, suggests it is no more than a subspecies of the widespread *S. erythrothorax*, and it is treated as such here, pending further evidence. This yellow-bellied form is quite common in Nouabalé–Ndoki. *Gallinago media* has been recorded, but its local status is unknown; *Falco naumanni* can be no more than a vagrant.

Key species

A3 (A05) Guinea–Congo Forests biome: 168 of the 200 species of this biome that occur in Congo have been recorded at this site; see Table 2.

Other threatened/endemic wildlife

The park was initially designated to protect the rich mammal fauna of the area, including *Gorilla gorilla* (EN), *Pan troglodytes* (EN), *Procolobus (badius) oustaleti* (LR/nt), *Loxodonta africana* (EN) and *Tragelaphus euryceros* (LR/nt).

Conservation issues

The park is currently administered by the Wildlife Conservation Society (New York). A management plan is in preparation. The peripheral zone is attributed to a logging company, but WCS has been given the remit for wildlife management in collaboration with the company, currently active to the south and west of the park. Human impact on the park itself and the Bomassa buffer zone is minimal and the illegal hunting that takes place seems to be of no consequence for bird populations. The park headquarters were temporarily evacuated during the civil war in 1997; normal activities have resumed from 1998.

Further reading

Chadwick (1995), Dowsett-Lemaire (1997a), Dowsett-Lemaire and Dowsett (1997, 1998b, 2000).

Odzala National Park complex — CG002

Admin region Cuvette, Sangha
Coordinates 00°45′N 14°52′E — A3 (A05)
Area 1,360,000 ha **Altitude** c.350–650 m — National Park

Site description

Odzala National Park was created in 1935 (gazetted 1940), covering then 1,266 km². The Odzala complex also included the Lékoli–Pandaka Faunal Reserve (682 km²) and Mboko Hunting Reserve (900 km²), both to the south of the park. These and an enormous area of forest to the north, west and east of the original complex have been included in an enlarged National Park in June 2001. Odzala is on the southern fringes of the block of Guineo–Congolian forest extending from Gabon to DR Congo. The southern section of the site consists of a forest-savanna mosaic on a plateau at 500–600 m, while the north is continuous forest. Over 90% of the forest is semi-evergreen, with a fairly open canopy and a dense Marantaceae understorey; most of the rest is taken up by swamp-forest (with a closed canopy and more open understorey, *Raphia* is dominant very locally). Savannas occupy

c.420 km² in the south, most of which is wooded grassland (with *Hymenocardia acida*, 2–4 m tall, as the main tree). There are also some thickets while many dambos (seasonally wet grassland) line the galleries of swamp-forest. Wetlands are small, but include rivers, small pools, Cyperaceae marsh and saltpans.

Birds

See Box and Table 2 for key species. Some 440 bird species have been recorded, of which c.330 are proven or thought to breed. Species of interest include *Phoeniculus castaneiceps* (previously unknown from the southern fringe of the Guineo–Congolian forest block), *Smithornis sharpei*, *Lobotos oriolinus*, *Phylloscopus budongoensis* and *Apalis jacksoni* (the latter two are mainly montane elsewhere), *Cisticola eximius* (previously unknown from south of the Guineo–Congolian forest block) and *Ploceus dorsomaculatus.* The yellow-bellied form of *Stiphrornis erythrothorax* (described as a new species *S. sanghensis*) is locally common (see site CG001). *Falco naumanni* and *Glareola nordmanni* are recorded as vagrants while *Gallinago media* is also known to occur and may prove to be regular on both passages. In addition, two species of the Zambezian biome (A10), *Hirundo rufigula* and *Sylvietta ruficapilla*, occur (the first as a seasonal migrant, the second is resident in wooded savanna).

Key species

A3 (A05) Guinea–Congo Forests biome: 177 of the 200 species of this biome that occur in Congo have been recorded at this site; see Table 2.

Other threatened/endemic wildlife

The park is an important refuge for large mammals, including *Loxodonta africana* (EN), *Syncerus caffer nanus* (LR/cd), *Tragelaphus euryceros* (LR/nt) (local), many primates, including *Gorilla gorilla* (EN) and *Pan troglodytes* (EN), and a small, isolated population of *Panthera leo* (VU). The forest vegetation is varied and has recently yielded a new species of *Diospyros* (*D. whitei*).

Conservation issues

Since 1992, the park has been administered by the European-funded Ecofac Project. This has brought about a significant decrease in the poaching of *Loxodonta africana*, but whether this improvement can be sustained beyond the life of the project is uncertain. The park has been considerably enlarged recently (2001); it used to fall within timber concessions, but no licences have ever been issued and all but one of the concessions have been withdrawn recently. The amount of big-game hunting that has taken place (in some years) in Mboko Hunting Reserve, and illegal hunting there and elsewhere, seem to have had no impact on bird populations. From June 1997, when the civil war spread from Brazzaville to the whole country, Ecofac had to reduce its activities to a minimum, mainly concerned with anti-poaching control, but by mid-1999 other activities were being resumed.

Further reading

Dowsett and Dowsett-Lemaire (1997), Dowsett-Lemaire (1996, 1997c), Dowsett-Lemaire and Dowsett (1996), Hecketsweiler *et al.* (1991).

Léfini Faunal Reserve — CG003

Admin region Plateaux, Pool
Coordinates 03°00′S 15°25′E — A1, A3 (A05)
Area 630,000 ha **Altitude** 310–780 m — Faunal Reserve

Site description

This site represents a good sample of the Téké Plateau in the south-east of the country, a scenic undulating grassy plateau which stretches over c.58,000 km² in Congo. The relief is rather broken in places, with large cliffs of eroded limestone and rocky outcrops dotted about on ridges. Much of the forest is restricted to galleries along rivers (including swamp-forest, some with *Raphia* palms), but some patches of dry forest and thicket persist on high ground. The other main habitats are *Loudetia simplex* grassland (very extensive, probably largely fire-induced) and *Hymenocardia acida* wooded grassland. Some ponds and lakes are found locally in depressions. A number of small villages occur along the roads (one of which enters the reserve in the north; others border the eastern and northern edges).

Birds

See Box and Table 2 for key species. The avifauna is still incompletely known (the main survey covered only a week), but numbers at least 239 species and is expected to hold at least 300. The forest component (nearly 100 species) is poorer than further north or west, but includes species such as *Bostrychia rara* and *Scotopelia bouvieri*. In addition to good populations of *Francolinus finschi* and *Ploceus nigrimentum*, another endemic of the Téké–Angola plateau, *Myrmecocichla tholloni*, occurs in large numbers in *Loudetia* grassland (population estimated at over 20,000 pairs). The Léfini is so far the only locality where the two closely-related *Cisticola brunnescens* and *C.* (*b.*) *cinnamomeus* are known to coexist, the former in dry grassland (where very common), the latter in grassy swamps (where very local). Other common grassland species include *Eupodotis senegalensis*, *Vanellus lugubris*, *Mirafra africana*, *Anthus leucophrys* and *A. brachyurus*. *Merops breweri* is locally common at the forest/grassland ecotone and *Jynx ruficollis* in wooded grassland. The little-known *Phedina brazzae* is recorded from neighbouring localities and could be expected to occur; there is one record of *Nectarinia congensis* from the eastern edge of the reserve, but it could be more widespread. More research is needed. In addition, two species of the Zambezian biome (A10), *Lanius souzae* and *Sylvietta ruficapilla*, occur in wooded grassland.

Key species

A1 *Ploceus nigrimentum*

A3 (A05) Guinea–Congo Forests biome: 56 of the 200 species of this biome that occur in Congo have been recorded at this site; see Table 2.

Other threatened/endemic wildlife

Large mammals have been over-hunted in the past, but *Syncerus caffer nanus* (LR/cd), *Tragelaphus spekii* (LR/nt), various duikers and primates (including *Cercopithecus neglectus*) still occur.

Conservation issues

A reintroduction programme of orphaned *Gorilla gorilla* (funded mainly by the late J. Aspinall and GEF–World Bank) had been taking place on the south-eastern edge of the reserve (Lésio river) until June 1997, when the civil war in Brazzaville and elsewhere forced the evacuation of expatriate staff. With the cessation of hostilities staff returned to the site, but there was a marked increase in poaching by refugees from the combat zones. GEF funding has now ceased and the future of the project is uncertain. With its great scenic beauty and proximity to Brazzaville, this area should have considerable tourism potential once peace is restored. The conservation efforts mentioned above were vastly insufficient to ensure protection of the remaining mammal populations, but habitats and birds are not considered at risk given the very low human pressure.

Further reading

Dowsett-Lemaire (1997b).

Dimonika Biosphere Reserve — CG004

Admin region Kouilou
Coordinates 04°12′S 12°22′E — A1, A3 (A05)
Area 136,000 ha — Biosphere Reserve
Altitude c.300–670 m — (Unprotected)

Site description

The site embraces a section of the Mayombe massif, which covers c.11,000 km² in Congo, in an area of rather steep hills. The main forest-type is evergreen or semi-evergreen rainforest with a very mixed canopy. There is some monodominant *Gilbertiodendron dewevrei* forest on the eastern side of the reserve, near the ecotone with the Niari savannas, and some small grassy clearings (*savanes incluses*), mainly in the eastern section. The southern edge of the reserve coincides with the main road and, for part of its length, the railway line connecting Brazzaville to Pointe-Noire, along which lie several large settlements (in 1987 the three main villages of Mvouti, Mpounga and Les Saras numbered 7,000 inhabitants). There is also a road running into the reserve to the villages of Dimonika and Makaba. Various stages of forest regrowth and young *Musanga* forest are encountered in the vicinity of villages and associated plantations of cassava and banana.

Birds

See Box and Table 2 for key species. A total of 275 species (of which 266 are likely to breed) has been recorded in this part of the Mayombe, including rare or little-known species such as *Bubo shelleyi*. This figure is based on rather short visits and is certainly incomplete. Of special interest is the existence of a small relict population of two montane species in the region of Mont Mbamba at an altitude of 500–600 m, *Dryoscopus angolensis* and *Zoothera crossleyi*. This area in particular deserves further investigation.

Key species

A1	*Zoothera crossleyi*
A3 (A05)	Guinea–Congo Forests biome: 147 of the 200 species of this biome that occur in Congo have been recorded at this site; see Table 2.

Other threatened/endemic wildlife

Large mammals such as *Loxodonta africana* (EN), *Syncerus caffer nanus* (LR/cd), *Mandrillus sphinx* (LR/nt) and small arboreal monkeys have been largely hunted out, but there are still good numbers of *Gorilla gorilla* (EN) and *Pan troglodytes* (EN).

Conservation issues

The Biosphere Reserve includes a protected core area of 90,000 ha or more and, near inhabited areas, buffer zones in which the only prohibited activities are forestry operations and hunting. In fact, while forestry operations have indeed been suspended, hunting (both subsistence and commercial) continues to be widely practised and is still the main source of income. In the main zone of human influence, along the roads and railway track, several bird species have been exterminated by hunters, including *Bostrychia rara*, *Stephanoaetus coronatus*, *Agelastes niger*, *Guttera plumifera*, *Corythaeola cristata* and *Ceratogymna atrata*. All of these are found in more remote, less disturbed areas. It is regrettable that the Biosphere Reserve was not located in a section of the Mayombe with less population pressure (mean densities of 6 people/km² in Mvouti District are way above the average rural density of 2.7). The relations between the local people and the Dimonika Project are not good.

Further reading

Dowsett and Dowsett-Lemaire (1991), Dowsett-Lemaire and Dowsett (1989), Sénéchal *et al.* (1989).

Lower Kouilou basin — CG005

Admin region Kouilou
Coordinates 04°25′S 11°55′E — A1, A2 (s043), A3(A05)
Area 160,000 ha **Altitude** 0–130 m — Unprotected

Site description

The basin of the lower Kouilou river, lying a little to the west of Dimonika (CG004), is bordered to the south-west by the Atlantic coast, between Diosso and Madingo–Kayes, to the north-west and north by the road from Madingo–Kayes to Nkola and Magne, and to the east by the Lakes Kitina and Titina. The main part of the site is occupied by the 900 km² marsh of the Kouilou basin, which includes 15 km² of *Rhizophora* mangrove, 20 km² of lakes, 65 km² of papyrus (pure or mixed with low shrubs), 30 km² of wet *Jardinea* grassland, c.170 km² of flooded thickets (mainly *Raphia*, *Pandanus*, *Ficus trichopoda*) and c.600 km² of permanently or seasonally flooded forest (*Chrysobalanus*, *Ctenolophon*, *Sacoglottis*, *Uapaca*). The coastal strip is occupied by sandy beaches, evergreen thickets and dry evergreen *Symphonia* forest (in gorges), giving way to a forest-savanna mosaic further inland—with c.100 km² of dry *Andropogon* grassland. Semi-evergreen rainforest, from this mosaic to the foothills of the Mayombe, covers c.500 km². Most of the villages are located along the coast and the Madingo–Kayes road; there is also a cluster of fishing villages in the vicinity of Lake Nanga and small fishing camps on the Kouilou. The dryland forests are all exploited by selective logging. A large proportion of the grassland is being planted with *Eucalyptus*, an operation financed by Shell.

Birds

See Box and Table 2 for key species. A total of 378 bird species is known from the area, of which 284 are likely to breed (based on a five-month survey). Species of special interest include *Sterna balaenarum*, a non-breeding visitor to the coast in unknown numbers, but thought to be regular, *Merops breweri* whose breeding density on the forest-savanna ecotone is locally high, and *Ploceus subpersonatus* recently discovered in coastal bush. Extensive swamp-forest and thickets harbour good numbers of little-known species such as *Tigriornis leucolophus*, *Canirallus oculeus* and *Scotopelia bouvieri*. *Pseudochelidon eurystomina* is a common visitor from September to November and some may breed on occasion. In addition, two species of the Zambezian biome (A10), *Lybius minor* and *Hirundo rufigula*, have been recorded.

Key species

A1	*Sterna balaenarum*	*Ploceus subpersonatus*
A2 (s043)	Gabon–Cabinda coast Secondary Area: *Ploceus subpersonatus* has been recorded at this site.	
A3 (A05)	Guinea–Congo Forests biome: 138 of the 200 species of this biome that occur in Congo have been recorded at this site; see Table 2.	

Other threatened/endemic wildlife

Trichechus senegalensis (VU) is present in the Kouilou river and its larger tributaries (e.g. the Nanga), but is probably decreasing. *Loxodonta africana* (EN), *Mandrillus sphinx* (LR/nt) and small arboreal monkeys have been largely exterminated, but there are still good numbers of *Gorilla gorilla* (EN) and *Pan troglodytes* (EN).

Conservation issues

The selective logging practised on a rotational basis has more impact on mammals, through disturbance and hunting, than on birds. The relatively low human population pressure means that bird populations are barely affected away from roads and villages, and this is particularly true of the core area of the Kouilou swamp. The main environmental threat comes from the programme of extensive plantations of *Eucalyptus* in grassland, which could bring about the local extinction of several savanna species, including *Merops breweri* which uses the dry grassland for nesting. The nests of this bee-eater are situated relatively close (20–65 m) to the edge of the swamp-forest where they feed, and it would have been easy to avoid planting this narrow band in order to respect the breeding requirements of this localized species. Unfortunately, an appropriate impact study was not carried out and no action taken to protect this species, despite verbal and written recommendations.

Further reading

Bulens and Dowsett (2001), Dowsett and Dowsett-Lemaire (1991), Sénéchal *et al.* (1989).

Conkouati National Park — CG006

Admin region Kouilou
Coordinates 03°55′S 11°25′E — A3 (A05), A4ii
Area c.300,000 ha **Altitude** 0–550 m — National Park

Site description

Conkouati is situated on the coast in the extreme south-west of the country and against the international frontier with Gabon. It includes the same range of habitats as the Lower Kouilou basin (CG005), which lies immediately to the south-east, with the addition of lagoons, while swamp-forests are far less extensive. Semi-evergreen rainforest is the dominant vegetation-type, from the sublittoral forest-savanna mosaic to the Mayombe massif inland, and covers a wider altitudinal range than does CG005. There are several lagoons of low salinity, of which Conkouati is the largest (c.60 km²). The park is crossed by two roads that reach the Gabon border and the local human population is well over 3,000 inhabitants.

Birds

See Box and Table 2 for key species. From two brief surveys some 288 species are known, a total well below the potential (over 400 species). Species of note include *Merops malimbicus* and *Pseudochelidon eurystomina* found breeding in October 1996. There are very few documented breeding colonies of this swallow on the central African coast (Gabon); exact location and numbers involved here are not given (Maisels and Cruickshank 2000). *Ploceus subpersonatus* could occur on the edge of the lagoons. In addition, one species of the Zambezian biome (A10), *Lybius minor*, has been recorded.

Key species

A3 (A05)	Guinea–Congo Forests biome: 117 of the 200 species of this biome that occur in Congo have been recorded at this site; see Table 2.		
A4ii		Breeding (pairs)	Non-breeding
	Merops malimbicus	1,000–1,500 (1996)	—

Other threatened/endemic wildlife

The area north of the Ngongo–Loupevi confluence (03°45′S 11°25′E) is relatively untouched and the area west of Cotivindou is especially good for large mammals. *Trichechus senegalensis* (VU) is hunted occasionally, but still occurs in the Conkouati lagoon and some rivers. *Gorilla gorilla* (EN), *Pan troglodytes* (EN) and *Loxodonta africana* (EN) are common in the north. *Syncerus caffer nanus* (LR/cd) and *Mandrillus sphinx* (LR/nt) still occur. *Mandrillus sphinx* has been virtually eliminated elsewhere in Congo and its status in Conkouati deserves further study.

Conservation issues

Conkouati became a Faunal Reserve of some 3,000 km² in 1980. However, about half of this has been under logging concessions and other forms of exploitation for many years, including mining (although the latter is now suspended). Despite these difficulties, Conkouati became a National Park in August 1999, with a total size of 5,050 km² (of which c. 2,000 km² are a marine extension not considered in this site). The terrestrial portion of the park includes several important logging concessions (in operation) and many villages in a zone of 'eco-development'—in contradiction of the law on National Parks. IUCN has been involved with the management of the reserve from 1993–1999, and the Wildlife Conservation Society (New York) with that of the new park since its creation. The control of poaching (especially large mammals) in the logging concessions, and around the villages (where marine turtles come to breed) is proving very difficult. Conkouati is also the site of a reintroduction programme, run by the association HELP, of orphaned *Pan troglodytes*. Hunting is severely affecting mammal populations (the Conkouati area contributes significantly to the bush-meat market of Pointe-Noire), but it is doubtful whether most birds are presently threatened, except bee-eaters (and perhaps the river martins) which are snared or netted in numbers at their breeding colonies.

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