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BirdLife International is a UK-registered charity No. 1042125

ISBN: 978-9942-9959-0-2

Recommended citation: Devenish, C., Díaz Fernández, D. F., Clay, R. P., Davidson, I. & Yépez Zabala, I. Eds. (2009) Important Bird Areas Americas - Priority sites for biodiversity conservation. Quito, Ecuador: BirdLife International (BirdLife Conservation Series No. 16).

To cite this chapter: Sergile, F. (2009) Haiti. Pp 249 – 254 in C. Devenish, D. F. Díaz Fernández, R. P. Clay, I. Davidson & I. Yépez Zabala Eds. *Important Bird Areas Americas - Priority sites for biodiversity conservation*. Quito, Ecuador: BirdLife International (BirdLife Conservation Series No. 16).

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Translations: Christian Devenish, Ítala Yépez Zabala & Amiro Pérez-Leroux
Maps: David F. Díaz Fernández, Ítala Yépez Zabala & Christian Devenish
Edition of Spanish language country chapters: Ítala Yépez Zabala, Carlos Huertas Sánchez & David F. Díaz Fernández
Graphic design volunteer (Spanish language country chapters): Adriana Valencia Tapia
Printed in Ecuador by Poligráfica C.A.

This publication and all country/territory chapters in their native languages are available for download at www.birdlife.org/





Country facts at a glance

Area:	27,750 km ²				
Population:	8,706,500				
Capital:	Port-Au-Prince				
Altitude:	0–2680 m				
Number of IBAs:	10				
Total IBA area:	23,240 ha				
IBA coverage of land area:	0.9%				
Total number of birds:	245				
Globally threatened birds:	11				
Globally threatened birds in IBAs:	11				
Country endemics:	1				

General introduction

The Republic of Haiti is situated on the western third of the island of Hispaniola, the second largest island in the Caribbean. The Dominican Republic, with which Haiti shares a 360-km border, occupies the rest of Hispaniola. Northwestern Haiti is just 80 km east of Cuba. Haiti's landscape of rugged mountains interspersed with small coastal plains and river valleys has been divided politically into 10 "départements": Artibonite, Centre, Grande-Anse, Nippes, Nord, Nord-Est, Nord-Ouest, Ouest, Sud, Sud-Est. Haiti also has six satellite islands (totaling 954 km²), namely Île de la Tortue (off the north coast), La Gonâve, (north-west of Portau- Prince), Île à Vache (off the southern tip of south-western Haiti), Les Cayemites (off the north coast of the Southern Peninsula) and the disputed island of Navassa (see p317).



Small colonies of Endangered Black-capped Petrels (*Pterodroma hasitata*) breed along the La Selle escarpment which forms part of the Aux Diablotins IBA (HT007) in the Massif de la Selle.

Photo: Jim Goetz/Cornell Lab Of Ornithology

The northern region of Haiti consists of the Massif du Nord mountain range (an extension of the Dominican Republic's Cordillera Central) which extends from the border through the north-west peninsula. The Plaine du Nord lowlands lie along the northern border with the Dominican Republic, between the Massif du Nord and the Atlantic Ocean. Haiti's central region consists of the Plateau Central that runs southeast to north-west along both sides of the Guayamouc River, south of the Massif du Nord. South-west of this plateau are the Montagnes Noires, the north-western parts of which merge with the Massif du Nord. The southern region consists of the Plaine du Cul-de-Sac in the south-east, and the mountainous southern Tiburon Peninsula. The Plaine du Cul-de-Sac is a natural depression in which lies the lake of Trou Caïman and Haiti's largest lake, Lac Azuei. The Chaîne de la Selle mountain range is an extension of the Sierra de Bahoruco in the Dominican Republic. It extends from the Massif de la Selle in the east (Pic la Selle is Haiti's highest point) to the Massif de la Hotte in the west.

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Haiti has a tropical climate with two main wet seasons: the north-east trade winds bring rain from April to June, and northerly winds bring drizzle from about September through November. However, the country's topography produces significant regional (and altitudinal) differences in temperature and rainfall. The resultant vegetation varies from subtropical very dry forest formations where cacti and scrub predominate, to tropical montane wet forest at the higher altitudes where Hispaniolan pines (Pinus occidentalis) and temperate vegetation thrive. Wetlands, lakes, lagoons, estuaries and a varied coastline provide additional diversity. In 1925, Haiti was lush, with 60% of its original forest cover. Since then, the population (which is now at a density of c.300/km² and growing at a rate of 2.3% each year) has cut down all but c.2%, and in the process fertile farmland soils have been destroyed which in turn has contributed to desertification. Most Haitian logging is done to produce charcoal, the country's chief source of fuel. Deforestation has led to severe erosion in the mountainous areas, and also periodic (but often catastrophic) flooding. Droughts, earthquakes and hurricanes add to the human and environmental suffering. Haiti has remained the least developed country in the Americas with c.80% of the population estimated to be living in poverty in 2003 (on an average income of <US\$1 per day). About 66% of all Haitians work in the agricultural sector, which is mainly small-scale subsistence farming although mangos and coffee are Haiti's two most important exports.



Forest in La Visite National Park (HT008)–Haiti's protected areas are primarily montane.

Photo: Fondation Seguin

Conservation and protected area system

Since 1983, biodiversity protection in Haiti slowly turned into a reality resulting from a combination of government commitment, dedicated people and a national environmental awareness campaign. In spite of economic hardships the Ministry of the Environment (Ministère de l'Environnement, MDE) and Ministry of Agriculture, Natural Resources, and Rural Development (Ministère de l'Agriculture, des Ressources Naturelles et du Développement Rural, MARNDR) managed to establish a protected area system encompassing c.25,000 ha (c.1% of the country's land area) in four reserves. The reserves are: Macaya Biosphere Reserve in the Massif de la Hotte, the Parc National La Visite and the Forêt des Pins in the Massif de la Selle, and the Parc Historique La Citadelle, Sans Souci, les Ramiers in the north. Recognizing that the full range of Haiti's ecosystems was not covered in these primarily montane reserves, 18 additional areas (totaling another 23,000 ha) were identified as potential protected areas (see IBA overview below), although none of these have yet been officially designated.



Agriculture is mainly small-scale subsistence farming carried out by the country's largest, growing and economically impoverished population. Photo: lamie Rhodes

Management of the protected areas started in 1992, initially with USAID funding targeting Macaya Biosphere Reserve, and then through a John D. and Catherine T. MacArthur Foundation project that ran until 1998. These projects facilitated the development of a World Bank financed park and forest technical assistance initiative (Appui technique à la Protection des Parcs et Forêt, ATPPF) that started in late 1998. Bridging the gap between the USAID and World Bank projects, the University of Florida focused activities on bird monitoring, species recovery plans and environmental education within Macaya Biosphere Reserve, La Visite and La Citadelle parks, updating the bird work done in these areas

during the 1980s. The World Bank ATPPF project aimed to develop the Mayaca, La Visite and Forêt des Pins protected areas and their buffer zones and train Haitian professionals. It led to the inclusion of Morne d'Enfer and Pic La Selle in the Parc La Visite boundary, and the Sapotille area into the northern side of the Macaya reserve. The MDE (which was created in 1995) and MARNDR are both chronically financially underresourced. MARNDR (through its Service des Parcs et Sites Naturels) is responsible for managing the protected areas. However, natural resource management was moved down the agenda by the transitional government (2004-2006) who put a greater emphasis on agricultural production. With the country's high population density, poverty, and political instability, compounded by the small budgets for conservation, absence of trained staff, lack of clear policies, and shifting government priorities, sustained conservation efforts have been prevented from becoming established. The protected areas in Haiti are essentially unprotected. There are personnel responsible for the parks, and basic offices do exist, but staff seem to be present only intermittently and access is entirely uncontrolled.

The conservation NGO sector includes Haiti-Net, created in 1992 to promote ecosystem management and environmental education in Haiti, Société Audubon Haïti (SAH) which was established in 2003 to conserve Haiti's natural ecosystems focusing on birds. SAH works in collaboration with the Vermont Center for Ecostudies, Sociedad Ornitológica de la Hispaniola and BirdLife, and is implementing conservation projects in both Macaya and La Visite. In 2005 SAH published Haiti's first book on birds as an educational tool to raise awareness about the country's unique biodiversity.

"Habitat destruction is leading to desertification, erosion and sedimentation, all of which negatively impact the human population."

The pressures on Haiti's ecosystems and biodiversity are huge. They are primarily a result of the country's large, growing but economically impoverished population. Habitat destruction is leading to desertification, erosion and sedimentation, all of which negatively impact the human population. With so little forest left, its continued destruction will result in numerous species extinctions in the country. Habitat loss is compounded by unregulated, unsustainable hunting which is widespread, invasive mammalian predators, introduced exotic plants which are outcompeting the native flora, and the commercial export of plants and ani-

Ornithological importance



The Republic of Haiti supports over 245 species of bird, of which more than 73 are resident landbirds. The Hispaniolan avifauna exhibits exceptional levels of endemism. The island is covered by the Hispaniola Endemic Bird Area (EBA 028). All the 36 restricted-range species within this EBA are known from Haiti, one of which, Grey-crowned Palm-tanager (Phaenicophilus poliocephalus) is endemic to Haiti. The majority of the restricted-range species are confined to, or occur in habitats above 1000 m, emphasizing the importance of mixed montane broadleaf-pine forest. A total of 28 of these restricted-range birds are endemic to the island, the others being shared with adjacent EBAs. For example, Vervain Hummingbird (Mellisuga minima), Stolid Flycatcher (Myiarchus stolidus), Greater Antillean Elaenia (Elaenia fallax) and Golden Swallow (Tachycineta euchrysea) are all shared with Jamaica (EBA 027). Six of the restricted-range species represent genera endemic to Hispaniola, namely Calyptophilus, Dulus (also a monotypic family), Microligea, Nesoctites, Phaenicophilus and Xenoligea. Endemism is also high at the sub-specific level with 47 subspecies described. All of the satellite islands support their own endemic subspecies, with seven found on Île de la Gonâve and three on Île de la Tortue. Our ornithological knowledge of Haiti is relatively poor, as a result of which there are a number of restricted-range birds whose current distribution and status in Haiti is unknown. These species include: Ashy-faced Owl (Tyto glaucops), Ridgway's Hawk (Buteo ridgwayi), Least Pauraque (Siphonorhis brewsteri), Bay-breasted Cuckoo (Coccyzus rufigularis), Flat-billed Vireo (Vireo nanus), Hispaniola Nightjar (Caprimulgus ekmani). These species are not represented within the Important Bird Area analysis, but further work in the IBAs may show them to be present, and their discovery in localities outside the IBA network may necessitate the definition of new IBAs.

There are significant populations of 18 globally threatened and Near Threatened species currently known from Haiti. However, four additional species are listed from Haiti but are not represented in IBAs. These are the Near Threatened Buff-breasted Sandpiper (*Tryngites subruficollis*) which

"The Critically Endangered Ridgway's Hawk has not been recorded for 20 years, but was known from Haiti's satellite islands and may yet occur there."

is only known as a vagrant; the Critically Endangered Ridgway's Hawk which has not been recorded for 20 years, but was known from Haiti's satellite islands and may yet occur; and the Endangered Bay-breasted Cuckoo and Near Threatened Least Pauraque, the current status of which is unknown within the country. Most of the globally threatened birds (including three Endangered and eight Vulnerable birds) are concentrated in the remnant montane forests of the Massif de la Hotte (Macaya) and Massif de la Selle (La Visite). All of the globally threatened and Near Threatened birds are poorly known within the country and population estimates at the site and national levels are not available.

More than 155 waterbirds are found in Haiti. Although work has been done to survey and monitor the ducks (by Ducks Unlimited) there is very little documentation concerning the populations of shorebirds passing through or wintering in Haiti, or the numbers of resident waterbirds at the various wetlands. Seabirds are also poorly known in terms of colony sizes (or indeed distribution and species composition). Consequently, no congregatory species feature in the IBAs. Key waterbird sites that are known about (albeit with limited population data available) include Lagon-aux-Bœufs (HT001); Acul Bay near Cap-Haitian; île de la Tortue in Basse-Terre and Coquillage (HT003); Petit Paradis; Artibonite Delta and Étang Bois Neuf; Sources Puantes; Lac Azuéi (HT006); Trou Caïman (HT005); Étang de Miragoâne; Baradères—Cayemite mangroves; Étang Laborde-Lachaux near Camp-Perrin; Île-à- Vache wetlands and mangroves; and the Île de la Gonâve mangroves.

IBA overview



Five of Haiti's 10 IBAs (Table 1, Figure 1) are within the country's embryonic protected areas system. In the Massif de la Hotte, Bois Musicien IBA (HT010) and Aux Becs-Croisés IBA (HT009) are both within the Macaya Biosphere Reserve. In the Massif du Nord, Les Todiers IBA (HT002) is within the Parc Historique la Citadelle, Sans-Souci, les Ramiers, and in the Massif de la Selle, Aux Diablotins IBA (HT007) and Aux Cornichons IBA (HT008) are within the La Visite National Park. However, effective conservation management within these parks is essentially non-existent and thus the protection afforded these critical sites is minimal. The other five IBAs are not legally protected.

The IBAs have been identified on the basis of 37 key bird species, including 18 (of the 22) globally threatened and Near Threatened birds, all 30 restricted-range species for which there are known populations, but no congregatory waterbirds/seabirds due to the lack of site-level population estimates for these species groups. Most of the globally threatened and restricted-range birds are confined to or occur in the IBAs within the La Visite and Macaya protected areas, emphasizing the importance of the montane forests in these two parks. However, there are some lowland, drier forest restricted-range birds (and the two globally threatened waterbirds) that are only present outside of these montane areas, showing that a network of sites is critical to conserve the full range of Haiti's unique biodiversity.



The Macaya Biosphere Reserve embraces two of Haiti's IBAs (HT009 and HT010) Photo: Chris Rimmer/Vermont Center For Ecostudies

Important Bird Areas **AMERICAS**

Table 1. Important Bird Areas in Haiti

IBA code	IBA name	Adm unit	Area (ha)		A1			A2	A 3	A4		
				CR	EN	VU	NT			A4i	A4ii A4iii A4ii	
HT001	Lagon-aux-Bœufs	Département du Nord-est	700			1		Х				
HT002	Les Todiers	Département du Nord	1,385			2	1	X				
HT003	Coquillage-Pointe Est	Île de la Tortue/ Département du Nord-ouest	710				2	X				
HT004	Les Grottes	Île de la Tortue/ Département du Nord-ouest	80				2	X				
HT005	Trou Caïman	Departement de l'Ouest	1,000			3	2	X				
-HT006	Lac Azuéi	Departement de l'Ouest	13,240				1					
HT007	Aux Diablotins	Departement de l'Ouest, Department du Sud-Es	t 1,980		3	5	3	X				
HT008	Aux Cornichons	Department du Sud-Est	630		1	4	3	X				
HT009	Aux Becs-Croisés	Department du Sud-Est	2,455		1	3	1	X				
HT010	Bois Musicien	Department du Sud-Est	1,060			3	3	X				





Trou Caïman (HT005) is one of a number of IBAs previously identified as potential additions to the protected area network in Haiti. Photo: Jean Vilmond Hilaire/SAH

Figure 1. Location of Important Bird Areas in Haiti



Opportunities



The IBA network as described in this chapter is not complete. With so many gaps in our knowledge of bird distributions, populations and abundance in Haiti, other sites will be identified in the future. Surveys could usefully focus on increasing our knowledge of the globally threatened and restricted-range birds whose current status and distribution in the country is unknown. Discoveries of any of these species may result in the definition of new IBAs. Similarly, fieldwork looking at waterbird populations and seabird colony size will almost certainly result in new IBAs being described - large numbers of shorebirds, waterbird and seabirds are present in the country, but without estimated population data, sites cannot be objectively described against the IBA criteria.

"Further IBAs will undoubtedly be identified in the future when the status and distribution of poorly-known species is established."

Four protected areas have been designated in Haiti. However, another 18 sites were identified as "areas to be protected". Of these 18 sites, one -Navassa Island- is described in a separate chapter. Coquillage IBA (HT003), Lagon-aux-Bœufs IBA (HT001), Trou Caïman IBA (HT005) and Lac Azuéi IBA (HT006) represent another four of the potential protected areas. The remaining 13 sites are (from north

to south): Baie de Fort-Liberté-Rivière du Massacre delta; Baie de l'Acul; Pointe Ouest; Petit Paradis; Artibonite Delta; Bassin Zim; Étang Bois-Neuf; Langue Blanche and Pointe Ouest; Les Arcadins; Étang de Miragoâne; Baie de St Louis du Sud/Grosse Cayes; Îles Cayemites and Baradères; and Pointe Diamant. The survey work that is so urgently required within Haiti could usefully focus on these potential protected areas to determine their current status and importance for the key globally threatened, restricted-range and congregatory bird species. Similar field assessments (surveys and subsequent monitoring) are needed for the key bird species in all 10 Haitian IBAs. The results should be used to help inform the assessment of state, pressure and response variables at each IBA to provide an objective status assessment and to highlight the management interventions that are required to maintain these internationally important biodiversity sites.

In summary, to move forward with conservation in Haiti it will be essential to: focus on a few priority sites such as the Important Bird Areas (IBAs) and potential protected areas; address the livelihood needs of the people dependent on the resources (at both the site and species level) being conserved; involve these same stakeholders in the design and implementation of conservation actions; raise the level of awareness of biodiversity and conservation issues at the site level, but also within the government; conservation management training for local practitioners and national institutions; establish clear monitoring frameworks to determine the success or failure of particular management actions; and ensure projects are developed with long-term sustainability and commitment as prerequisites.

Further information



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Acknowledgements



The author would like to thank Charles Woods (Bear Mountain Natural History Center), Philippe Bayard and Jean Vilmond Hilaire (SAH), Judex Edouarzin (Ministère de l'Environnement), Jamie Rhodes, Chris Rimmer (Vermont Center for Ecostudies), Eladio Fernandez (SOH), Jim Goetz (Cornell Laboratory of Ornithology) and Fondation Seguin.

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