

# GUYANA

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## Country facts at a glance

Area: 83,000 Sq. miles (approx. 216,000km<sup>2</sup>)  
Population (2007): est. 769,095  
Capital: Georgetown  
Number of IBAs: 5  
Total IBA area: 3,636 km<sup>2</sup>  
Total number of birds: 864  
Globally threatened birds: 3  
Globally threatened birds in IBAs: 1  
Country endemics: Nil

## General Introduction

Guyana the only English speaking country in South America, located on the northern shoulder of South America at longitude 1-9° and latitude 57-61° and borders east of Venezuela, West of Suriname and North of Brazil. Politics in Guyana takes place in a framework of a semi-presidential representative where the president is head of the state, the supreme executive authority and commander-in-chief of the armed forces. Political parties participating in the general election choose a presidential candidate to represent their party; whichever party or presidential candidate, secures the most votes is declared the elected president. Government has three main branches of democratic power-parliament, the president and the cabinet. Parliament is a collective part of the government representing interests of the population. This consists of the president and the National Assembly, and has all legislative power. The National Assembly has 72 members which includes an elected speaker, 40 members elected on the basis of proportional representation from national list drawn up by the political parties, 25 members elected by regional councils, four non-elected ministers and two non-elected parliamentary secretaries. The cabinet consists of the president, prime minister and other ministers appointed by the president. The highest Judicial body is the Court of Appeal, while the second highest is the High Court, the chancellor and the chief justice who preside over them are appointed by the president. On the local level, Guyana is divided into ten administrative regions and Regional Democratic Council comprising 12 to 36 elected members administered each.

The population was estimated at 769,095 in 2007 with an average annual growth rate of 0.07 percent in the same year. Half of Guyana's population is descended from Indian workers of the Dutch West Indian Company who first settled here in 1620. One-third of the population descends 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 as 50,000 (6.3% of the total population), and 70% live in Guyana's interior. This country has the highest proportion in South America of people who live in rural areas, with only 35 percent living in urban areas in 1995. There is religious diversity in Guyana Christian 50 percent, Hindu 35%, Islam 10%, other five %. The official language is English but 'Creolese' is the unofficial and



predominantly spoken language throughout the country as well as various Indigenous dialects.

The extremely low population pressure in most of the forest belt has facilitated the occurrence of large expanses of pristine rainforest supporting over 6000 plant species; 1400 chordates; 834 arthropods; 426 fungi; 33 bacteria; 13 nematodes; 44 algae; 17 mollusk and an estimated 30 viruses. Known biodiversity includes 200 mammals; 864 birds; 200 reptiles and amphibians; 700 freshwater fish and invertebrates unknown. The climate in Guyana is equatorial, has an average temperature of 27.5°C and average annual rainfall of 91 inches. Humidity is generally high year-round and distinct climatic differences between coastal belt and the interior. The coast is cooled by sea breezes and has a temperature range of 18-34°C.

The biodiversity inventory of Guyana is by no means complete. Mammalian inventories may defer probably a reasonable percentage of the country's species. Data on fungi, bacteria, arthropods, algae and nematodes are definitely much lower due to the lack of research attention to these groups. For instance, based on the global number of described species (WR1, 1997), the ratio of plant: fungi is 3.75. It could be reasonably surmised that with over 6000 plants, (approximately 10% of Amazon region), documented in Guyana, an estimated 1600 fungi should have been described for the country instead of 904 recorded so far (J.C. Caesar, in preparation). Similarly, arthropod numbers are grossly underestimated as 950 species were added in 1999 alone. (Charles *et al* 1998). The documented data on biodiversity have been derived predominantly from inventories of terrestrial and freshwater habitats. The following habitats have been categorized for Guyana: coastal, marine, littoral, estuarine palustrine, mangrove, riverine, lacustrine, swamp, savannah, white sand forest, brown sand forest, montane, cloud forest, moist lowland and dry evergreen scrub forests .

Guyana forms part of the Guiana Shield. The Guiana shield derives its characteristics from the crystalline geological formation covered by Roraima sandstones now characterized as a massif of hard, predominantly proterozoic rocks. The Guiana Shield covers an area of approximately 1 million square kilometres with a distinct floristic province consisting of over 8000 species of which approximately 50% are believed to be endemic to the shield (Maguire, 1970). According to Berry *et al* (1995) 3763 plant species of 118 genera belonging to 4 families are endemic to Venezuelan Guyana (i.e. Venezuela part of the Guiana Shield) of which 6.1 endemic genera occur in Guyana. Among regional endemic found in Guyana are *Victoria amazonica* lily, *Arapaima gigas*, *Pteroneura brasiliensis*, and *Prionoxystus giganteus*. *Chlorocardium rodiei*, a prime timber species has a range almost 95% restricted to Guyana. An estimated 20% of Guyana's 500 orchids are endemic to Guyana. Other notable endemic tree species are *Dicymbe alstomi*, *Vouacapoua macropetala*, and *Swartzia leiocalycina*, The Guiana Shield is a neotropical centre of endemism (Prance 1982, 1989). Guyana is one of five countries in the world with a very high percentage forest cover and low human population pressure. Estimates indicate 90 percent of the country's population occupies only about 7.5 percent of the total land area predominantly in the coastal zone (National Development Strategy 2000). It is also bounded by the rivers of the Orinoco, Amazon, Rio Negro and the Atlantic Ocean.

The main threats and development pressures are: mining, itinerant forestry and commercial forestry operations (despite a selective logging approach), plans to open up the country through a Guyana-Brazil highway, hinterland urbanization through tourism ventures wildlife trade, establishment of industries, freshwater pollution from small and

large scale land and river mining, use of agrochemicals, agricultural practices (fires set by agriculturalist), fuel wood collection, indiscriminate burning, ethno-biological fish poisoning, selective targeting of marine fish species, solid and other waste contamination, and poverty-affluence-related pressures (NBAP, 1999). However, global phenomena such as global warming, sea level rise and ozone layer depletion also pose a great threat to Guyana's biodiversity.

### **Conservation and Protected Areas Systems**

More than 75% of Guyana remains covered by forest, but as time marches onwards this number is surely going to continue declining. As Guyana struggles with economic development, increasing pressure is being put on the country's natural and biological resources. As Guyana's foreign debt grows and poverty remains, the government is more apt to yield larger areas of forest for timber and mining concessions. Also, with the completion of the bridge over the Takutu river on the border of Brazil, and the inevitable paving of the Linden-Lethem roadway, environmental pressures will also increase. There has been pressure on the government for more than a decade to create system of protection for large tracts of some areas of Guyana's mostly- intact 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.

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 seeks to promote conservation initiatives while protecting traditional ways of life (the proposed protected areas are largely on Amerindian lands), support 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 establishing protected areas. 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.

With help from the World Bank grant, each lead agency is working towards setting goals in establishing the protected areas, including education and community awareness activities for those living in and near the proposed protected areas (nearly 40 communities are impacted by the two pilot projects), creation of management plans, and identifying conservation-based, alternative activities (outside of timber, mining, wildlife trade, etc) that will generate income.

In today's modern world, the global benefits of protecting large swaths of biodiversity are obvious, but the Protected Areas would also help to protect Guyana's Indigenous communities from encroaching developments that are making them change their way of life. The Environmental Protection Agency (EPA) was established under the Environmental Protection (EP) Act of 1996. It serves to promote, facilitate and coordinate effective environmental and protection and the sustainable use of Guyana's natural resources. EPA's role is as environmental coordinator. Their primary approach to environmental protection and management is to work through existing organizations dealing with the environment as well as 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

## Ornithological Importance

The first known recording of birdlife in Guyana was made by the Schaumburg brothers who traveled to Guyana's interior in 1835 to 1839 and who also mapped Guyana's boundaries during 1841 to 1844. In 1956, the 'Zoo Quest to Guiana' was done by David Attenborough and others. Dorothy E. Snyder released 'The Birds of Guyana' in 1966 which contained 720 species. In 1994, Robert Fernandes and Balram Singh produced 'An Introduction to birds of Guyana' which gave a brief pictorial guide to some main birds in Guyana. An updated edition was released in 2004, containing 84 plates of birds in Guyana. The Tropenbos Foundation in 1996 listed 302 species recorded in Mabura Hill and surroundings. Iwokrama Rainforest reserve has also established a list of 500 species of birds within the reserve. The Smithsonian researchers Davis W. Finch, Michael J. Braun, Mark B. Robbins and Brian K. Schmidt released a new checklist in 2000 listing 786 species. Conservation International (Guyana) listed 264 species of birds in the Kanuku Mountains. In 2006 Guyana Feather Friends released. 'A field checklist of Birds in Georgetown' listing 263 species by Gajendra Nauth Narine (Andy), called the City of Birds. In 2007 Smithsonian researchers Davis W. Finch, Michael J. Braun, Mark B. Robbins and Brian K. Schmidt released a 2<sup>nd</sup> Edition of "A field Checklist of Birds of Guyana' with a total of 814 species. The Guyana Amazon Tropical Birds Society in 2006 produced its first regional checklist on birds in Region # 4 containing 307 species by Gajendra Nauth Narine (Andy) and a waterbird project which recorded 137 waterbirds a funded by Waterbird Conservation for the Americas done by Gajendra Nauth Narine and members of GATBS. Presently the Society is now supporting Region # 3, 9, and 10 to prepare their regional lists.

To date, Guyana inhabits over 864 birds species belonging to 79 families, of these 47 endemic species to the Guiana Shield, 32 Tepuis endemics, 116 water birds and 98 North American Migrants which are recorded by Gajendra Nauth Narine and other members of the society. The Capital City - Georgetown entertains over 268 birds belonging to 43 families making it one of the few capital city with many birds. There are no endemics to Guyana however, there are 3 globally threatened species namely *Cercomacra carbonaria* Rio Branco Antbird, *Synallaxis kollari* Hoary-throated Spinetail and *Carduelis cucullata* Red Siskin

## IBA Overview

A total of seven Important Bird Areas (IBAS) have been identified and are proposed for Guyana with an average area of 3636 km<sup>2</sup> or 4.4% of the country total area. In all a total of three meet the A1 criterion and one proposed, also two meet the A4iii criterion. See table below for sites and details.