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Important Bird Areas AMERICAS

# BELIZE

Dirk Francisco & Anna D. Hoare





## Country facts at a glance

Area:	22,965 km <sup>2</sup>
Population (2006):	311,500
Capital:	Belmopan
Altitude:	0–1160 m
<b>Number of IBAs:</b>	<b>6</b>
<b>Total IBA area:</b>	<b>3,134,582 ha</b>
<b>IBA coverage of land area:</b>	<b>66%</b>
Total number of birds:	550
Globally threatened birds:	4
Globally threatened birds in IBAs:	4
Country endemics:	0

## General introduction

Belize, a former British colony known as British Honduras until attaining independence in 1981, is located in the north of Central America. The approximate area of the entire territory and cays is 22,965 km<sup>2</sup>. The length from north to south is 280 km and its width is 109 km. It is bounded on the east by the Caribbean Sea, on the north and part of the west by Mexico, and on the south and part of the west by Guatemala. The inner coastal waters are shallow and are lined by both the barrier reef and dotted with hundreds of cays as well as three atolls.

**“Approximately 36% of terrestrial lands in Belize are protected.”**

Along the length of the country lies a low coastal plain that is generally covered with mangrove forest. Moving inland, elevations rise gradually. The Maya Mountains and the Cockscomb Range form the backbone of the southern half of the country, the highest point being Doyle’s Delight at 1124 m in the latter mountain range. The Mountain Pine Ridge area, located in the Cayo District in the west, includes the other areas of higher elevation within the country, ranging from 305 to around 914 m. Moving along to the northern districts, considerable areas of tableland are found. Eighteen rivers meander through all parts of the country with the majority concentrated in the southern part.

The climate is subtropical, accompanied by trade winds. Temperatures range from approximately 10 to 35.6 °C in the various coastal parts of the country with inland temperatures being slightly higher. Rainfall varies from an average of 1295 mm in the north to 4445 mm in the southernmost part of the country. There are two marked seasons; the dry season being from February to May (and sometimes August) and the remaining months making up the wet season.



Mangrove habitat is important in half of Belize’s IBAs: Northeastern Belize (BZ001), Coastal and near shore islands (BZ004) and Off shore and Barrier Islands (BZ005).  
Photo: Dirk Francisco/BAS

### Conservation and protected area system



As a small country Belize has been safeguarding its environment through various mechanisms, one of which is the establishment of protected areas. After Belize gained independence, the Government passed the National Parks System Act (1981) to initiate the establishment of protected areas. Half Moon Caye Natural Monument, which contains an IBA, became one of the first areas to be protected under this act. The Belize Audubon Society was instrumental in both of these actions. There were more concerted efforts in the establishment of key protected areas in the country which were later identified as part of the Important Bird Area network. This provided further support for maintaining the integrity of protected areas. Currently, some 36% of Belize's terrestrial areas and 13% of its marine area are designated under various protected areas categories.

The protected areas system in Belize consists of National Parks, Nature Reserves, Wildlife Sanctuaries, Natural Monuments, Forest Reserves, Marine Reserves, Archaeological Sites and Archaeological reserves. In addition, a few private protected areas have been established within the system. Connectivity has been established by way of natural biological corridors. Some of the protected areas are based on their high scenic value and are considered protected landscapes of geomorphic significance. The functions of protected areas have been recognized as provision of valuable environmental, social, economic and cultural goods and ser-

“The Belize Audubon Society was instrumental in establishing and applying the country's new protected area legislation.”

vices provided. These include watershed protection, habitat, biodiversity repository, climate regulator, and other functions that contribute to socio-economic activities related to biodiversity management and conservation.

Belize is clearly committed to the sustainable use and management of its natural resources as demonstrated by the establishment of legislation for a protected area system covering a diversity of ecosystems and habitats as well as other environmental laws. These include the Forest Act CAP 213 Revised Edition 2000, the Fisheries Act CAP 210 Revised Edition 2000, and the National Institute of Culture and History Act CAP 331 of the Substantive Laws of Belize. In addition, the country has ratified a number of legally binding multilateral environmental agreements such as the Ramsar Convention on Wetlands, World Heritage Convention, Convention on Biological Diversity, Convention on International Trade in Endangered Species of Wild Fauna and Flora, the UN Convention to Combat Desertification and the UN Framework Convention on Climate Change, all of which deal with proper management of the country's natural resources.

### Ornithological importance



Belize has four globally threatened species: two Endangered, Yellow-headed Amazon (*Amazona oratrix*) and Golden-cheeked Warbler (*Dendroica chrysoparia*) and two Vulnerable, Cerulean Warbler (*Dendroica cerulea*) and Keel-billed Motmot (*Electron carinatum*). There are also 12 regularly occurring Near Threatened species.

Although Belize has no politically endemic birds, the country is part of the Yucatán peninsula and is therefore important for the protection of species within the Eastern Yucatán Secondary Area (SA007). These species are Yucatán Vireo (*Vireo magister*), for which the secondary area was originally designated as well as the Near Threatened Black Catbird (*Melanoptila glabrirostris*), now also considered as restricted range. The country also has some 36 biome-restricted species within the Madrean Highlands (MAH) and Gulf-Caribbean Slope (GCS) biomes.

Given the country's location on the northernmost part of the Mesoamerican continent, Belize is an important flyway for migratory birds, highlighting the importance of Belize's IBAs as habitat for transient and overwintering species. This migratory route is still relatively healthy but with the constant threat of anthropogenic activities in this young country, there is a growing need for its conservation. Other main threats to this flyway, and to the avian population in Belize, include reduced, fragmented habitats and urban development on the coast, especially for tourism.

“Belize provides important habitat for transient and overwintering migratory species.”

The Belizean citizenry in general have always considered birds as part of their landscape and communities everywhere have traditionally observed trends within environmental changes based on avian life cycles. For example, birds that have been traditionally hunted are no longer seen in abundance. Communities' observations of Muscovy Duck (*Cairina moschata*) point to changes in this species' behavioral pattern, raising concerns about its conservation status as a result of hunting. Communities have also deduced that factors in the environment are changing. This has spurred a growing interest in engaging local people at all levels to monitor avian populations to determine their best use. This is especially important in species with high attraction value such as Jabirus (*Jabiru mycteria*) or the critical roosting site for the Red-footed Booby (*Sula sula*), located within one of Belize's IBAs (BZ005).

As with current conservation trends, avitourism is viewed by communities as an activity with a high potential to generate substantial revenues. Due to Belize's strategic geographical location and close proximity to North America, it is a hot spot for birding visitors whose activities also contribute to the socio-economic growth of the country.

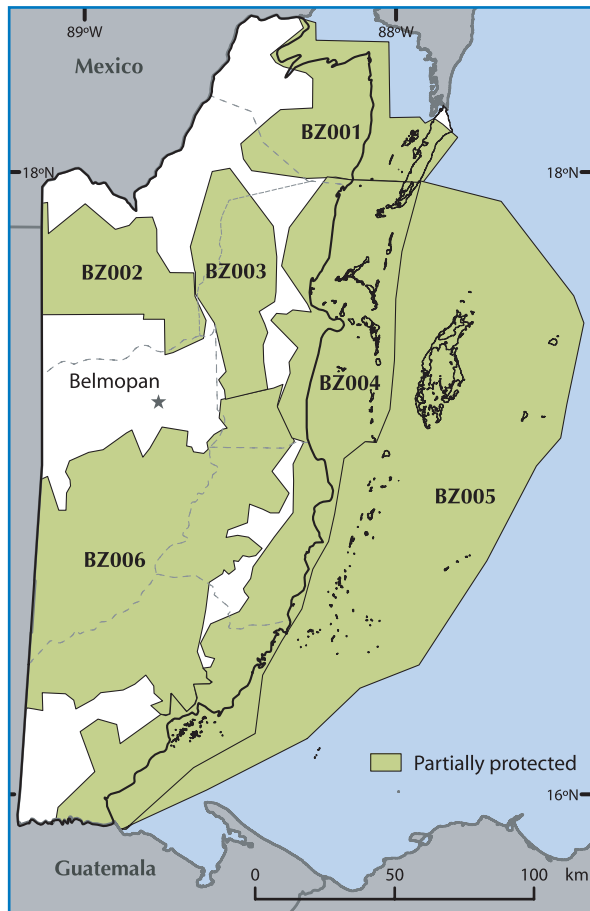
### IBA overview



The history of Important Bird Areas in Belize can be traced back to the establishment of the Belize Audubon Society which was formed in 1969 by a group of energetic conservationists who were mainly bird enthusiasts. As an initial foreign chapter of the Florida Audubon Society, the purpose of the Society was to learn more about wildlife, and how to preserve it as a part of Belize's heritage. This objective was achieved mainly through field trips where bird-watching became a primary activity. One of the first activities of Belize Audubon Society consisted of the preservation of bird species, such as the Roseate Spoonbill (*Platalea ajaja*) found at Cayo Rosario in San Pedro Ambergris Caye area. Conservation actions were also implemented for mammals, such as the Near Threatened jaguar. The Jabiru (*Jabiru mycteria*) stork was the object of the Belize Audubon Society's first funded conservation project and the species was added to Belize's list of protected species in 1973.

The Belize Audubon Society continued its work on bird conservation but it was not until 2004 when the Belize IBA project was funded by Birdlife International. The project was commissioned to Bruce W. Miller PhD and Carolyn Miller who have extensive experience in avian conservation in Belize. The results of this initiative were validated by avid birders and others interested in bird conservation as well as the Society's staff. The methods used to identify IBAs followed the standardized method as proposed by Birdlife International, allowing for consistency across the globe for species and sites. Despite global methods being used for the regional IBAs in the Mesoamerican region, it is important to note that any relevant variance or issue from the global criteria were discussed and agreed upon regionally via a technical committee before the national IBAs were delineated in a consolidated manner.

Figure 1. Location of Important Bird Areas in Belize



In Belize, six IBAs were identified, portions of which are located within protected areas (Figure 1, Table 1). Belize is rather unique within Central America as a significant proportion (36%) of its national territory is still protected. While the IBAs are not formally legislated protected areas, their identification serves to further consolidate the existing protected areas system. With the identification of the IBAs in Belize, a national initiative to create awareness of these areas will be necessary. The Belize Audubon Society has plans to promote the IBAs nationally and efforts started with IBA identification.

Belize has the highest proportion of IBA coverage of land area in the Americas. The six IBAs in Belize range in size from 160,345 ha (Crooked Tree and Associated Wetlands; BZ003) to 1,219,671 ha (Off-shore and Barrier Islands; BZ005), itself made up of five marine reserves.

All IBAs include A1 trigger species, with all four globally threatened species represented at sites. Of the 12 regularly occurring Near Threatened species, seven are represented within the IBA network. All sites also include A2 trigger species for the Eastern Yucatán Secondary Area (SA007), five sites for Yucatán Vireo (*Vireo magister*) and four for Black Catbird (*Melanoptila glabrirostris*). Five sites have been confirmed for A3, including all but three of the biome-restricted species present in Belize in the Gulf-Caribbean Slope (GCS) and Madrean Highlands (MAH). Three IBAs have been confirmed under A4, of these, three for A4i and one for both A4ii and A4iii.

Migrant species make up an important part of the avifauna of all IBAs in Belize, for example, 68% of the species recorded at the Off-shore and Barrier Islands are migrants. Other IBAs have between 24 and 41% of migrant species.



Crooked Tree wetlands (BZ003) are important for many species of waterbirds, including one of the largest populations of Black-bellied Whistling-duck (*Dendrocygna autumnalis*) and Blue-winged Teal (*Anas discors*) in the Americas.  
Photo: Dirk Francisco/BAS

## Important Bird Areas AMERICAS

**Table 1.** Important Bird Areas in Belize

IBA code	IBA name	Adm unit	Area (ha)	A1				A2	A3	A4			
				CR	EN	VU	NT			A4i	A4ii	A4iii	A4iv
BZ001	Northeastern Belize	Belize, Corozal	238,282	1	1	2	X	X					
BZ002	Rio Bravo CMA Gallon Jug Estate	Orange Walk	175,497		1	3	X	X					
BZ003	Crooked Tree and associated wetlands	Belize	160,345	1		2	X	X	X			X	
BZ004	Coastal and near shore islands	Belize, Corozal, Stann Creek, Toledo	696,824	1		2	X	X	X				
BZ005	Off-shore & Barrier Islands		1,219,671		1	3	X		X	X			
BZ006	Maya Mountains and southern reserves	Cayo, Stann Creek, Toledo	643,963	1	2	4	X	X					



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

## Opportunities



The identification of IBAs as key conservation areas will further consolidate the protected area system in Belize. However, financial support for the management of these areas is limited and their value or critical functions are not always recognized, therefore, the existence of some areas is threatened. With the identification of globally important IBAs within some protected areas, further value and support for their existence will be added.

Opportunities also exist for local communities, tourism stakeholders and individuals to capture economic benefits arising from biodiversity conservation, especially bird conservation. Income-generating activities such as avitourism and conservation development consistent with protected area goals and objectives are becoming common. IBAs such as the Crooked Tree Complex (BZ003) have been recognized worldwide for their avifauna and this particular bird haven has attracted thousands of visitors. This has enabled some community members to build capacity in bird watching skills in addition to being able to provide other services to the tourism sector. Consequently this contributes to communities' local development and helps in pro-

viding opportunities to reduce poverty which is prevalent in rural communities.

In cases where the IBA has been globally recognized as a Ramsar site (such as Crooked Tree Complex), a high recreational and touristic value has also been acquired, leading to the development of special events such as the Crooked Tree Cashew Festival, highlighting the special attributes of the area in capturing economic benefits. This has further enhanced existing educational and/or research activities, thus increasing training opportunities in the management and use of the site. Avifauna in Belize represents a wonderful opportunity as a tourism product for the country and this is evidenced by bird checklists, brochures and bird watching activities offered by resorts, tour operators and guides.

Another priority for the IBA program includes the establishment of monitoring activities throughout the country to ascertain the health of these key biodiversity areas. There is limited bird monitoring in Belize but the opportunity to focus on these activities is tremendous and one which Belize Audubon Society is working towards.



Northern Jacanas (*Jacana spinosa*) at Crooked Tree Wildlife Sanctuary, within Crooked Tree IBA (BZ003).  
Photo: Dirk Francisco/BAS

## Further information



### Data sources

Miller, Bruce PhD & Miller, Carolyn MSc; July 2007, The Belize Important Bird Areas Project commissioned by Belize Audubon Society and funded by BirdLife International

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Yellow-legged Gallinule (*Porphyrio martinica*)  
Photo: Dirk Francisco/BAS