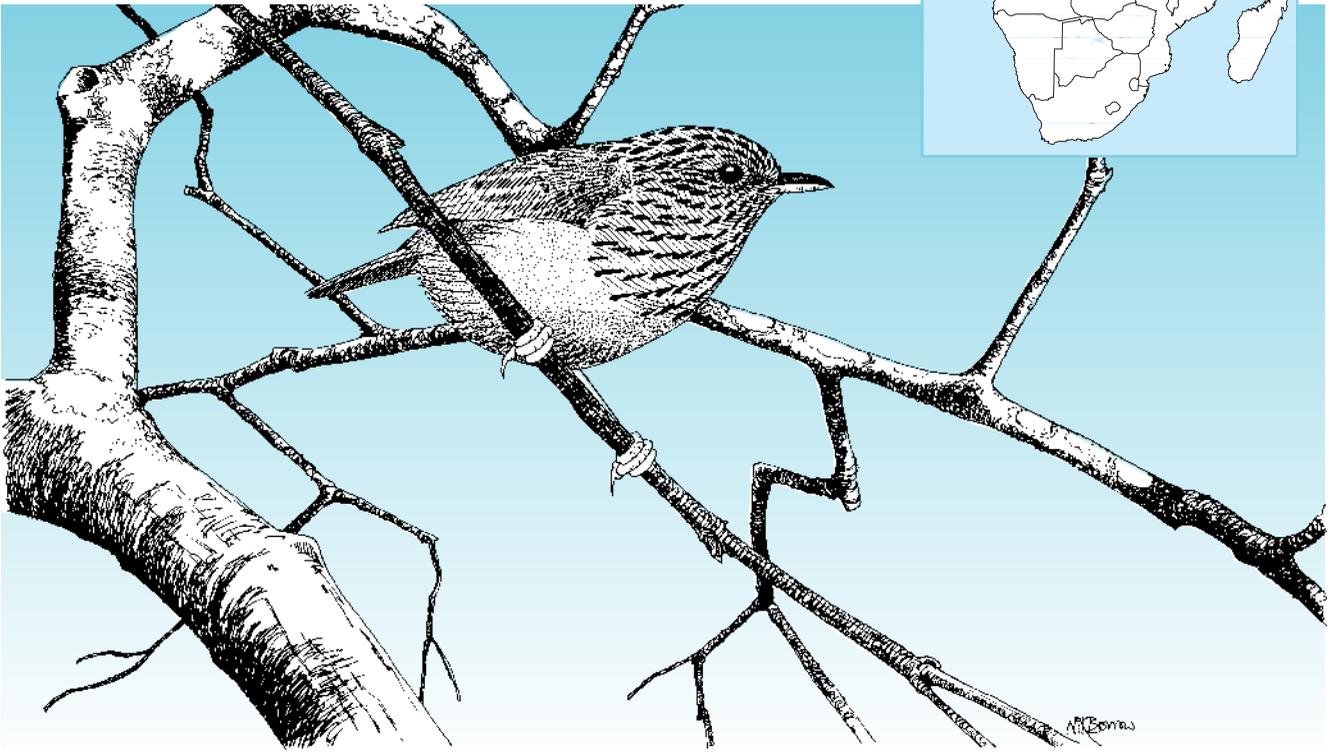


# GABON

PATRICE CHRISTY



Tit-hylia *Pholidornis rushiae*. (ILLUSTRATION: NIK BORROW)

## GENERAL INTRODUCTION

The Republic of Gabon is bordered to the north by the Republic of Equatorial Guinea and Cameroon, to the east and south by the Republic of Congo and to the west by the Gulf of Guinea. The country straddles the Equator between 02°30'N and 03°55'S and extends from 08°42'E to 14°30'E, with a total land-surface area of 267,667 km<sup>2</sup>. The population of Gabon was estimated to be 1,015,000 in 1993, 73% of whom live in the three main towns of Libreville, the capital, Port-Gentil, on the coast, which owes its development to the oil industry, and Franceville in the south-east. The average annual growth-rate is estimated as 2.5%. While some areas, mainly in the north, support fairly large rural communities, the population density in others is extremely low. Administratively, the country is divided into nine provinces.

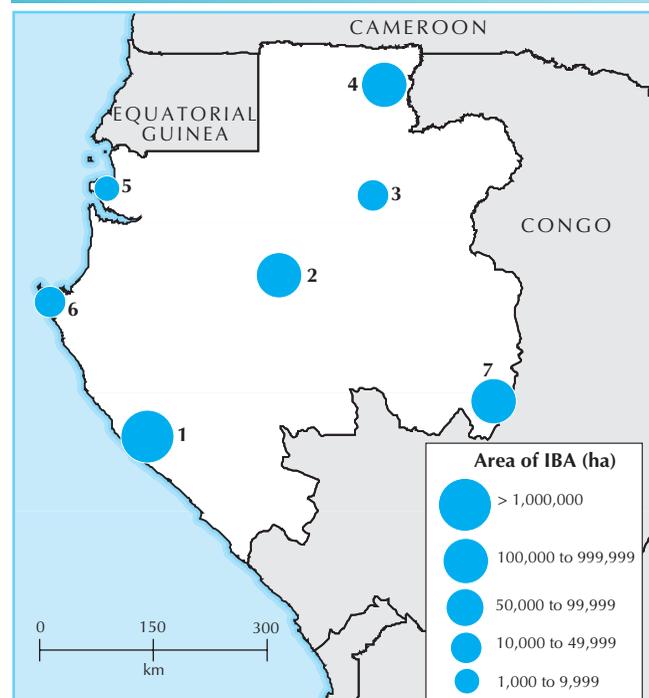
Inland from the relatively narrow, low-lying coastal strip, the majority of the country consists of a plateau lying at 450–800 m elevation. This is cut in two, from south-east to centre-west, by the Ogooué river which, with its main tributaries, the Ivindo in the north-east and the Ngouinié in the west, drains much of the country. Two small rivers in the north, the Ntem and the Woleu, which flow westwards into southern Cameroon and Equatorial Guinea, are part of a different drainage system, as is the Nyanga river in the south-west. The large estuaries of the Ogooué and other rivers and associated lagoons are conspicuous features of the 1,014-km-long coast. There are no mountainous areas but two large massifs reach over 900 m. These are the Monts de Cristal in the north-west and the du Chaillu Massif in the south where some of the highest peaks in Gabon (1,020 and 1,022 m) are situated. There is a smaller massif in the north-east, near Bélinga, where two peaks reach 1,024 m.

The climate is equatorial, warm and humid. There are two rainy seasons (September to mid-December and mid-February to May) and two dry seasons. Across the country the average number of days with rain is 130–140, but is greatest in the Monts de Cristal where it is 226. Average annual rainfall varies between 1,400 mm and 3,500 mm, while mean monthly temperatures range from 21°

to 28°C, with the minima occurring during the June to August dry season.

Some 85% of Gabon was originally covered by forest, of which two main types are recognized. These are evergreen forest in the sedimentary basins along the coast and in central parts, and semi-evergreen forest in the north-east of the country. In addition,

Map 1. Location and size of Important Bird Areas in Gabon.



IBA code	Site name	Administrative region	Criteria (see p. 11; for A2/A3 codes, see Tables 2/3)					
			A1	A2	A3	A4i	A4iii	
GA001	Gamba Protected Areas complex	Ogooué-Maritime, Nyanga	✓	✓	✓	✓	✓	
GA002	Lopé Faunal Reserve	Ogooué-Ivindo	✓	✓	✓			
GA003	Ipasa Strict Nature Reserve	Ogooué-Ivindo	✓	✓	✓			
GA004	Minkébé Forest Reserve	Woleu-Ntem	✓	✓	✓			
GA005	Akanda	Estuaire	✓		✓	✓	✓	
GA006	Ogooué delta and Mandji island	Ogooué-Maritime	✓		✓	✓	✓	
GA007	Léconi grasslands	Haut-Ogooué	✓		✓			
Total number of IBAs qualifying:			7	4	3	7	3	1

swamp-forest fringes the rivers in both areas, while there are also extensive areas of mangroves lining the estuaries and coastal lagoons. Large areas of savanna also occur, of three types: fringing the coast are coastal savannas on sand, with short grasses and few shrubs or trees; inland, tall grass savannas occur in the Lopé area in the centre of the country and along the Nyanga and Ngouinié rivers in the south-west; and on the Batéké plateau in the south-east there is savanna on sand, dominated by *Loudetia simplex*, in which shrubs are present in some areas while others are devoid of any arboreal vegetation.

Economically, oil production has been the main foreign-exchange earner since the mid-1970s. In addition, Gabon has been a significant source of timber since the beginning of the century. For a long time, logging was confined to coastal areas because of the difficulties of transport. Exploitation concentrated on okoumé *Aucoumea klaineana*, the logs of which float and could therefore be moved to the coast by river in the form of huge rafts. Following the completion of the Libreville–Franceville railway in the 1980s, however, large areas of the hitherto inaccessible forest in the centre and the east of the country became the subject of extensive logging concessions. These will inevitably have a considerable impact on the forest environment and the overall protection of forest ecosystems. In 1997 timber production was estimated to be 2,671,000 m<sup>3</sup>. By contrast, since the rural population is relatively small and farming is at a subsistence level, pressures on forests for agricultural land are few.

## ORNITHOLOGICAL IMPORTANCE

Although a few species, mostly migrants or accidentals, are added annually, the avifauna of Gabon is fairly well known, with 678 species. This includes 14 species of conservation concern. Of these, eight are either rare migrants or vagrants, of Palearctic (*Falco naumanni* (VU), *Crex crex* (VU), *Gallinago media* (NT), *Glareola nordmanni* (NT)), Afrotropical (*Spheniscus demersus* (NT), *Morus capensis* (NT), *Phoenicopterus minor* (NT)) or marine origin (*Fregata aquila* (CR); one nineteenth century record). More important is *Sterna balaenarum* (NT), up to a thousand of which occur as non-breeding visitors from Namibia and South Africa along the coast from June to November. The remaining five species are resident: three are from the forest zone

**Table 2.** The occurrence of restricted-range species at Important Bird Areas in Gabon. Sites that meet the A2 criterion are highlighted in **bold**. Species of global conservation concern are highlighted in **bold blue**.

<b>085 – Cameroon and Gabon lowlands Endemic Bird Area</b> (five species in Gabon; four sites meet the A2 criterion)				
IBA code:	001	002	003	004
<i>Hirundo fuliginosa</i>	✓	✓	✓	
<i>Picathartes oreas</i>	✓	✓		
<i>Bradypterus grandis</i>		✓		
<i>Batis minima</i>			✓	✓
<i>Malimbus racheliae</i>		✓	✓	✓
Number of species recorded:	2	4	3	2
<b>s043 – Gabon–Cabinda coast Secondary Area</b> (three sites meet the A2 criterion)				
IBA code:	001	005	006	
<i>Ploceus subpersonatus</i>	✓	✓	✓	

(*Picathartes oreas* (VU), *Bradypterus grandis* (DD) and *Batis minima* (DD)), and two are savanna-dwelling weavers, *Ploceus subpersonatus* (VU) and *Ploceus nigrimentum* (VU). All except the last-mentioned species are also of restricted range—*Picathartes oreas*, *Bradypterus grandis* and *Batis minima*, together with *Hirundo fuliginosa* and *Malimbus racheliae*, are members of the Cameroon and Gabon lowlands Endemic Bird Area (EBA 085), which covers much of central Gabon, while the distribution of *Ploceus subpersonatus* defines the Gabon–Cabinda coast Secondary Area (s043).

Elements of two biome-restricted assemblages occur in Gabon—the Guinea–Congo Forests biome (A05) covers much of the country, and 201 species of this biome occur. Additionally, five species of the Zambezi biome (A10) penetrate into the savannas of the south. The coastal wetlands hold an impoverished avifauna, in comparison with other parts of Africa. The coastal mangroves and adjoining mudflats are, however, important for a large number of Palearctic waders and, to a lesser extent, for some tern species. No habitat is currently subject to any significant threat and it is not thought that any forest bird species is nationally in danger from habitat destruction or hunting.

## CONSERVATION INFRASTRUCTURE AND PROTECTED-AREA SYSTEM

Wildlife conservation is largely the responsibility of the Direction de la Faune et de la Chasse within the Ministère des Eaux et Forêts and relates primarily to the regulation of hunting. The Direction de la Faune et de la Chasse is also responsible for the gazettement of protected areas. In addition, the Ministère du Tourisme is responsible for the management of national parks while the Ministère de l'Environnement has responsibility for pollution control and other aspects of the urban environment. The principal laws dealing with wildlife utilization and conservation are Law 1/82 of 22 July 1982 (Loi d'orientation en matière des eaux et forêts) and Law 16/93 of 26 August 1993 (relative à la protection et à l'amélioration de l'environnement).

Five categories of protected area are legally recognized: Parc National (National Park), Réserve de Faune (Faunal Reserve), Réserve Naturelle Intégrale (Strict Nature Reserve), Domaine de Chasse (Hunting Area) and Sanctuaire (Wildlife Sanctuary). There are currently six protected areas—Wonga-Wongué, Setté-Cama, Moukalaba, Monts Doudou, Lopé and Ipasa—while formalities are under way for the designation of Minkébé Forest Reserve (IBA GA004), in the north-east of the country, as the seventh. Wonga-Wongué has special status as a Presidential Reserve. Setté-Cama, together with Moukalaba and Monts Doudou, form part of the large coastal Gamba complex (GA001) which comprises no fewer than seven contiguous protected areas. Three of these were originally hunting areas (as were Wonga-Wongué and Lopé) but, as a consequence of the prohibition of big-game hunting in 1981, hunting areas effectively became faunal reserves. Lopé Faunal Reserve (GA002) in central Gabon is a mixture of forest-savanna mosaic and forest. Ipasa Strict Nature Reserve (GA003), in the north-east of the country near Makokou, was created in 1971 for the purposes of biological and ecological research. It is under the authority of the Institut de Recherches en Ecologie Tropicale, itself answerable to the Centre National de Recherche Scientifique et Technologique. With the exception of Ipasa, none of these sites is free from activities such as mining and logging. There are also a

**Table 3.** The occurrence of biome-restricted species at Important Bird Areas in Gabon. Sites that meet the A3 criterion are highlighted in **bold**. Species of global conservation concern are highlighted in **bold blue**. Any other species with a restricted range are highlighted in blue.

A05 – Guinea–Congo Forests biome (201 species in Gabon; seven sites meet the A3 criterion)															
IBA code:	001	002	003	004	005	006	007	IBA code:	001	002	003	004	005	006	007
<i>Tigriornis leucolophus</i>	✓	✓	✓	✓	✓	✓		<i>Pogoniulus subsulphureus</i>	✓	✓	✓	✓		✓	✓
<i>Bostrychia rara</i>	✓	✓	✓	✓	✓			<i>Buccanodon duchaillui</i>	✓	✓	✓	✓		✓	✓
<i>Pteronetta hartlaubii</i>	✓	✓	✓	✓		✓		<i>Tricholaema hirsuta</i>	✓	✓	✓	✓	✓	✓	
<i>Dryotriorchis spectabilis</i>	✓	✓	✓	✓				<i>Trachyphonus purpuratus</i>	✓	✓	✓	✓			
<i>Accipiter castanius</i>	✓	✓	✓	✓				<i>Indicator maculatus</i>	✓	✓	✓	✓			
<i>Accipiter erythropus</i>	✓	✓	✓	✓				<i>Indicator willcocksi</i>		✓	✓				
<i>Urotriorchis macrourus</i>	✓	✓	✓	✓				<i>Melichneutes robustus</i>	✓	✓	✓	✓			
<i>Spizaetus africanus</i>	✓	✓	✓	✓				<i>Melignomon zenkeri</i>			✓				
<i>Francolinus lathamii</i>	✓	✓	✓	✓				<i>Prodotiscus insignis</i>	✓	✓	✓	✓			
<i>Francolinus finschi</i>							✓	<i>Sasia africana</i>		✓	✓	✓			
<i>Agelastes niger</i>	✓	✓	✓	✓				<i>Campethera nivosus</i>	✓	✓	✓	✓			
<i>Guttera plumifera</i>	✓	✓	✓					<i>Campethera caroli</i>	✓	✓	✓	✓	✓	✓	
<i>Sarothrura pulchra</i>	✓	✓	✓	✓			✓	<i>Dendropicops gabonensis</i>	✓	✓	✓	✓		✓	
<i>Himantornis haematopus</i>	✓	✓	✓	✓	✓			<i>Dendropicops xantholophus</i>	✓	✓	✓	✓		✓	
<i>Canirallus oculus</i>	✓	✓	✓	✓		✓		<i>Smithornis rufolateralis</i>	✓	✓	✓	✓			
<i>Columba unicincta</i>	✓	✓	✓	✓				<i>Smithornis sharpei</i>		✓	✓	✓			
<i>Columba iriditorques</i>	✓	✓	✓			✓	✓	<i>Pitta reichenowi</i>			✓				
<i>Turtur brehmeri</i>	✓	✓	✓	✓		✓		<i>Pseudochelidon eurystomina</i>	✓	✓	✓			✓	
<i>Psittacus erithacus</i>	✓	✓	✓	✓	✓	✓		<i>Hirundo nigrita</i>	✓	✓	✓	✓		✓	✓
<i>Agapornis swindernianus</i>			✓					<i>Hirundo fuliginosa</i>	✓	✓	✓				
<i>Tauraco persa</i>	✓	✓	✓	✓	✓	✓	✓	<i>Psalidoprocne nitens</i>	✓	✓	✓	✓			✓
<i>Tauraco macrorhynchus</i>	✓	✓	✓	✓		✓		<i>Anthus pallidiventris</i>	✓	✓	✓		✓	✓	✓
<i>Cercococcyx mechowii</i>			✓	✓				<i>Coracina azurea</i>	✓	✓	✓	✓			
<i>Cercococcyx olivinus</i>		✓	✓	✓			✓	<i>Campephaga petiti</i>					✓		✓
<i>Chrysococcyx flavigularis</i>	✓	✓	✓	✓				<i>Campephaga oriolina</i>			✓	✓			
<i>Centropus leucogaster</i>	✓							<i>Andropadus gracilis</i>	✓	✓	✓	✓		✓	✓
<i>Centropus anelli</i>	✓	✓	✓	✓		✓		<i>Andropadus ansorgei</i>	✓	✓	✓	✓			
<i>Otus icterorhynchus</i>	✓	✓						<i>Andropadus curvirostris</i>	✓	✓	✓	✓			
<i>Bubo poensis</i>		✓	✓					<i>Calyptocichla serina</i>	✓	✓	✓	✓			
<i>Bubo shelleyi</i>			✓					<i>Baeopogon indicator</i>	✓	✓	✓	✓			✓
<i>Bubo leucostictus</i>	✓		✓					<i>Baeopogon clamans</i>	✓	✓	✓	✓			
<i>Scotopelia bouvieri</i>	✓	✓	✓	✓				<i>Ixonotus guttatus</i>	✓	✓	✓	✓			
<i>Jubula lettii</i>	✓	✓	✓					<i>Chlorocichla simplex</i>	✓	✓	✓				✓
<i>Glaucidium tephronotum</i>		✓						<i>Chlorocichla falkensteini</i>		✓	✓				
<i>Glaucidium sjostedti</i>	✓	✓	✓	✓				<i>Thescelocichla leucopleura</i>	✓	✓	✓	✓	✓	✓	✓
<i>Caprimulgus binotatus</i>			✓					<i>Phyllastrephus scandens</i>	✓		✓	✓			
<i>Caprimulgus batesi</i>	✓	✓	✓	✓				<i>Phyllastrephus albigularis</i>	✓	✓	✓	✓			
<i>Telacanthura melanopygia</i>	✓	✓	✓					<i>Phyllastrephus icterinus</i>	✓	✓	✓	✓		✓	
<i>Rhaphidura sabini</i>	✓	✓	✓	✓	✓			<i>Phyllastrephus xavieri</i>	✓	✓	✓	✓			
<i>Neafrapus cassini</i>	✓	✓	✓	✓	✓	✓		<i>Bleda syndactyla</i>	✓	✓	✓	✓			
<i>Apus batesi</i>	✓	✓	✓					<i>Bleda notata</i>	✓	✓	✓	✓	✓	✓	
<i>Apaloderma aequatoriale</i>	✓	✓	✓	✓				<i>Nicator chloris</i>	✓	✓	✓	✓		✓	
<i>Alcedo leucogaster</i>	✓	✓	✓	✓				<i>Nicator vireo</i>	✓		✓	✓			✓
<i>Ispidina lecontei</i>	✓	✓	✓	✓				<i>Criniger chloronotus</i>	✓	✓	✓	✓			
<i>Halcyon badia</i>	✓	✓	✓	✓				<i>Criniger calurus</i>	✓	✓	✓	✓			
<i>Merops gularis</i>	✓	✓	✓	✓	✓	✓	✓	<i>Criniger ndussumensis</i>	✓	✓	✓	✓			
<i>Merops muelleri</i>	✓	✓	✓	✓				<i>Dryoscopus senegalensis</i>	✓	✓	✓	✓			✓
<i>Merops breweri</i>	✓		✓			✓	✓	<i>Dryoscopus sabinii</i>	✓	✓	✓	✓			
<i>Merops malimbicus</i>	✓	✓			✓	✓	✓	<i>Laniarius leucorhynchus</i>	✓	✓	✓	✓	✓		✓
<i>Eurystomus gularis</i>	✓	✓	✓	✓			✓	<i>Telophorus bocagei</i>			✓				✓
<i>Tockus albocristatus</i>	✓	✓	✓	✓		✓		<i>Malaconotus cruentus</i>	✓	✓	✓	✓			
<i>Tockus hartlaubi</i>	✓	✓	✓	✓				<i>Prionops caniceps</i>	✓	✓	✓	✓			
<i>Tockus camurus</i>	✓	✓	✓	✓	✓	✓		<i>Neocossyphus fraseri</i>	✓	✓	✓	✓			✓
<i>Tockus fasciatus</i>	✓	✓	✓	✓	✓	✓		<i>Neocossyphus poensis</i>	✓	✓	✓	✓	✓		
<i>Ceratogymna fistulator</i>	✓	✓	✓	✓	✓	✓		<i>Zoothera camerounensis</i>			✓	✓			
<i>Ceratogymna subcylindricus</i>		✓	✓	✓				<i>Zoothera princei</i>			✓	✓			
<i>Ceratogymna albotibialis</i>	✓	✓	✓	✓				<i>Alethe diademata</i>	✓	✓	✓	✓	✓	✓	
<i>Ceratogymna atrata</i>	✓	✓	✓	✓	✓	✓		<i>Stiphornis erythrothorax</i>	✓	✓	✓	✓	✓		
<i>Gymnobucco calvus</i>	✓	✓	✓				✓	<i>Sheppardia cyornithopsis</i>	✓	✓	✓	✓			
<i>Gymnobucco peli</i>	✓	✓	✓					<i>Cossypha cyanocampter</i>			✓				
<i>Pogoniulus scolopaceus</i>	✓	✓	✓	✓		✓	✓	<i>Illadopsis cleaveri</i>	✓	✓	✓	✓			✓
<i>Pogoniulus atroflavus</i>	✓	✓	✓	✓				<i>Illadopsis fulvescens</i>	✓	✓	✓	✓		✓	✓

**Table 3 ... continued.** The occurrence of biome-restricted species at Important Bird Areas in Gabon. Sites that meet the A3 criterion are highlighted in **bold**. Species of global conservation concern are highlighted in **bold blue**. Any other species with a restricted range are highlighted in blue.

A05 – Guinea–Congo Forests biome ... continued (201 species in Gabon; seven sites meet the A3 criterion)							
IBA code:	001	002	003	004	005	006	007
<i>Picathartes oreas</i>	✓	✓					
<i>Cisticola anonymus</i>	✓	✓	✓		✓	✓	
<i>Apalis nigriceps</i>			✓	✓			
<i>Apalis binotata</i>			✓				
<i>Apalis rufogularis</i>	✓	✓	✓	✓			
<i>Apalis goslingi</i>			✓	✓			
<i>Camroptera superciliaris</i>	✓	✓	✓	✓	✓		
<i>Camroptera chloronota</i>	✓	✓	✓	✓		✓	✓
<i>Bradypterus grandis</i>		✓					
<i>Eremomela badiceps</i>	✓	✓	✓	✓		✓	✓
<i>Sylvietta virens</i>	✓	✓	✓	✓	✓	✓	✓
<i>Sylvietta denti</i>	✓	✓	✓	✓			
<i>Macrosphenus flavicans</i>	✓	✓	✓	✓			
<i>Macrosphenus concolor</i>	✓	✓	✓	✓		✓	
<i>Hylia prasina</i>	✓	✓	✓	✓	✓	✓	✓
<i>Hylia violacea</i>	✓	✓	✓	✓			
<i>Fraseria ocreata</i>	✓	✓	✓	✓			
<i>Fraseria cinerascens</i>	✓	✓	✓	✓	✓	✓	
<i>Muscicapa infuscata</i>	✓	✓	✓	✓			✓
<i>Muscicapa olivascens</i>	✓	✓	✓	✓			
<i>Muscicapa epulata</i>			✓				
<i>Muscicapa sethsmithi</i>	✓	✓	✓	✓			
<i>Muscicapa comitata</i>		✓	✓				
<i>Muscicapa cassini</i>	✓	✓	✓	✓			✓
<i>Myioparus griseigularis</i>	✓	✓	✓	✓			
<i>Bias flammulatus</i>	✓	✓	✓	✓			
<i>Batis minima</i>			✓	✓			
<i>Batis occulta</i>		✓	✓	✓			
<i>Platysteira castanea</i>	✓	✓	✓	✓		✓	
<i>Platysteira tonsa</i>	✓	✓	✓	✓			
<i>Platysteira chalybea</i>		✓	✓				
<i>Erythrocerus mccallii</i>	✓	✓	✓	✓			
<i>Trochocercus nigromitratus</i>	✓		✓	✓			
<i>Trochocercus nitens</i>	✓	✓	✓	✓			✓
<i>Terpsiphone ruiventer</i>	✓	✓	✓				
<i>Terpsiphone rufocinerea</i>	✓	✓	✓	✓	✓	✓	
<i>Parus funereus</i>		✓	✓	✓			
<i>Anthoscopus flavifrons</i>	✓		✓	✓			
<i>Anthreptes fraseri</i>	✓	✓	✓	✓			
<i>Anthreptes gabonicus</i>	✓	✓	✓		✓	✓	
<i>Anthreptes aurantium</i>	✓	✓	✓	✓	✓	✓	
<i>Anthreptes rectirostris</i>	✓	✓	✓	✓	✓		✓
<i>Nectarinia seimundi</i>	✓	✓	✓	✓		✓	
<i>Nectarinia batesi</i>	✓	✓	✓	✓			
<i>Nectarinia reichenbachii</i>	✓	✓	✓	✓	✓	✓	
<i>Nectarinia cyanoaema</i>	✓	✓	✓	✓			
<i>Nectarinia fuliginosa</i>	✓				✓	✓	
<i>Nectarinia rubescens</i>	✓	✓	✓	✓		✓	✓
<i>Nectarinia minulla</i>	✓	✓	✓	✓			
<i>Nectarinia johannae</i>	✓	✓	✓	✓		✓	✓
<i>Nectarinia superba</i>	✓	✓	✓	✓		✓	✓
<i>Pholidornis rushiae</i>	✓	✓	✓	✓			
<i>Parmoptila woodhousei</i>	✓	✓	✓	✓			
<i>Nigrita fusconota</i>	✓	✓	✓	✓			✓
<i>Nigrita bicolor</i>	✓	✓	✓	✓			
<i>Nigrita luteifrons</i>	✓	✓	✓		✓		✓
<i>Spermophaga haematina</i>	✓	✓	✓	✓		✓	
<i>Ploceus subpersonatus</i>	✓				✓	✓	
<i>Ploceus aurantius</i>	✓	✓	✓				
<i>Ploceus nigerrimus</i>	✓	✓	✓		✓	✓	
<i>Ploceus tricolor</i>	✓	✓	✓	✓			
<i>Ploceus albinucha</i>	✓			✓			
<i>Ploceus preussi</i>			✓	✓			
<i>Ploceus dorsomaculatus</i>			✓	✓			
<i>Malimbus coronatus</i>		✓	✓	✓			
<i>Malimbus cassini</i>	✓	✓	✓	✓		✓	✓
<i>Malimbus racheliae</i>		✓	✓	✓			
<i>Malimbus erythrogaster</i>	✓	✓	✓	✓			
<i>Malimbus nitens</i>	✓	✓	✓	✓	✓	✓	
<i>Malimbus malimbicus</i>	✓	✓	✓	✓			
<i>Malimbus rubricollis</i>	✓	✓	✓	✓			
<i>Poeoptera lugubris</i>	✓		✓	✓			
<i>Onychognathus fulgidus</i>	✓	✓	✓	✓		✓	
<i>Lamprotornis purpureiceps</i>	✓	✓	✓	✓		✓	✓
<i>Oriolus brachyrhynchus</i>	✓	✓	✓	✓			✓
<i>Oriolus nigripennis</i>	✓	✓	✓		✓		
<i>Dicrurus atripennis</i>	✓	✓	✓	✓			
Number of species recorded:	166	170	190	157	39	60	43

number of Forêts Classées or Forest Reserves but these offer little or no protection to fauna.

## INTERNATIONAL MEASURES RELEVANT TO THE CONSERVATION OF SITES

Gabon has ratified the following conventions: CITES, the Convention on Biological Diversity, the Ramsar Convention, the World Heritage Convention, the Convention to Combat Desertification and the Convention on Climate Change. Gabon participates in the UNESCO Man and Biosphere programme under which Ipassa Strict Nature Reserve has been designated as a Biosphere Reserve. Regionally, it has also ratified the Algiers Convention (the African Convention on the Conservation of Nature and Natural Resources) and the Abidjan Convention (the Convention for Cooperation in the Protection and Development of the Marine and Coastal Environment of the West and Central African Region).

## OVERVIEW OF THE INVENTORY

This inventory comprises seven Important Bird Areas (IBAs), covering a total area of 23,875 km<sup>2</sup>, equivalent to 8.9% of the land

area of the country (Map 1, Table 1). These sites include most of the major habitat-types of importance for birds, especially the extensive evergreen forests of the west and centre, and the semi-evergreen forests and mixed swamp-forests of the north-east. The three types of savanna are also included, as well as some mangrove and coastal areas.

Of the 678 bird species known from Gabon, at least 655 occur within the IBAs. All seven sites qualify under the A1 criterion (Table 1), four do so under the A2 criterion for the Cameroon and Gabon lowlands EBA, collectively holding all five restricted-range species of this EBA that are known from Gabon (Table 2); two others, along with one of the EBA sites, qualify under A2 for the Gabon–Cabinda coast Secondary Area. All seven sites meet the A3 criterion, since they have the potential collectively to conserve all 201 characteristic species of the Guinea–Congo Forests biome that occur in the country (Table 3). Three sites also qualify under the A4i criterion for the significant numbers of congregatory waterbirds that occur at them (Table 1).

Three of the seven sites are legally protected as Faunal Reserves; it is anticipated that another, Minkébé, will be protected in the near future. Proposals for giving protection to two further sites, Akanda (IBA GA005) and Léconi (GA007), have been made (Wilks 1990), but are not yet implemented. Avifaunal data for the sites are thought to be relatively complete, although the total duration of fieldwork that has been undertaken at sites varies from about twenty years at Ipassa to between several weeks and a few months at other IBAs.

## SITE ACCOUNTS

### Gamba Protected Areas complex

**GA001**

Admin region Ogooué-Maritime, Nyanga

 Coordinates 02°25'S 10°00'E A1, A2 (085, s043), A3 (A05), A4i  
 Area 1,130,000 ha Altitude 0–820 m Faunal Reserves

#### Site description

The site comprises several contiguous protected areas, including the Petit Loango, Monts Doudou, Ouanga Plain and Moukalaba Reserves, and the ex-hunting reserves of Setté-Cama, Iguéla and Ngové-Ndogo, situated beside the coast in south-western Gabon, south-east of Port-Gentil. The whole comprises an exceptionally diverse and rich succession of habitats from the coastline through to grasslands and forest. Coastal habitats include beaches and estuarine waters, incorporating two large lagoons, Lagune Iguéla and Lagune Ndogo, mangroves and littoral thickets, coastal forests and savannas. These give way inland to lowland evergreen forests in which typical tree species include *Aucoumea klaineana*, *Sacoglottis gabonensis*, *Desbordesia glaucescens*, *Dacryodes buettneri*, *Tetraberlinia moreliana*, *Monopetalanthus pellegrini*, *Tessmannia africana*, *Odyndeya gabonensis*, *Lophira alata*, *Klainedoxa gabonensis* and *Librevillea klainei*. Further inland, in the Moukalaba area, other tree species appear, such as *Dialium pachyphyllum*, *Toubaouate brevipaniculata*, *Austranella congolensis* and *Dacryodes heterotricha*. These dry-land forests are interspersed with large stretches of mixed swamp-forests (characterized by *Alstonia congensis*, *Anthocleista vogelii*, *Mitragyna ciliata*, *Raphia* palms, *Lecomtedoxa biraudii*, *Gilbertiodendron unijugum*) and woodland patches in savannas. Grasslands are widespread both along the coast, where they include extensive seasonally waterlogged savannas and herbaceous swamps, and in the Moukalaba Reserve where they occur as tall grass savannas and wooded grasslands in which shrubby species such as *Nauclea latifolia*, *Bridelia ferruginea* and *Crossopteryx febrifuga* are common. The hilly Monts Doudou Reserve, highest point 820 m, represents a northern outlier of the Mayombe of the Congo, in which some submontane flora elements occur.

#### Birds

See Box and Tables 2 and 3 for key species. A total of 470 species have been recorded, of which 362 are breeding residents or, in a few cases, breeding visitors. Six species of global conservation concern occur, of which two, *Picathartes oreas* and *Ploceus subpersonatus*, are resident. The latter breeds in small colonies in the palm *Phoenix reclinata* in coastal savannas. The former was recently found breeding in Monts Doudou at 600 m. The other four are non-breeding visitors—*Phoenicopterus minor*, *Gallinago media*, *Glareola nordmanni* and *Sterna balaenarum*—of which only the last-mentioned occurs regularly. No other protected area in Gabon offers such a variety of habitats. Little known species or birds with limited distribution elsewhere in the country include *Bostrychia olivacea*, *Otus icterorhynchus*, *Telacanthura melanopygia*, *Merops breweri*, *Lybius minor*, *Pseudochelidon eurystomina*, *Phyllastrephus fulviventris*, *Cichladusa ruficauda* and *Batis minulla*. Breeding colonies of *Pseudochelidon eurystomina* and *Merops malimbicus* occur in the coastal savannas.

#### Key species

A1	<i>Sterna balaenarum</i>	<i>Ploceus subpersonatus</i>
	<i>Picathartes oreas</i>	
A2 (085)	Cameroon and Gabon lowlands EBA: Two of the five species of this EBA that occur in Gabon have been recorded at this site; see Table 2.	
A2 (s043)	Gabon–Cabinda coast Secondary Area: <i>Ploceus subpersonatus</i> has been recorded at this site.	
A3 (A05)	Guinea–Congo Forests biome: 166 of the 201 species of this biome that occur in Gabon have been recorded at this site; see Table 3.	
A4i	Breeding (pairs)	Non-breeding
	<i>Sterna maxima</i>	— 3,000

#### Other threatened/endemic wildlife

The site is rich in large forest mammals such as *Loxodonta africana* (EN), *Tragelaphus spekei* (LR/nt), *Gorilla gorilla* (EN) and *Pan troglodytes* (EN), and *Trichechus senegalensis* (VU) occurs in the lagoons and estuaries. The Moukalaba Reserve holds the last important population in Gabon of the ungulate *Kobus ellipsiprymnus*

(LR/cd). Three species of crocodile, including *Crocodylus cataphractus* (DD) and *Osteolaemus tetraspis* (VU), live in the complex.

#### Conservation issues

The reserves are managed by the Direction de la Faune et de la Chasse which implements conservation activities through three bases established at Setté-Cama, Iguéla and Moukalaba. WWF has been working with government to improve conservation in the reserves since 1989 and in 1997 began an integrated conservation and development project. Main threats include logging, oil exploration and extraction (in-shore and offshore) and commercial hunting for the local bush-meat trade market.

#### Further reading

Sargeant (1993), Schepers and Martejn (1993).

### Lopé Faunal Reserve

**GA002**

Admin region Ogooué-Ivindo

 Coordinates 00°30'S 11°35'E A1, A2 (085), A3 (A05)  
 Area 500,000 ha Altitude 200–920 m Faunal Reserve

#### Site description

The site is located in central Gabon, to the west of the town of Booué, south of the Ogooué river which forms the northern border of the reserve. Vegetation in the northern part of the reserve consist of savanna grasslands with small bushes, mainly *Crossopteryx febrifuga* and *Nauclea latifolia*. Riparian forest fringes the Ogooué and follows its tributaries southwards into the main forest block where there is a mosaic of gallery forest, marantaceous forest, which is colonizing the savanna, and mature forest. Typical trees of the mature forest include *Aucoumea klaineana*, *Cola lizae*, *Pentaclethra eetveldeana*, *Dacryodes buettneri*, *Lophira alata*, *Diospyros polystemon*, *Hyloedendron gabunense*, *Ganophyllum gigantum*, *Pycnanthus angolensis*, *Xylopia quintasii*, *Ceiba pentandra*, *Santiria trimera*, *Pentaclethra macrophylla*, *Coula edulis*, *Scyphocephalum ochocoa*, *Conceveiba macrostachys*, *Sacoglottis gabonensis*, *Sindoropsis letestui*, *Pterocarpus soyauxii*, *Tetraberlinia bifoliolata* and *Paraberlinia bifoliolata*. Marantaceous forest is characterized by a rich understorey of Marantaceae and Zingiberaceae beneath a canopy of such tall trees as *Cola lizae*. Forest-clad hills reach between 800 and 960 m and represent the northern extension of the du Chaillu Massif. There are no wetlands or open marshes, except for a small artificial pond.

#### Birds

See Box and Tables 2 and 3 for key species. The avifauna is rich; 380 species are known, of which 290 are breeding residents, including two species of global conservation concern, both of which are limited by their particular habitat requirements to restricted areas within the reserve. In addition, there are a few records of *Gallinago media*. Little-known forest species such as *Apus batesi*, *Caprimulgus batesi* and *Melichneutes robustus* are common. The avifauna of the savannas is impoverished compared with the savannas of other regions of country, presumably because of their isolation. A pair of *Falco peregrinus*, rare in the region, has bred on a cliff in the reserve for at least the last 20 years.

#### Key species

A1	<i>Picathartes oreas</i>	<i>Bradypterus grandis</i>
A2 (085)	Cameroon and Gabon lowlands EBA: Four of the five species of this EBA that occur in Gabon have been recorded at this site; see Table 2.	
A3 (A05)	Guinea–Congo Forests biome: 170 of the 201 species of this biome that occur in Gabon have been recorded at this site; see Table 3.	

#### Other threatened/endemic wildlife

Lopé is well known for its populations of large forest mammals, including *Loxodonta africana* (EN), *Gorilla gorilla* (EN), *Pan troglodytes* (EN) and *Colobus satanas* (VU). *Cercopithecus solatus* (VU), endemic to Gabon, occurs in the southern part of the reserve and in the adjacent Forêt des Abeilles, to the east.

#### Conservation issues

Lopé is managed by the Direction de la Faune et de la Chasse. A project to improve conservation management in the reserve and develop

ecotourism has been run by Ecofac, in collaboration with government, since 1992. The northern part of the reserve has been selectively logged during the last twenty years. Some logging concessions are now abandoned, but two large ones—one in the east, one in the south—are still being exploited or will be in the near future.

#### Further reading

Christy and Clarke (1994), White and Abernethy (1997).

### Ipasa Strict Nature Reserve

Admin region Ogooué-Ivindo

Coordinates 00°28'N 12°43'E

Area 10,000 ha Altitude 450–550 m

GA003

A1, A2 (085), A3 (A05)

Strict Nature Reserve

#### Site description

Ipasa, also known as Mpassa, is situated in north-east Gabon, west of the town of Makokou. It consists mainly of moist lowland evergreen rainforest, located on a plateau at 450–550 m elevation and drained by small tributaries of the Ivindo river, which forms the southern boundary of the reserve. There are also some areas of mixed swamp-forests in valleys and near streams. Around the headquarters of the reserve's biological research station, and between it and Makokou, 12 km distant, the vegetation has been much modified and includes extensive fallow and cultivated fields. Rocky islets appear in the Ivindo river during dry seasons.

#### Birds

See Box and Tables 2 and 3 for key species. The Ipasa reserve was, for a long time, the most intensely studied forest in Africa. This included about twenty years of ornithological research, during which period 424 species were recorded (not all of which, however, were found in the reserve itself). Three more species have subsequently been observed at Ipasa. Of the four species of global conservation concern known, three are rare migrants—*Falco naumanni*, *Crex crex*, and *Gallinago media*—and, in fact, only recorded from man-made habitats around the reserve. The fourth, *Batis minima*, is a rare breeding resident. Except for some species restricted to coastal forests or with specific ecological requirements (e.g. *Picathartes oreas*), the reserve holds almost all forest birds known from Gabon; only 11 species of the Guinea–Congo Forests biome on the Gabon list have not been found at Ipasa.

#### Key species

A1 *Batis minima*

A2 (085) Cameroon and Gabon lowlands EBA: Three of the five species of this EBA that occur in Gabon have been recorded at this site; see Table 2.

A3 (A05) Guinea–Congo Forests biome: 190 of the 201 species of this biome that occur in Gabon have been recorded at this site; see Table 3.

#### Other threatened/endemic wildlife

Large mammals *Loxodonta africana* (EN), *Gorilla gorilla* (EN) and *Pan troglodytes* (EN) have been recorded, but their present status is unknown.

#### Conservation issues

There was a permanent research station at Ipasa until 1985, when most staff left. This was followed by an increase in poaching to supply Makokou, the provincial capital. Initially, mammals were targeted, but large birds such as *Ceratogymna atrata* now seem to be rarer than a decade ago. Proposals for rehabilitating the research station have been made regularly, but have not so far been implemented.

#### Further reading

Brosset and Erard (1986), IRET-ECOTROP (CNRS) (1987).

### Minkébé Forest Reserve

Admin region Woleu-Ntem

Coordinates 01°50'N 12°50'E

Area 600,000 ha Altitude 450–940 m

GA004

A1, A2 (085), A3 (A05)

Forest Reserve

#### Site description

Located in north-east of the country, at the joint boundary with Cameroon and the Republic of Congo, Minkébé is a complex of semi-

evergreen lowland rainforest and mixed swamp-forest, unique in Gabon. Two main tributaries of the Ivindo river flow north through the reserve, the Sing (or Nsyé) and the Nouna, and are bordered by extensive swamp-forest, with some monodominant stands of *Gilbertiodendron dewevrei*. Dry-land forest is dominated by species such as *Monopetalanthus* sp., *Tetraberlinia* sp., *Gilbertiodendron pierreanum*, *Cylicodiscus gabunensis*, *Pentaclethra eetveldeana*. Semi-evergreen trees include *Terminalia superba*, *Triplochiton scleroxylon*, and *Pteleopsis hylodendron*. Species typical of the swamp-forest include *Sterculia subviolacea*, *Macaranga* sp. and *Gilbertiodendron dewevrei*. Small patches of aquatic grasses grow in open areas along the riverbanks but Minkébé is, otherwise, entirely forested. The ridges between the river basins reach 900 m and may support a third distinct type of forest.

Minkébé is the name of an ancient village and colonial post, built on one of the ridges, that was abandoned in the 1930s. Patches of old secondary growth mark its presence.

#### Birds

See Box and Tables 2 and 3 for key species. The forest avifauna of the Minkébé area is one of the richest in Gabon and indeed Central Africa. Preliminary surveys, principally of the swamp-forests and adjacent dry forests, have recorded 226 species, of which 206 are forest residents. *Batis minima* is the only species of global conservation concern known to occur, but the presence of *Picathartes oreas* is virtually certain, as the species is known from the nearby Belinga area and geologically similar hills, providing suitable habitat, are known to occur in Minkébé. It is also likely that the restricted-range *Hirundo fuliginosa*, often associated with *Picathartes oreas* for nest-sites, will probably also be found in the future. Some species, such as *Bostrychia olivacea*, *Bostrychia rara*, *Canirallus oculus*, *Cercococcyx olivinus*, *Cercococcyx mechowi*, *Scotopelia bouvieri*, *Smithornis sharpei*, *Campephaga oriolina*, *Zoothera princei*, and *Zoothera camaronensis*, appear to be common or, at least, easier to observe, here than elsewhere.

#### Key species

A1 *Batis minima*

A2 (085) Cameroon and Gabon lowlands EBA: Two of the five species of this EBA that occur in Gabon have been recorded at this site; see Table 2.

A3 (A05) Guinea–Congo Forests biome: 157 of the 201 species of this biome that occur in Gabon have been recorded at this site; see Table 3.

#### Other threatened/endemic wildlife

Large forest mammals such as *Loxodonta africana*, (EN) *Gorilla gorilla* (EN) and *Pan troglodytes* (EN) are common. Local people report the presence of the ungulate *Tragelaphus euryceros* (LR/nt).

#### Conservation issues

Minkébé was gazetted a Forest Reserve in 1998 as a result of proposals by IUCN and WWF while the approval of government to upgrade its status to a protected area was given in early 2000. WWF, in conjunction with the Ministère des Eaux et Forêts, began an integrated conservation and development project for the reserve in 1997. The local population is mostly composed of gold-panners and totals fewer than 1,500 individuals. The main threats include forest-logging, gold extraction, ivory poaching, and commercial hunting for the local bushmeat trade.

#### Further reading

Wilks (1990).

### Akanda

Admin region Estuaire

Coordinates 00°35'N 09°30'E

Area 7,500 ha Altitude 0–60 m

GA005

Unprotected

#### Site description

Akanda is situated 30 km north-east of Libreville and consists of two islands barely separated from the mainland by the Mamboubé and Moka creeks and the Ntsini river, which forms the southern boundary of the site. The site borders Corisco Bay to the north and Mondah Bay to the east. Vegetation includes some dry forests on higher ground, dominated by *Aucoumea klaineana*, *Klainedoxa*

*gabonensis*, *Sacoglottis gabonensis*, *Librevillea klainei*, *Hannoa klaineana*, *Dacryodes buettneri* and *Pycnanthus angolensis*. Lower down, this merges into coastal forest, typified by smaller trees such as *Syzygium guineense*, *Cassipourea* sp., *Chrysobalanus icaco*, and *Manilkara lacera*. Some flat, sandy areas are highly saline and lack vegetation. Large areas of *Rhizophora* and *Avicennia* mangroves line the creeks and the coast. At low tide vast areas of mudflat are exposed in Corisco and Mondah Bays, the rivers being confined to narrow channels.

### ■ Birds

See Box and Tables 2 and 3 for key species. A preliminary list for site totals 152 species, of which half are migrants. Three species of global conservation concern occur, of which *Phoenicopterus minor* is merely an irregular and uncommon visitor. *Sterna balaenarum* is a common non-breeding visitor between June and November. *Ploceus subpersonatus*, also a restricted-range species, breeds in small colonies in the palm *Phoenix reclinata*. Although relatively few Guinea–Congo Forests biome species occur, they include some which are rare elsewhere, such as *Campephaga petiti* and *Nectarinia fuliginosa*. The mangrove shelters some typical specialist species such as *Anthreptes gabonicus*, *Laniarius bicolor*, and *Apalis flavida*. At high tide, waders and terns roost on a sandbank at the mouth of the Moka river. A 1992 survey estimated 34,000–38,000 waders in Corisco Bay, the highest concentration in the country and included species rare in this part of Africa, such as *Charadrius mongolus*, *Charadrius leschenaultii*, *Charadrius asiaticus* and *Haematopus ostralegus*.

#### Key species

A1	<i>Sterna balaenarum</i>	<i>Ploceus subpersonatus</i>
A2 (s043)	Gabon–Cabinda coast Secondary Area: <i>Ploceus subpersonatus</i> has been recorded at this site.	
A3 (A05)	Guinea–Congo Forests biome: 39 of the 201 species of this biome that occur in Gabon have been recorded at this site; see Table 3.	
A4i	Breeding (pairs)	Non-breeding
	<i>Pluvialis squatarola</i>	— 3,900
	<i>Calidris minuta</i>	— 10,219
	<i>Calidris ferruginea</i>	— 8,192
	<i>Sterna maxima</i>	— 1,500–2,000
	<i>Sterna balaenarum</i>	— 300
	<i>Rynchops flavirostris</i>	— 750
A4iii	More than 20,000 waterbirds occur regularly at this site.	

### ■ Other threatened/endemic wildlife

The primate *Cercocebus torquatus* (LR/nt) has been recorded.

### ■ Conservation issues

The site has been proposed as a Nature Reserve. The creeks and the bays are important for fishing, and a permanent camp of immigrant Nigerian fisherman has been established within the site. There is some small-scale cutting of mangroves for smoking fish. Akanda should be considered for designation as a Ramsar Site.

### ■ Further reading

Schepers and Marteiijn (1993), Wilks (1990).

## Ogooué delta and Mandji island

**GA006**

Admin region Ogooué-Maritime

Coordinates 00°50'S 08°50'E

A1, A2 (s043), A3 (A05), A4i

Area 30,000 ha Altitude 0–10 m

Unprotected

### ■ Site description

Situated close to Port-Gentil on Cape Lopez, the westernmost part of Gabon, the site comprises much of Mandji island, in the delta of the Ogooué river. The area is mix of sand-dunes, coastal grasslands, swamps, small patches of littoral forests and *Dalbergia ecastaphyllum* thickets and mangroves. The southern half of Mandji island comprises extensive short-grass savannas on sandy soil, with herbaceous swamps, and areas of littoral forests characterized by *Chrysobalanus icaco*. Patches of dry forest occur, in which typical tree species include *Sacoglottis gabonensis*, *Pachypodanthium confine* and *Cola flavovelutina*, while *Mitragyna ciliata* is typical of the swamp-forests. Mangroves are extensive along the Ogooué and large areas of mudflat occur in Cape Lopez Bay.

### ■ Birds

See Box and Tables 2 and 3 for key species. The avifauna of the area is diverse—323 species have been recorded, but the list is undoubtedly incomplete. Six species of global conservation concern have been found, only one of which is resident: *Ploceus subpersonatus*, also a restricted-range species, is fairly common and breeds in *Phoenix reclinata* palms. The other five species are non-breeding visitors from the south (*Morus capensis*, *Phoenicopterus minor* and *Sterna balaenarum*) or Palearctic migrants (*Gallinago media* and *Glareola nordmanni*). Only *Sterna balaenarum* is a regular and common non-breeding visitor, from May to November. Counts of this species made off Cape Lopez have recorded over 900 migrating south. The site is also remarkable for the presence of small breeding colonies of two tern species, *Sterna caspia* and *Sterna hirundo*, which nest together with a few pairs of *Rynchops flavirostris* and *Sterna albifrons*. This population of *S. hirundo* appears to be resident. The location of Cape Lopez, a finger of land protruding into the Atlantic Ocean, makes it an important area for migrants and explains the relatively large number of rare species that have been recorded. Counts made in 1992 estimated the number of Palearctic waders in the area to be between 4,210 and 5,845.

#### Key species

A1	<i>Sterna balaenarum</i>	<i>Ploceus subpersonatus</i>
A2 (s043)	Gabon–Cabinda coast Secondary Area: <i>Ploceus subpersonatus</i> has been recorded at this site.	
A3 (A05)	Guinea–Congo Forests biome: 60 of the 201 species of this biome that occur in Gabon have been recorded at this site; see Table 3.	
A4i	Breeding (pairs)	Non-breeding
	<i>Sterna maxima</i>	— 1,632
	<i>Sterna balaenarum</i>	— 430
	<i>Rynchops flavirostris</i>	— 116

### ■ Other threatened/endemic wildlife

Among mammals, a small population of *Loxodonta africana* (EN) survives in the southern part of Mandji island, and dolphins, possibly *Sousa teuszii* (DD), and *Megaptera novaeangliae* (VU) are regularly seen offshore.

### ■ Conservation issues

An oil terminal has been built at Cape Lopez and two pipelines cross Mandji island from south to north. Mandji island has never been proposed as a Nature Reserve, probably because of its the proximity to Port-Gentil. There is a case, however, for declaring the northern part of the island a Wildlife Sanctuary, in order to prohibit hunting. Children catch migrating terns with snares and measures need to be taken to reduce this practice. A large immigrant fishing community, mainly Ghanaians and Beninois, is well-established at Cape Lopez.

### ■ Further reading

Alexander-Marrack (1990), Sargeant (1993), Schepers and Marteiijn (1993).

## Léconi grasslands

**GA007**

Admin region Haut-Ogooué

Coordinates 02°00'S 14°10'E

A1, A3 (A05)

Area 110,000 ha Altitude 350–830 m

Unprotected

### ■ Site description

The site is located in south-east of the country, east of the town of Franceville, near the border with the Republic of Congo and represents the northern part of the vast Batéké Plateau, which extends south through both Congos into northern Angola. It consists of *Loudetia simplex*-dominated short-grass savannas, either as tree-less prairies or as wooded grasslands, characterized by *Hymenocardia acida*, *Maprounea africana*, *Dialium* sp. and *Annona senegalensis* shrubs. Other common grass species include *Ctenium newtoni* and *Trachypogon thollonii*. Patches of dense woodland occur on the tops of some hills. Associated with the rivers and lakes in the area are a number of erosion cirques. Swamp-forests, often with *Raphia* palms, grow on the banks of these lakes and rivers, with associated permanent herbaceous swamps.

### ■ Birds

See Box and Table 3 for key species. A preliminary inventory of the avifauna totals 249 species, of which 208 are considered breeding

residents. One species of global conservation concern occurs, *Ploceus nigrimentum*, and Léconi is the only locality in the country from which it is known. Five species restricted to the Zambezi biome also occur: *Lybius minor*, *Hirundo rufigula*, *Lanius souzai*, *Cisticola dambo* and *Sylvietta ruficapilla*. A number of Central African species of limited distribution are found, in particular *Francolinus finschi*, *Myrmecocichla tholloni* and *Batis minulla*, while many southern African species reach the northern limit of their distribution in Central Africa in the area. Examples include *Streptopelia capicola*, *Caprimulgus pectoralis*, *Halcyon albiventris*, *Coracias caudata*, *Anthus brachyurus*, *Cisticola chiniana* and *Petronia superciliosa*. Other species of wide distribution in Africa occur, but are unknown elsewhere in Gabon, such as *Neotis denhami*, *Francolinus coqui*, *Circaetus pectoralis*, *Terathopius ecaudatus*, *Apus horus*, *Halcyon chelicuti*, *Anthus leucophrys* and *Estrilda paludicola*. The patches of dense woodland hold some forest species such as *Cercococcyx olivinus*, *Smithornis capensis*, *Malaconotus multicolor*, *Telophorus bocagei*, *T. viridis* and *Ploceus bicolor*.

#### Key species

A1 *Ploceus nigrimentum*  
 A3 (A05) Guinea-Congo Forests biome: 43 of the 201 species of this biome that occur in Gabon have been recorded at this site; see Table 3.

#### ■ Other threatened/endemic wildlife

None known to BirdLife International.

#### ■ Conservation issues

The area has been proposed as a Nature Reserve. Subsistence hunting has significantly reduced mammal populations, but birds have been little affected. In April–May, however, migrating *Ciconia abdimii* are shot. Except around the town of Léconi, there is little demand for land for agriculture.

#### ■ Further reading

Sargeant (1993), Wilks (1990).

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