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Important Bird Areas AMERICAS

SURINAME

Otte H. Ottema. Translated by Christiaan van der Hoeven





Country facts at a glance

Area:	163,270 km ²
Population (2005):	438,144
Capital:	Paramaribo
Altitude:	0–1286 m
Number of IBAs:	13
Total IBA area:	5,062,270 ha
IBA coverage of land area:	32%
Total number of birds:	727
Globally threatened birds:	0 (1) ¹
Globally threatened birds in IBAs:	0 (1) ¹
Country endemics:	1

General introduction

Suriname is located on the Guiana Shield in the north of South America between French Guiana to the east and Guyana to the west. The country borders Brazil to the south and to the north lies the Atlantic coast. Suriname is the smallest sovereign state in terms of area and population in South America. The vast majority of people (about 80%) live in the capital, Paramaribo, 5 to 10% live in the rest of the coastal area.

Suriname is a democratic republic with an elected president heading the executive branch of the government and an assembly of 51 elected representatives making up the legislative branch. Administratively, the country is divided into ten districts headed by an elected district commissioner. Each district is divided into provinces, also with elected heads.

Suriname's population of 438,144 (July 2005 estimate) is made up of several distinct ethnic groups, including a majority of East Indians, descendants of nineteenth-century contract workers from India (37% of population), Surinamese Creoles, descendants of West African slaves (31%), Javanese (15%) and Surinamese Maroons, descendants of escaped West African slaves (10%). There are also small populations of Amerindians, Chinese, Brazilians, Boeroes, Jews and Dutch immigrants. Religions include various forms of Christianity, Hinduism and Islam. Despite this diversity, the people of Suriname are very tolerant and racial problems hardly exist.

Suriname has a warm and humid tropical climate which is tempered by trade winds. Four seasons exist, the long rainy season from mid-April to mid-August, followed by the long dry season through to December, then follows a short rainy season until February, and finally, a short dry season until mid-April. May is the wettest month and October is the driest and an average annual rainfall of 2200 mm is reported. However, this varies locally from less than 1500 mm in the coastal area to over 5000 mm in mountainous areas.

Biodiversity in Suriname is high, mostly because of the variety of different habitats in the country, including rich tropical rainforests and extensive mudflats along the coast which are exposed during low tide. *Parwa*, or forests found along the coast are almost completely homogenous and dominated by Black Mangrove (*Avicennia germinans*). Inland from the mangroves lie saltwater and brackish lagoons surrounded by grass and fern vegetation with low plant species diversity. Further inland species-rich freshwater grass and shrub swamps are found. On the coastal plains, parallel to the shoreline, lie old sand and shell ridges known as *ritsen* which are overgrown with tall *terra firme* and swamp forests.

South of the coastal plains begins the savanna belt, a mosaic of diverse landscapes and ecosystems. The savanna belt is intersected by numerous rivers and creeks of different sizes, flowing from south to north, as is the case for all rivers in Suriname. The rivers have eroded most of the soil in their vicinity, resulting in tall swamp and *terra firme* forests on their banks. Savannas surround these forests, and include high and low savanna forests, and many types of grasslands. Grassland plains without trees or shrubs are rare in Suriname and the many types are summarized in two categories: tree savannas with dispersed trees or groups of trees, and shrub savannas with dispersed shrubs.

The rest of Suriname is covered with high forests. Forests above 500 m are called mountain or moss forests given that trees are covered with moss at these altitudes due to the high humidity. A few savannas can be found inland, of which the Kappel and the Sipaliwini savannas are the most important (information on ecosystems from Teunissen 1988).

¹ *Aratinga solstitialis* was uplisted in 2008 from LC to EN, giving Suriname one threatened species. However, this directory employs IUCN 2007 categories throughout.

Conservation and protected area system



There are 16 protected areas in Suriname, totaling 2,134,500 ha, designated between 1966 and 2002. Categories include nature reserves, multiple use management areas and one nature park. The latter category corresponds to the Brownsberg Nature Reserve, currently on long-term lease to the Foundation for Nature Conservation - Suriname (STINASU), the BirdLife affiliate in Suriname. There are four proposed protected areas, covering 132,000 ha, two of which will eventually become special protected forests under the Forest Law of 1992.

Two laws are of conservation importance: the law on hunting or the Game Law, and the Nature Conservation Law, both promulgated in 1954. The latter regulates the establishment and the management of nature reserves and other protected areas. Responsibility for management lies with the Nature Conservation Division in the Ministry of Physical Planning, Land and Forest Management.

The Game Law states which species of wildlife may be hunted and during which period. For many species the hunting season is closed during the breeding season. A distinction is made between hunting game species and trapping cage birds, for the latter, the law indicates that prey has to be captured alive. For the purposes of this law, Suriname is divided into a northern and southern region given that maroons and indigenous peoples are dependent on hunting for their livelihoods, therefore, the government did not apply the same rules to these peoples. The law on hunting was revised recently and improved in the Hunting Decree of 2002. The law now applies to the whole of Suriname, but in the southern part there are no closed seasons. Fully protected species are now also protected in the southern half of the country. A "bag limit" has been set for certain species, defining how many specimens a person may shoot during a hunting trip. Suriname and neighboring Guyana are the only two countries which export live animals and birds in South America. Annual exportation quotas have also been defined.

Suriname is a signatory to many international conventions aimed at conservation. The most important are the Convention on Biological Diversity, the UNESCO World Heritage Convention, Convention on International Trade in Endangered Species of Wild Fauna and Flora, and the Ramsar Convention on Wetlands. Suriname is also a member of the Western Hemisphere Shorebird Reserve Network (WHSRN). The country has one Ramsar site, three WHSRN sites of hemispheric importance and one World Heritage Site, the Central Suriname Nature Reserve.

Most of the forests in Suriname are undisturbed because of the low human population density of 2.7 people/km², with most of the population concentrated in the capital. Although more than 80% of the country is considered to be undisturbed, the ongoing and rapidly increasing damage done by gold mining (the biggest threat to the country's rainforests) is greatly underestimated, probably resulting in a much lower percentage of undisturbed forests.

Most of the gold miners are Brazilians who practice these illegal activities without impediment. No measures are taken to regulate or stop this illegal activity and therefore forests are being destroyed because soil is heavily disturbed and recovery becomes impossible, additionally, creeks and rivers are heavily polluted with mercury. There are no data on forest regions already destroyed by this activity. Legal bauxite mining is also responsible for the destruction of large tracts of rainforest. Reforestation has proven to be unsuccessful, although it has been tried in many ways. What remains after mining has ceased is a laterite wasteland, with a few stands of *Cecropia* spp. and some grass.

Poaching is a major problem in the coastal areas. A 2006 study revealed that tens of thousands of protected shorebirds and waders are poached annually. Even the nationally protected Scarlet Ibis (*Eudocimus ruber*) suffers from hunting. The Nature Conservation Division within the amalgamated Forestry Ministry attempts to prevent poaching by employing more forest guards as well as through environmental education. However, poaching takes place on a large scale. Few hunters abide to the law on hunting, and even admit doing so, employing the commonly heard adage, "if I don't shoot the last animal, someone else will". Trapping of songbirds is also widespread, threatening several bird species in Suriname. Large-billed Seed-finch or Twa twa (*Oryzoborus crassirostris*) is almost extirpated. This species has been protected since 2002, but it is probably too late for its recovery. There are approximately 50 protected rare colorful songbirds, most belonging to the family Thraupidae, for which exporters can obtain an export permit. Large macaws are hunted for food and have seriously declined in numbers since the last century. Similarly, Muscovy Duck (*Cairina moschata*) has been decimated due to overhunting.

There are no ornithological societies or clubs, and birding as a hobby is virtually non-existent. A few people are interested in birding because it provides them with an income through nature guiding. Interest in birds is above all restricted to species that can be kept as cage birds. This activity is a very common practice in Suriname, several species are used in song contests, which involves gambling large sums of money on their outcome. Large-billed Seed-finch is particular popular, a champion bird can fetch as much as US \$30,000 when traded.

STINASU works with tourism and carries out research in nature reserves. Research is aimed at conservation, while the activities in tourism have two goals: environmental education and providing funds for research and to control hunting.



Rufous Crab-hawk (*Buteogallus aequinoctialis*) at Weg naar Zee, north of Paramaribo, in the Noord Saramacca IBA (SR003). This is one of three restricted-range species for which a new Endemic Bird Area needs to be defined.
Photo: Carla Out



Ornithological importance

The total number of recorded bird species in Suriname is currently 727, however, this number is increasing continuously. There are large tracts of forest that have not been studied yet, particularly in the South and these areas will certainly reveal new species. Furthermore, the inaccessible swamps of the Northwest probably harbor more new species. Additionally, there are three species found in Suriname that after capture and research may be new to science.

The almost pristine rainforests of the three Guianas, neighboring Brazil and Venezuela are the last stronghold of the Near Threatened Harpy Eagle (*Harpia harpyja*) and Crested Eagle (*Morphnus guianensis*). These species are particularly vulnerable given that their territories occupy vast areas, approximately 10,000 ha. It is unknown whether these species can survive in fragmented forests. By connecting the Central Suriname Reserve through the potential Grensgebergte/Tumuc-humac IBA with the Parc Amzonien de Guyane in French Guiana and the Tumuc-humac Nature Reserve in Brazil a large enough area of habitat is created to guarantee the survival of both species. However, this is only possible if Suriname is willing to protect IBAs legally. The Near Threatened Blue-cheeked Amazon (*Amazona dufresniana*) also occurs in these forests as a rare breeder. An avifaunal boundary is found between 200 and 300 m with a number of species only occurring above this altitude.

Suriname has one threatened bird species according to the IUCN 2008 Red List, the Sun Parakeet (*Aratinga solstitialis*), classified as Endangered. It is expected that this species will be split into two new species: *Aratinga solstitialis* and *Aratinga pintoii*. It is possible that both taxa occur in the Sipaliwini Reserve, which is also an IBA. There are two specimens of *Aratinga pintoii* in "Naturalis", the National Museum of Natural History in Leiden, Netherlands. These birds were trapped alive in Sipaliwini, kept caged in the capital Paramaribo for a considerable time and then sent to Naturalis. Brian O' Shea (pers. comm.) has sight records of *Aratinga solstitialis* in Sipaliwini from 2005.

Suriname has six restricted-range species. Three are found in the coastal zone, Blood-colored Woodpecker (*Veniliornis sanguineus*), Guianan Piculet (*Picumnus minutissimus*), and Rufous Crab-Hawk (*Buteogallus aequinoctialis*). A new endemic bird area, which has not yet been defined, covers the area of occurrence of these species. For Rufous Crab-Hawk this is the narrow coastal belt from the Orinoco mouth south to Brazil. Both woodpeckers are distributed in the Suriname coastal area and the Northern savanna belt. According to recent evidence, Guianan Piculet (*Picumnus minutissimus*) is endemic to Suriname, given that it has not been confirmed for neighboring countries.

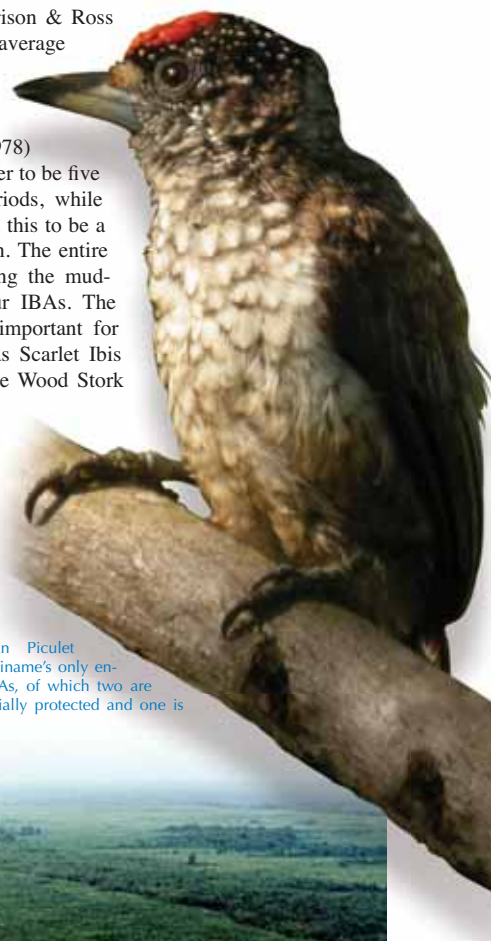
Blood-coloured Woodpecker is rare in the Eastern coastal area of Guyana up to the Essequibo river. Suriname has a great responsibility towards these three species as Suriname makes up the majority of their ranges.

Of the other three restricted-range species, Velvet-browed Brilliant (*Heliodoxa xanthogonyx*) occurs on Suriname's only tepui (isolated

sandstone mountain) in the middle of the country, probably extending the current limits of the Tepuis Endemic Bird Area (EBA 064). One species is without an EBA, White-streaked Antwrevo (*Dysithamnus leucostictus*). A further species lies well outside the proposed limits of Orinoco-Negro whites-sand forests (EBA 065) on the Kappel Savana, in the case of the rare and unknown Pelzel's Tody-Tyrant (*Hemitricus inornatus*). An important habitat for birds is formed by the "dwarf forest" on white sand. Three bird species are common here, which are almost absent from other habitats, including the biome-restricted Saf-fron-crested Tyrant-manakin (*Neopelma chrysocephalum*).

The Sipaliwini savanna, on the southern border with Brazil, is part of the extensive Paru savanna of Brazil. This savanna has a completely different avifauna with more than 20 species that do not occur elsewhere in Suriname. The Endangered Sun Parakeet (*Aratinga solstitialis*), the Near Threatened Rufous-sided Pygmy-Tyrant (*Euscarthmus rufomarginatus*) and the Bearded Tachuri (*Polystictus pectoralis*) are found here.

The extensive mudflats on the coast are very important as staging and wintering areas for shorebirds. Although the Surinamese coastline forms only 1.2% of the total coastline of South America, Morrison & Ross (1989) found that on average 52% of waders wintered in Suriname. However, wader numbers are declining, Spaans (1978) estimated the total number to be five million during peak periods, while Ottema (2006) estimated this to be a maximum of one million. The entire Suriname coast, including the mudflats, is covered by four IBAs. The coastal plains are also important for other waterbirds, such as Scarlet Ibis (*Eudocimus ruber*) and the Wood Stork (*Mycteria americana*).



The range-restricted Guianan Piculet (*Picumnus minutissimus*) is Suriname's only endemic bird, occurring in 5 IBAs, of which two are totally protected, two are partially protected and one is unprotected.
Photo: Foek Chin Joe



Mangroves and mudflats at low tide in the Wia Wia Nature Reserve, part of the Noord Commewijne / Marowijne IBA (SR004). The Nature Reserve is also a WHSRN site of hemispheric importance, providing a vital staging and overwintering location to as many as 100,000 individuals of Semipalmated Sandpiper (*Calidris pusilla*).
Photo: Arie Spaans

Important Bird Areas AMERICAS

Table 1. Important Bird Areas in Suriname

IBA code	IBA name	Adm unit	Area (ha)	A1				A2	A3	A4				
				CR	EN	VU	NT			A4i	A4ii	A4iii	A4iv	
SR001	Bigi Pan	Coronie, Nickerie	136,000					X		X		X		
SR002	Noord Coronie	Coronie	66,237					X		X		X		
SR003	Noord Saramacca	Saramacca	217,530					X		X		X		
SR004	Noord Commewijne / Marowijne	Commewijne, Marowijne	333,423					X		X		X		
SR005	Noord- West Suriname	Nickerie, Sipaliwini	216,386					X	X					
SR006	Boven Coesewijne Natuurreservaat (BCNR)	Para	27,000						X					
SR007	Brownsberg Natuurpark (BB)	Brokopondo	13,000						X					
SR008	Nassau gebergte	Sipaliwini	28,850						X					
SR009	Bakhuys gebergte	Sipaliwini	561,327				3		X					
SR010	Kabalebo / Arapahu	Sipaliwini	1,683,697				2		X	X				
SR011	Centraal Suriname Natuurreservaat (CSNR)	Sipaliwini	1,600,000				2	X	X					
SR012	Lely gebergte	Sipaliwini	78,820						X					
SR013	Sipaliwini Natuurreservaat	Sipaliwini	100,000		1 ¹		2		X					
Potential IBA ¹	Grensgebergte/Toemoek-hoemak	Sipaliwini	1,156,088				2		X					

IBA overview

IBA identification in Suriname began in early 2007 when STINASU took on responsibility for the program. A team of three people, one from the Nature Conservation Division and two from STINASU prepared a proposal of 12 IBAs which was approved at a workshop in November, 2007. Three additional IBAs were proposed at the workshop. One did not comply with criteria, resulting in a final proposal sent to Birdlife in April 2008 of 14 sites, of these, 13 have been approved at global level and one remains potential. The total area of the 13 global IBAs is 5,062,270 ha, or 32% of Suriname's land area (Table 1, Figure 1).

Four IBAs comply with criterion A1, and it is expected that the potential IBA will also be confirmed for the presence of two Near Threatened species. All seven of Suriname's Near Threatened and Endangered species occur in IBAs, but only five occur in high enough numbers to meet criterion A1. Three of these five species occur in only one IBA (Table 2). Two of the eight threatened species are rare northern migrants.

Six IBAs comply with criterion A2, with all six restricted-range species occurring in at least one IBA, three of these species occur in just one IBA, two in five, and one in four. Nine IBAs comply with criterion A3, with all 46 biome-restricted species confirmed for at least one IBA. Some IBAs hold between 30 and 40 biome-restricted species. Five IBAs were confirmed under the A4 criteria (Table 1).

Eight of the 13 IBAs are legally protected to some degree (Figure 1), and a ninth will probably achieve protected status as a Multiple Use Management Area (MUMA) within a few years. Three IBAs are Nature Reserves, one is a Nature Park and four are MUMAs. All habitat types occurring in Suriname are amply represented in IBAs and the four IBAs along the coastline are especially important with regards to coastal habitats.

Table 2. Threatened and Near Threatened bird species in Suriname

Scientific name	English name	IUCN category	Number of IBAs	
			confirmed under A1	not meeting A1 ⁴
<i>Aratinga solstitialis</i>	Sun Parakeet	LC (EN) ³	1	
<i>Morphnus guianensis</i>	Crested Eagle	NT	3	1
<i>Harpia harpyja</i>	Harpy Eagle	NT	3	1
<i>Euscarthmus rufomarginatus</i>	Rufous-sided Pygmy-Tyrant	NT	1	
<i>Polystictus pectoralis</i>	Bearded Tachuri	NT	1	
<i>Amazona dufreshiana</i>	Blue-cheeked Parrot	NT	1	
<i>Tryngites subruficollis</i>	Buff-breasted Sandpiper	NT		2
<i>Contopus cooperi</i>	Olive-sided Flycatcher	NT		3

Pale-bellied Mourner (*Rhytipterna immunda*)
Photo: Candi McManiman

Figure 1. Location of Important Bird Areas in Suriname



²It is expected that populations of *Harpia harpyja* and *Morphnus guianensis* will comply with A1 criteria and that a suite of species will be confirmed under A3 for ANT Biome when more data become available.

³*Aratinga solstitialis*, confirmed for Sipaliwini Natuurreservaat IBA, changed IUCN category in 2008 from LC to EN.

⁴Species are present but not in sufficient numbers to meet IBA criteria.

Opportunities

It seems unlikely that unprotected IBAs will gain legal protection in the future given that the government is not in favor of creating more paper parks. There are three main reasons for this reluctance on the part of the government. First, management, including provision of park wardens, is necessary for effective protection but funding is not available to cover this service. Second, tourism is a potential source of funding for protected areas, but its implementation is not currently feasible in Suriname. Finally, no agreement has yet been reached regarding a carbon offset scheme. Given that only unprotected areas could benefit from such a scheme, the government is waiting for a decision on this issue before declaring new protected areas so that they are able to enter into a carbon offset program.

However, when an agreement is reached, carbon offsets do represent an opportunity to obtain alternative sources of international funding for unprotected IBAs. The IBAs Kabalebo/Arapahu and Grensgebergte/Tumac-humac might be particularly suitable candidates for such a scheme.

For the above reasons, it is also unlikely that the newly proposed Multiple Use Management Area (MUMA) in northwest Suriname (SR005), including two nature reserves, will be effectively protected. However, unofficial, yet practical protection could be obtained by enlisting the support of Apura and Washabo indigenous Amerindians who use the south of the area for hunting and fishing. These activities, if sustainably managed, are not necessarily in conflict with the area's conservation. The same can be said for the northwest region of the Kabalebo/Arapahu IBA (SR010).

A recent declaration by the Association for Tropical Biology and Conservation called on the Suriname government to protect biodiversity, including unique habitats, in the bauxite mountains in the west of the country. The declaration called for urgent action to stop all mining activities in the area, establish park boundaries and enforce regulations, among others. The area includes three IBAs: Brownsberg Natuurpark (SR007), Nassau gebergte (SR008) and Lely gebergte (SR012), which together hold 70% of species restricted to the Northern Amazonia and Tepuis biome in Suriname.

The next most important step in the IBA program is to hold a planning workshop, however, the following three priority actions have also been identified: 1) save Brownsberg Natuurpark from bauxite mining and illegal gold mining, 2) implement a monitoring program in the potential IBA Grensgebergte/Toemoek-hoemak, and 3) build up relationships with the people of Apura and Washabo with a view to implementing mutually beneficial conservation actions.



Mudflat near Weg naar Zee, North of Paramaribo in the in Noord Saramacca (SR003).
Photo: Candi McManiman

Further information

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For information on trigger species at each IBA, see individual site accounts at BirdLife's Data Zone: www.birdlife.org/datazone/sites/

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