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Tel: +593 2 2277059 Fax: +593 2 2469838

americas@birdlife.org www.birdlife.org

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Important Bird Areas **AMERICAS** GUYANA Rhonda Narine & Gajendra "Andy" Nauth Narine Sun Parakeet (*Aratinga solstitialis*) was uplisted to Endangered in 2008 and has suffered serious population declines due to trapping for the caged bird market.

Photo: Chris Collins



Country facts at a glance

Area:	216,000 km ²
Population (2007):	769,095
Capital:	Georgetown
Altitude:	0–2835 m
Number of IBAs:	10 ¹
Total IBA area:	366,600 ha
IBA coverage of land area:	1.7%
Total number of birds:	864
Globally threatened birds:	3
Globally threatened birds in IBAs:	3
Country endemics:	0

General introduction

Guyana is located in northeast South America, bordering Venezuela to the west, Suriname to the east and Brazil to the south and west. The country is a semi-presidential representative democratic republic, with the president acting as head of state, supreme executive authority and commander-in-chief of the armed forces. The government is divided into three main branches of democratic power: parliament, the president and the cabinet. Legislative power is exercised by parliament, consisting of the president and the 72-member National Assembly. The cabinet consists of the president, prime minister and other ministers appointed by the president. Guyana is divided into ten administrative regions, administered by Regional Democratic Councils, comprising 12 to 36 elected members.

Guyana's population was estimated at 769,095 in 2007 with an average annual growth rate of 0.07% that same year. Half of Guyana's population is descended from Indian workers of the Dutch West Indian Company who first settled in the country in 1620. A third of the population is descended from native Africans who were brought as slaves in the 18th century. The rest are mostly Amerindians, Europeans, Chinese, Portuguese and people of mixed races. Indigenous peoples are the fourth largest ethnic group in Guyana with a total population estimated at 50,000 (6.3% of the population), of which 70% live in Guyana's interior. The country has the highest proportion of people living in rural areas in South America, with only 35% percent living in urban areas in 1995. Guyana is the only English speaking country in South America, although "Creolese" is the unofficial and predominantly spoken language throughout, as well as various indigenous dialects.

The climate in Guyana is equatorial, with an average annual temperature of 27.5 °C and average annual rainfall of 2311 mm. Humidity is generally high year-round with distinct climatic differences between the coastal belt and the interior. The coast is cooled by sea breezes and has a temperature range of 18-34 °C.



Kaieteur falls, inside Guyana's only national park Photo: Rick Wright

Important Bird Areas AMERICAS

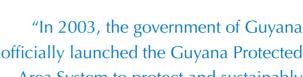
Four major landforms have been identified in Guyana, a flat coastal belt, including mangroves and littoral plains, a sand belt, forested in some areas, a central plain making up more than half the country's area, comprising almost pristine tropical forests and savannas (including Rupununi, bordering Brazil) and part of the Guiana highlands, including the Pacaraima Mountains, where montane forest is present (NDS 2000).

Guyana forms part of the Guiana Shield, an area rich in endemic plants (Prance 1982). For example, greenheart (*Chlorocardium rodiei*), a prime timber species, is almost entirely restricted to Guyana and an estimated 20% of Guyana's 500 orchid species are endemic to the country. Although Guyana's biodiversity inventory is still incomplete, the country is known to support over 6000 plant species, 200 mammals,

864 birds, 200 reptiles and amphibians, 700 freshwater fish and over 1700 arthropods (Caesar 2001).

Guyana is one of five countries in the world with a very high percentage of forest cover and low human population pressure. Estimates indicate that 90% of the country's population occupies approximately 7.5% of the total land area, predominantly in the coastal zone (NDS 2000). This extremely low population pressure in most of the forest belt has facilitated the occurrence of large expanses of pristine rainforest. However, threats to biodiversity still exist, among them, mining (and associated pollution), forestry, infrastructure development, wildlife trade and agricultural practices. Phenomena such as global warming also threaten the country's biodiversity (Caesar 2001).

Conservation and protected area system



Area System to protect and sustainably manage selected ecosystems."

of Guyana's natural resources. EPA's role is to act as environmental coordinator. Their primary approach to environmental protection and management is to work through existing organizations dealing with the environment as well as to create partnerships around important environmental activities. The agency is assisted by a number of committees in the areas of biodiversity, education and awareness, integrated coastal zone management, climate change, environmental standards and a broad based inter-agency technical committee. It is a member of the Natural Resources and Environmental Advisory Committee to Cabinet.

The Guyana Amazon Tropical Birds Society (GATBS) is a non-governmental, non-political, and non-profit entity. Its main objectives are to protect the avifauna of Guyana, to prevent the extinction of any bird species, to maintain, and improve where possible, the conservation status of all bird species, and to undertake educational exercises and research projects throughout Guyana. The Society has been involved in the documentation of birds in Guyana for the past three years, producing the first map of bird habitat zones in Guyana, national and regional checklists, brochures on bird conservation and a map of bird migration in the country, among other products.

More than 75% of Guyana remains covered by forest, but as time marches onwards this percentage will surely continue to decline. As Guyana struggles with economic development, increasing pressure is being put on the country's natural and biological resources. However, there has also been pressure on the government for more than a decade to create a system of protected areas for large tracts of Guyana's mostly-pristine environment. In 1999, five sites were identified as priority areas for protected area status: Shell beach, Kanuku Mountains, Orinduik and Mount Roraima, and southern Guyana region. (Kaieteur National Park and Iwokrama International Centre for Rain Forest Conservation and Development were already protected areas.)

Subsequently, in 2003, the government of Guyana officially launched the Guyana Protected Area System (GPAS), which sets out to protect and sustainably manage selected ecosystems. The GPAS also seeks to promote conservation initiatives while protecting traditional ways of life from encroaching development (the proposed protected areas are largely on Amerindian lands), as well as supporting socio-economic advancement and sustainable development. Of the five original sites, two –Shell Beach and the Kanuku Mountains– were chosen to serve as pilot projects to help establish a national process in protected area creation. Each pilot protected area has a lead agency to oversee the project: Guyana Marine Turtle Conservation Society for Shell Beach and Conservational International for Kanuku Mountains. Management plans and alternative income-generating activities are being established with communities living in or near these proposed protected areas.

The Environmental Protection Agency (EPA), established under the Environmental Protection Act of 1996, serves to promote, facilitate and coordinate effective environmental protection and sustainable use



Kaieteur National Park may qualify as an IBA when the A3 (biome-restricted birds) criterion is applied in Guyana. Photo: Rick Wright



Savanna at the Karanambu Ranch, a proposed IBA. Photo: Rick Wright

To date, 864 bird species have been recorded in Guyana, belonging to 79 families. Of these, 116 are waterbirds and 98 are Neotropical-Nearctic migrants. More than 268 have been recorded from the capital alone, making it one of few capital cities with such a high number of species. Guyana has three globally threatened species², one Endangered: Red Siskin (*Carduelis cucullata*); and two Vulnerable: Rio Branco Antbird (*Cercomacra carbonaria*) and Hoary-throated Spinetail (*Synallaxis kollari*).

Although 47 bird species are endemic to the Guiana Shield, Guyana itself has no politically endemic species. In terms of Endemic Bird Areas, both Tepuis (EBA 064) and Rio Branco gallery forest (EBA 063) enter Guyana at their eastern extremes, the latter being defined by Rio Branco Antbird and Hoary-throated Spinetail. At least 28 species of the 36 restricted to EBA 064 are also present in the country. A new Endemic Bird Area, shared with Suriname, has been proposed for Blood-coloured Woodpecker (*Veniliornis sanguineus*), Rufous Crabhawk (*Buteogallus aequinoctialis*) and Guianan Piculet (*Picumnus minutissimus*). All three species have been recorded at the proposed IBA of Northeast Coastline. More than 70 species are restricted to the Amazonia North and Tepuis biome (ANT) in the country.

"The first known recording of birdlife in Guyana was made between 1835 and 1839."

The first known recording of birdlife in Guyana was made by the Schaumburg brothers who traveled to Guyana's interior between 1835 and 1839 (and mapped Guyana's boundaries from 1841 to 1844). The first major work on the country's avifauna was written by Dorothy E. Snyder in 1966, including 720 species in the *Birds of Guyana*. Following this, a brief pictorial guide to a selection of birds in Guyana was published in 1994 and later updated with 84 plates (Singh & Fernandes 2004). Other publications have focused on regional inventories, for example, at Mabura Hill, Iwokrama Rainforest reserve, Kanuku Mountains (Parker *et al.* 1993, Montambault & Missa 2002) and a checklist of Region 4, published by GATBS. The most recent publications on birds in Guyana are the updated checklist by Smithsonian researchers listing 814 species (Braun *et al.* 2007) and checklists and distribution maps by GATBS.

IBA overview



150

200 km

100

The IBA program in Guyana goes back to 2007 when the Guyana Amazon Tropical Birds Society (GATBS) first began to identify and propose priority areas for species conservation in Guyana. In 2009, after the initial IBA identification by GATBS, Mike Braun of the Smithsonian National Museum of Natural History, reviewed the IBA data and added a further four sites (sites 7 to 10 in Table 1) on the basis of eight additional species triggering IBA criteria. It should be noted, however, that the IBA process in Guyana is still at a very early stage, with an initial identification of proposed sites only just having finished. Further stages of the process will include validation with the wider ornithological community at regional or national workshops.

To date, a total of 10 Important Bird Areas have been proposed for Guyana with an area of more than 366,600 ha or 1.7% of the country's land area (Table 1, Figure 1). However, information on area is not available for all sites as some are yet to be delimited. So far, eight IBAs have been proposed under the A1 criterion and four each under the A2 and A4iii criteria.

Current results show progress in different stages of the process as well as a high level of recognition at national level, highlighting the participative methods used to identify IBAs as well as the different forms of publicizing the program. It is hoped that the Government of Guyana can agree on the proposed sites becoming protected areas in the near future as well as being recognized as an imperative project for Guyana in terms of bird conservation, both nationally and internationally.

Figure 1. Location of proposed Important Bird Areas in Guyana Unkown protection status Venezuela Georgetown 10 5°N **Suriname** Brazil

Table 1. Proposed Important Bird Areas in Guyana

Reddish Hermit (Phaethornis ruber) Photo: Chris Collins

IBA code	IBA name	Adm unit	Area (ha)	A1 CR EN VU	A2 A	A4 A4ii A4iii A4iv
1	Shell Beach	Barima-Waini	16,300		2 X	X
2	Karaw/Aruka	Barima-Waini	12,000		1	
3	Ireng River ³	Upper Takutu-Upper Essequibo	30,900	2	X	X
4	North Rupununi-Karanambu Ranch ⁴	Upper Takutu-Upper Essequibo	34,200		2	X
5	Mapari - Kanuku Mountain	Upper Takutu-Upper Essequibo	19,400		1	
6	South Central Rupununi	Upper Takutu-Upper Essequibo	253,800	1	2	
7	Iwokrama	Potaro-Siparuni	unknown		3	
8	Karasabai	Upper Takutu-Upper Essequibo	unknown	1 ⁵		
9	Northeast Coastline	Mahaica-Berbice	unknown		X	X
10	Pacaraima Mountains	Cuyuni-Mazaruni	unknown		X	

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

Ireng River includes Pirara, Ireng and Takutu River.
North Rupununi-Karanambu Ranch includes "Crane Pond".
Sun Parakeet (*Aratinga solstitialis*), changed IUCN category in 2008 from LC to EN.

Opportunities



The IBA program is only the beginning of a long-term process which aims to consolidate bird conservation in Guyana. There are still more areas to be identified as IBAs, but funding is also required for the proposed sites in order to improve management and implement conservation actions.

GATBS recently met with the Environmental Protection Agency, Conservation International-Guyana, and the Guyana Tourism Authority to discuss the findings and future of IBAs in Guyana. The next steps should involve forming an IBA Committee with other NGOs and conservation societies to function as a management and monitoring body for IBAs.

Eco-tourism has been touted as an effective way to conserve natural areas and to promote sustainable development by providing employment for local people and generating income for conservation. Hence, ecotourism can also effectively support scientific research. In addition, working with paying volunteers can provide funding and manpower for research projects. When nature-based tourism is conducted responsibly, local communities can benefit from their association with tourism e.g. sales of products and handicrafts, increased employment, profit sharing, vocational training and increased empowerment. Conservation gains

Visitor accommodation on the edge of the Iwokrama Forest Reserve, a proposed IBA. The local community at Surama protects the forest because a percentage of its income is made from visitors staying at the lodge. Photo: Chris Collins

"The IBA program is only the beginning of a long-term process which aims to consolidate bird conservation in Guyana."

from ecotourism can also include funding for protected areas, increased size and effectiveness of protected areas, reduced hunting, reduced land clearing, as well as the increased involvement and support of the local people.



Further information



Apart from the authors, other members of GATBS contributed to IBA identification in Guyana: Rhonda Cornelius-Narine, Alain Van Veen, Christopher Li and field officers at the various proposed sites. Many people associated with conservation and protected areas in Guyana also contributed information for IBA identification. Mike Braun at the Smithsonian National Museum of Natural History provided information at the latter stage of the IBA process.

Iwokrama Website: http://www.iwokrama.org/home.htm / Environmental Protection Agency-Guyana: http://www.epaguyana.org/

Contact information

Rhonda Narine Vice-President Gajendra "Andy" Nauth Narine President

Guyana Amazon Tropical Birds Society (guyanabirds_society@yahoo.com) 77C 1 Light Street, Alberttown Georgetown, Guyana

Mike Braun (braunm@si.edu) Curator, Department of Zoology Laboratories of Analytical Biology Smithsonian National Museum of Natural History, United States

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References



Braun, M. J., Finch, D. W., Robbins, M. B. & Schmidt, B. K. (2007) A Field Checklist of the Birds of Guyana. Second Edition. Washington, D.C., US: Smithsonian Institution.

CAESAR, J. C. (2001) The Integration of Biodiversity into National Environmental Assessment Procedures. National Case Studies - Guyana. Georgetown, Guyana: Biodiversity Planning Support Programme, UNDP, UNEP, GEF.

Montambault, J. R. & Missa, O. Eds. (2002) A Biodiversity Assessment of the Eastern Kanuku Mountains, Lower Kwitaro River, Guyana. Washington, DC: Conservation International (RAP Bulletin of Biological Assessment 26).

NDS - NATIONAL DEVELOPMENT STRATEGY SECRETARIAT (2000) National Development Strategy: 2001–2010 A Policy Framework. Georgetown, Guyana: NDS Secretariat, Ministry of Finance. http://www.guyana.org/ NDS/NDS.htm

PARKER, T. A. III, FOSTER, R. B., EMMONS, L. H., FREED, P., FORSYTH, A. B., HOFFMAN, B. & GILL, B. D. (1993) A biological assessment of the Kanuku Mountain region of southwestern Guyana. Washington, DC, USA: Conservation International (RAP Working Papers 5).

Prance, G. T. (1982) Biological Diversification in the Tropics. New York, US: Columbian University Press.

SINGH, B. & FERNANDES, R. (2004) An Introduction to Birds of Guyana. Oxford, UK: Macmillan Caribbean.

SNYDER, D. E. (1966) The Birds of Guyana. Salem, USA: Peabody Museum.