

# HAITI

LAND AREA 27,750 km<sup>2</sup> ALTITUDE 0–2,680 m  
HUMAN POPULATION 8,706,500 CAPITAL Port-au-Prince  
IMPORTANT BIRD AREAS 10, totalling 232 km<sup>2</sup>  
IMPORTANT BIRD AREA PROTECTION 73%  
BIRD SPECIES 245  
THREATENED BIRDS 22 RESTRICTED-RANGE BIRDS 36



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Small colonies of Endangered Black-capped Petrels breed along the La Selle escarpment which forms part of the Aux Diablotins IBA in the Massif de la Selle. (PHOTO: JIM GOETZ/CORNELL LAB OF ORNITHOLOGY)

## 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. North-western 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 (totalling 954 km<sup>2</sup>), namely Île de la Tortue (off the north coast), La Gonâve, (north-west of Port-au-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 separate Navassa chapter).

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 south-

east 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.

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



Agriculture is mainly small-scale subsistence farming carried out by the country's largest, growing and economically impoverished population. (PHOTO: JAMIE RHODES)

(which is now at a density of c.300/km<sup>2</sup> 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.

#### ■ Conservation

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. Recognising that the full range of Haiti's ecosystems was not covered in these primarily montane reserves, 18 additional areas (totalling another 23,000 ha) were identified as potential protected areas (see Important Bird Areas below), although none of these have yet been officially designated.

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

Forest in La Visite National Park—Haiti's protected areas are primarily montane. (PHOTO: FONDATION SEGUIN)



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 under-resourced. 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 establishing. 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 Haiti (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.

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 animals (e.g. for the pet trade) that has impoverished many life zones. 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); 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.

#### ■ Birds

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 an Endemic Bird Area (EBA), and 36 restricted-range species 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 1,000 m, emphasising 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. 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 ruficularis*, Flat-billed Vireo *Vireo nanus*, Hispaniolan Nightjar *Caprimulgus eckmani*. These species are not represented within the Important Bird Area (IBA) analysis (see Table 1), but further work in the IBAs may show them to be present, and their discovery in localities outside the IBAs may necessitate the definition of new IBAs.

There are significant populations of 18 globally threatened species currently known from Haiti. However, four additional species are listed from Haiti but have not been considered in the IBA analysis. These are the Near Threatened Buff-breasted Sandpiper *Tryngites subruficollis* which is only known as a vagrant; the Critically Endangered *Buteo ridgwayi* which has not been recorded for 20 years, but was known from Haiti's satellite islands and may yet occur; and the Endangered *Coccyzus ruficularis* and Near Threatened *Siphonorhis brewsteri*, the current status of which is unknown within the country. Most of the globally threatened birds (including three Endangered and eight Vulnerable birds: see Table 1) 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 birds are poorly known within the country and population estimates at the site and national levels are not available.

The Grey-crowned Palm-tanager is endemic to Haiti.  
(PHOTO: ELADIO FERNÁNDEZ)



Table 1. Key bird species at Important Bird Areas in Haiti.													
Key bird species	Criteria	National population	Criteria	Haiti IBAs									
				HT001	HT002	HT003	HT004	HT005	HT006	HT007	HT008	HT009	HT010
<b>Northern Bobwhite</b> <i>Colinus virginianus</i>	NT ■			■	■	■	■	■	■	■	■	■	■
<b>West Indian Whistling-duck</b> <i>Dendrocygna arborea</i>	VU ■			✓									
<b>Black-capped Petrel</b> <i>Pterodroma hasitata</i>	EN ■										✓		
<b>Caribbean Coot</b> <i>Fulica caribaea</i>	NT ■							✓	250–300				
<b>White-crowned Pigeon</b> <i>Patagioenas leucocephala</i>	NT ■					✓	✓						
<b>Plain Pigeon</b> <i>Patagioenas inornata</i>	NT ■					✓	✓				✓		✓
<b>Hispaniolan Parakeet</b> <i>Aratinga chloroptera</i>	VU ■ ■				✓			✓		✓	✓		
<b>Hispaniolan Amazon</b> <i>Amazona ventralis</i>	VU ■ ■				✓			✓		✓			
<b>Hispaniolan Lizard-cuckoo</b> <i>Saurothera longirostris</i>	■				✓	✓	✓			✓	✓		
<b>Antillean Mango</b> <i>Anthracothorax dominicus</i>	■				✓	✓	✓	✓	✓	✓	✓		✓
<b>Hispaniolan Emerald</b> <i>Chlorostilbon swainsonii</i>	■									✓	✓	✓	✓
<b>Vervain Hummingbird</b> <i>Mellisuga minima</i>	■				✓	✓	✓	✓		✓			
<b>Hispaniolan Trogon</b> <i>Priotelus roseigaster</i>	NT ■ ■									✓	✓		✓
<b>Narrow-billed Tody</b> <i>Todus angustirostris</i>	■				✓					✓	✓	✓	✓
<b>Broad-billed Tody</b> <i>Todus subulatus</i>	■				✓	✓		✓					
<b>Antillean Piculet</b> <i>Nesocittes micromegas</i>	■											✓	✓
<b>Hispaniolan Woodpecker</b> <i>Melanerpes striatus</i>	■				✓			✓		✓	✓	✓	✓
<b>Greater Antillean Elaenia</b> <i>Elaenia fallax</i>	■				✓					✓	✓	✓	✓
<b>Hispaniolan Pewee</b> <i>Contopus hispaniolensis</i>	■									✓	✓		
<b>Stolid Flycatcher</b> <i>Myiarchus stolidus</i>	■				✓		✓	✓					
<b>Thick-billed Vireo</b> <i>Vireo crassirostris</i>	■					✓	✓						
<b>Hispaniolan Palm Crow</b> <i>Corvus palmarum</i>	NT ■ ■				✓			✓		✓	✓		
<b>White-necked Crow</b> <i>Corvus leucognaphalus</i>	VU ■ ■							✓					
<b>Palmchat</b> <i>Dulus dominicus</i>	■				✓			✓					
<b>Golden Swallow</b> <i>Tachycineta euchrysea</i>	VU ■ ■									✓	✓	✓	✓
<b>Rufous-throated Solitaire</b> <i>Myadestes genibarbis</i>	■									✓	✓	✓	✓
<b>Bicknell's Thrush</b> <i>Catharus bicknelli</i>	VU ■									✓	✓	✓	
<b>La Selle Thrush</b> <i>Turdus swalesi</i>	EN ■ ■									✓	✓		
<b>Antillean Siskin</b> <i>Carduelis dominicensis</i>	■									✓	✓		
<b>Hispaniolan Crossbill</b> <i>Loxia megaplaga</i>	EN ■ ■									✓		✓	
<b>Green-tailed Warbler</b> <i>Microligea palustris</i>	■									✓	✓		
<b>White-winged Warbler</b> <i>Xenoligea montana</i>	VU ■ ■												✓
<b>Black-crowned Palm-tanager</b> <i>Phaenicophilus palmarum</i>	■				✓	✓							
<b>Grey-crowned Palm-tanager</b> <i>Phaenicophilus poliocephalus</i>	NT ■ ■											✓	✓
<b>Chat Tanager</b> <i>Calyptophilus frugivorus</i>	VU ■ ■									✓	✓	✓	✓
<b>Hispaniolan Spindalis</b> <i>Spindalis dominicensis</i>	■										✓	✓	✓
<b>Antillean Euphonia</b> <i>Euphonia musica</i>	■				✓								✓

All population figures = numbers of individuals.  
**Threatened birds:** Endangered ■; Vulnerable ■; Near Threatened ■. **Restricted-range birds** ■.



The Endangered La Selle Thrush occurs in the remnants of montane forest in the Massif de la Selle. (PHOTO: ELADIO FERNÁNDEZ)

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 IBA analysis. Key waterbird sites that are known about (albeit with limited population data available) include Lagon-aux-Boeufs (IBA HT001); Acul Bay near Cap-Haitien; île de la Tortue in Basse-Terre and Coquillage (IBA HT003); Petit Paradis; Artibonite Delta and Étang Bois Neuf; Sources Puanes; Lac Azuéi (IBA HT006); Trou Caïman (IBA 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.

### IMPORTANT BIRD AREAS

Haiti's 10 IBAs—the country's international site priorities for bird conservation—cover 232 km<sup>2</sup>, less than 1% of Haiti's land area. Five of the IBAs are within Haiti's embryonic protected areas system. In the Massif de la Hotte, Bois Musicien IBA (HT010) and Aux Bec-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

The Macaya Biosphere Reserve embraces two of Haiti's IBAs. ((PHOTO: CHRIS RIMMER/VERMONT CENTER FOR ECOSTUDIES)



essentially non-existent and thus the protection afforded these critical sites minimal. The other five IBAs are not legally protected.

The IBAs have been identified on the basis of 37 key bird species (listed in Table 1) that variously meet the IBA criteria. These 37 species include 18 (of the 22) globally 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.

Trou Caiman IBA 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.



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.

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 IBA chapter. Coquillage IBA (HT003), Lagon-aux-Boeufs 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’Acule; 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.

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<b>HT001 Lagon-aux-Boeufs</b>		<b>Unprotected</b>	
<p><b>COORDINATES</b> 19°40'N 71°46'W  <b>ADMIN REGION</b> Département du Nord-est  <b>AREA</b> 700 ha  <b>ALTITUDE</b> 0–10 m  <b>HABITAT</b> Shrubland, brackish wetland, mangrove, coast</p>		 <p>West Indian Whistling-duck</p>	<p><b>THREATENED BIRDS</b> 1</p> <p><b>RESTRICTED-RANGE BIRDS</b> 3</p> <p>BIOME-RESTRICTED BIRDS</p> <p>CONGREGATORY BIRDS</p>

**Site description**

Lagon-aux-Boeufs IBA is a brackish (20 parts per thousand) estuarine lake on the coastal plain of Dauphin, north-easternmost Haiti. It lies east of Fort-Liberté and is bounded to the north by the Baie de Mancenville, east by the Massacre River and the town of Melliac, to the west by Dérac and south by the tertiary road to Melliac. The lake is fringed with mangroves and xerophytic shrubland set within the otherwise agricultural coastal plain. Around the lake, sisal, annual staple crops and grazing are commonplace, but rice is the major crop, irrigated by the nearby Massacre River and Maribaroux irrigation system. The lake is used by local fishermen, hunters (shooting waterbirds), and local population for watering cattle and washing clothes.

**Birds**

This IBA supports an important population of the Vulnerable West Indian Whistling-duck *Dendrocygna arborea*. Three Hispaniola EBA restricted-range species occur, namely Antillean Mango *Anthracothorax dominicus*, Broad-billed Tody *Tody subulatus* and Black-crowned Palm-tanager *Phaenicophilus palmarum*, although this total will no doubt rise with seasonal surveys. It is suspected that the Near Threatened Caribbean Coot *Fulica caribaea* and Piping Plover

*Charadrius melodus* occur, but this requires confirmation. Large numbers of migratory ducks and shorebirds use the site which supports a population of Caribbean Flamingo *Phoenicopterus ruber*.

**Other biodiversity**

The Vulnerable American crocodile *Crocodylus acutus* and West Indian manatee *Trichechus manatus*, and globally threatened sea-turtles are all thought to occur.

**Conservation**

Lagon-aux-Boeufs IBA is state owned but unprotected. The area was included within a biosphere reserve nomination, and the Ministry of Environment identified the area as in need of protection (and as a recreational area) within a departmental environmental action plan, but no conservation action has been implemented. Approximately 20,000 people live around this wetland, living on fisheries, agriculture, charcoal production and occasionally boat rides. The resulting threats include water pollution, introduced predators (cats, dogs, mongooses and rats), surface water diversion (for irrigation and industrial needs), over-fishing, fuelwood extraction, hunting (especially coots *Fulica* spp., locally called “poule d’eau”), and conversion of habitat to agriculture.

<b>HT002 Les Todiers</b>		<b>National Park</b>	
<p><b>COORDINATES</b> 19°59'N 72°21'W  <b>ADMIN REGION</b> Département du Nord  <b>AREA</b> 1,385 ha  <b>ALTITUDE</b> 600–900 m  <b>HABITAT</b> Forest</p>		 <p>Hispaniolan Parakeet</p>	<p><b>THREATENED BIRDS</b> 3</p> <p><b>RESTRICTED-RANGE BIRDS</b> 14</p> <p>BIOME-RESTRICTED BIRDS</p> <p>CONGREGATORY BIRDS</p>

**Site description**

Les Todiers IBA is in the Massif du Nord on the Bonnet-à-l’Évêque mountain chain. It is situated within the Parc Historique la Citadelle, Sans-Souci, les Ramiers overlooking from its steep slopes the towns of Milot (a tourist and crafts town), Grande Rivière du Nord and Dondon (both farming communities) on the Plaine du Nord. The area comprises karst limestone outcroppings with low montane wet forest (with abundant tree ferns, epiphytes and melastomes) above 800 m, and subtropical moist forest (with a mix of broadleaf hardwoods and pine) lower down. The Plaine du Nord is one of the most important agricultural areas in Haiti, well known for its citrus, coffee, cocoa and bananas due to high and regular rainfall, and the remaining canopy trees.

**Birds**

Although poorly studied, this IBA supports a diverse avifauna including populations of 14 (of the 30) Hispaniola EBA restricted-range birds. Among the restricted-range birds are the Vulnerable Hispaniolan Parakeet *Aratinga chloroptera* and Hispaniolan Amazon *Amazona ventralis*. Although usually a lowland species in this part of Haiti, the parakeet occurs sympatrically with the Amazon parrots in this IBA. The Near Threatened Hispaniolan Palm Crow *Corvus palmarum* occurs.

**Other biodiversity**

The herpetofauna in this IBA is diverse, with reptiles such as *Anolis christophei*, *A. eugenegrahami* and *Sphaerodactylus lazelli* first discovered in the La Citadelle region. The Critically Endangered frogs *Eleutherodactylus poolei* and *E. schmidti limbensis* occur. Many endemic plants are found on the limestone.



**Conservation**

Les Todiers IBA is state owned and within the 2,200-ha Parc Historique la Citadelle, Sans-Souci, les Ramiers. This national park has been the focus of some ornithological surveys (although none since 1994) and historical monument restoration. Management plans have been proposed (including protection of historic monuments, promotion of tourism and biodiversity protection), and in spite of interest among local guides there has been little conservation action within this area. Insufficient legislation, commitment, funding, institutional capacity or awareness have left this park exposed to immense pressure from a poor and growing local population. The integrity of this park is deteriorating.



**HT003 Coquillage–Pointe Est** **Unprotected**

COORDINATES 20°00'N 72°39'W  
 ADMIN REGION Île de la Tortue/Département du Nord-ouest  
 AREA 710 ha  
 ALTITUDE 0–100 m  
 HABITAT Coastline, rocky areas, shrubland, coastal wetlands

Thick-billed Vireo

<b>THREATENED BIRDS</b>	<b>2</b>
<b>RESTRICTED-RANGE BIRDS</b>	<b>4</b>
<b>BIOME-RESTRICTED BIRDS</b>	0
<b>CONGREGATORY BIRDS</b>	0

**Site description**

Coquillage–Point Est IBA is in south-easternmost Île de la Tortue, a 180-km<sup>2</sup> island off the north-west coast of Haiti. It lies between the slopes of Morne Ti Clos (154 m) to the north, the Canal de la Tortue to the south, Grand Sable to the west and Pointe Est. Coquillage is a densely populated locality. The IBA covers an area of coastal limestone cliffs, lagoons, marshes, mangrove woodland, coral reefs and white sand beaches. Inland is an area of rugged limestone with xerophytic woodland.

**Birds**

This IBA supports populations of four (of the 30) Hispaniola EBA restricted-range birds, namely Hispaniolan Lizard-cuckoo *Saurothera longirostris*, Antillean Mango *Anthracothorax dominicus*, Vervain Hummingbird *Mellisuga minima* and (the only area in Hispaniola for) Thick-billed Vireo *Vireo crassirostris*. Three Île de la Tortue endemic subspecies are present in this IBA: *V. crassirostris tortugae*, Bananaquit *Coereba flaveola nectarea* and Greater Antillean Bullfinch *Loxigilla violacea maurella*. The Near Threatened

White-crowned Pigeon *Patagioenas leucocephala* and Plain Pigeon *P. inornata* occur. White-tailed Tropicbird *Phaethon lepturus* is present as a breeding species in unknown numbers.

**Other biodiversity**

Nothing recorded although the marine fauna almost certainly includes a number of globally threatened species such as sea-turtles.

**Conservation**

Coquillage–Point Est IBA has been proposed as part of a protected area (based on the biodiversity, historical and cultural interests, and its ecotourism potential), but there is currently no protection afforded this site. The IBA is used by (marine) fishermen, boat builders and farmers. The woodland is cut for lumber, fuelwood and charcoal (and then cultivated) and birds are hunted. With loss of vegetation, erosion is a problem which is leading to sedimentation of the wetland and reef system. The human population in this area is growing. Tourism and ecotourism is in its infancy on the island.

**HT004 Les Grottes** **Unprotected**

COORDINATES 20°03'N 72°44'W  
 ADMIN REGION Île de la Tortue/Département du Nord-ouest  
 AREA 80 ha  
 ALTITUDE 100–200 m  
 HABITAT Rocky areas, caves, shrubland, coast




White-crowned Pigeon

<b>THREATENED BIRDS</b>	<b>2</b>
<b>RESTRICTED-RANGE BIRDS</b>	<b>5</b>
<b>BIOME-RESTRICTED BIRDS</b>	0
<b>CONGREGATORY BIRDS</b>	0

**Site description**

Les Grottes (the caves) embraces a small section of Île de la Tortue, a 180-km<sup>2</sup> island on the north-west coast of Haiti. Located on the north-west (Atlantic) side of the island, the IBA includes La Grotte aux Bassins and the Trou d’Enfer, an area of limestone cliffs and terraces on the north-east slopes of Morne Monde and Morne Pois Congo. The limestone terraces are cultivated (plantains, bananas, coffee and beans) and grazed (goats and some cattle), but on the steep slopes between terraces there is xerophytic shrubland and woodland with many epiphytes.

**Birds**

This IBA supports populations of five (of the 30) Hispaniola EBA restricted-range birds, namely Hispaniolan Lizard-cuckoo *Saurothera longirostris*, Antillean Mango *Anthracothorax dominicus*, Vervain Hummingbird *Mellisuga minima*, Stolid Flycatcher *Myiarchus stolidus* and (the only area in Hispaniola for) Thick-billed Vireo *Vireo crassirostris*.

Three Île de la Tortue endemic subspecies are present in this IBA: *V. crassirostris tortugae*, Bananaquit *Coereba flaveola nectarea* and Greater Antillean Bullfinch *Loxigilla violacea maurella*. The Near Threatened White-crowned Pigeon *Patagioenas leucocephala* and Plain Pigeon *P. inornata* occur.

**Other biodiversity**

Nothing recorded although restricted-range species are almost certainly present.

**Conservation**

Grottes aux Bassins et Trou d’Enfer IBA has been proposed as part of a protected area (based on the biodiversity, historical and cultural interests of the area, and its ecotourism potential), but there is currently no protection allocated this site. The woodland and shrubland is being destroyed as a result of fuelwood extraction and conversion to agriculture. Cave system alteration is increasing with human uses during planting seasons non-guided ecotourism tours.

<b>HT005 Trou Caïman</b>		<b>Unprotected</b>
<p><b>COORDINATES</b> 18°38'N 72°08'W  <b>ADMIN REGION</b> Département de l'Ouest  <b>AREA</b> 1,000 ha  <b>ALTITUDE</b> 10 m  <b>HABITAT</b> Wetland, mangrove, shrubland</p>		<p><b>THREATENED BIRDS</b> <span style="border: 1px solid black; padding: 2px;">5</span></p> <p><b>RESTRICTED-RANGE BIRDS</b> <span style="border: 1px solid black; padding: 2px;">10</span></p> <p><b>BIOME-RESTRICTED BIRDS</b> <span style="border: 1px solid black; padding: 2px;"> </span></p> <p><b>CONGREGATORY BIRDS</b> <span style="border: 1px solid black; padding: 2px;"> </span></p>
		

**Site description**

Trou Caïman IBA (or Dlo Gaye) is a shallow, freshwater lake c.20 km north-east of Port-au-Prince, in the Plaine du Cul-de-Sac. Trou Caïman, together with Lac Azuéli (IBA HT006) and the Enriquillo wetlands in the Dominican Republic, form a fresh to salty water ecosystem of outstanding biological value. Reeds, sedges and cattails predominate in the north and east of the lake, grass fringes the western edge and there is dry shrubland on the southern edge. Mangroves growing on the north-eastern side are a remnant of the coastal vegetation of a shallow sea that separated Hispaniola into two Paleo-islands during the Pleistocene. The local population of c.22,000 people lives on cultivating surrounding land for sugarcane, sweet potatoes, beans etc. Over 150 fishermen work the lake, and artisans use the reeds and sedges to weave straw products.

**Birds**

This IBA is primarily a waterbird site. The Near Threatened Caribbean Coot *Fulica caribaea* occurs, and the Vulnerable West Indian Whistling-duck *Dendrocygna arborea* occurred historically, although there are no recent records. Flocks of Caribbean Flamingo *Phoenicopterus ruber* are present along with good (but unknown) numbers of waterbirds and shorebirds. The IBA also supports populations of 10 (of the

30) Hispaniola EBA restricted-range birds, four of which are globally threatened birds, namely the Vulnerable Hispaniolan Parakeet *Aratinga chloroptera*, Hispaniolan Amazon *Amazona ventralis* and White-necked Crow *Corvus leucognaphalus*, and the Near Threatened Hispaniolan Palm Crow *Corvus palmarum*.

**Other biodiversity**

Nothing recorded.

**Conservation**

Trou Caïman IBA is unprotected and no conservation actions have been undertaken, although the site was identified for protection over 20 years ago. Due to the development of sugar industry during colonial times, this area was heavily exploited for its hardwood to provide lumber for the railroad system and logs for energy. Current threats come from industrial development (using both land and water), hunting (of ducks and other waterbirds), pollution and the general unregulated direct and indirect impact of 20,000 people using the lake's resources. The ducks were monitored by Ducks Unlimited (2002–2005) and birdwatchers regularly visit the lake. Its proximity to the capital provides an excellent opportunity to develop the IBA as a “Watchable Wildlife Pond”.

<b>HT006 Lac Azuéli</b>		<b>Unprotected</b>
<p><b>COORDINATES</b> 18°34'N 72°02'W  <b>ADMIN REGION</b> Département de l'Ouest  <b>AREA</b> 13,240 ha  <b>ALTITUDE</b> 0 m  <b>HABITAT</b> Wetland, shrubland</p>		<p><b>THREATENED BIRDS</b> <span style="border: 1px solid black; padding: 2px;">1</span></p> <p><b>RESTRICTED-RANGE BIRDS</b> <span style="border: 1px solid black; padding: 2px;"> </span></p> <p><b>BIOME-RESTRICTED BIRDS</b> <span style="border: 1px solid black; padding: 2px;"> </span></p> <p><b>CONGREGATORY BIRDS</b> <span style="border: 1px solid black; padding: 2px;"> </span></p>
		

**Site description**

Lac Azuéli IBA (also called Etang Saumâtre) is Haiti's largest lake which lies south-east of Trou Caïman IBA (HT005), close to the Haiti–Dominican Republic border in the Neiba–Cul-de-Sac depression. Its waters are brackish. Reeds, sedges and cattails predominate in the north-west, adjacent to the wetland leading to the Trou Caïman lake. Grass fringes the western edge and there is dry shrubland on the karstic southern edge. Mangroves growing on the north-western side are a remnant of the coastal vegetation of a shallow sea that separated Hispaniola into two Paleo-islands during the Pleistocene. A number of springs provide drinking water to the populations of Malpasse and Fond Parisien. Surrounding settlements house 60,000 people supported by (irrigated) agriculture, hunting and fishing.

**Birds**

This important wetland supports a large population (up to 300) of the Near Threatened Caribbean Coot *Fulica caribaea*. Flocks of (up to 100) Caribbean Flamingo *Phoenicopterus ruber* are present along with good (but unknown) numbers of waterbirds and shorebirds. The Vulnerable West Indian Whistling-duck *Dendrocygna arborea* has been reported, but its continued presence needs to be confirmed.

**Other biodiversity**

The Vulnerable American crocodile *Crocodylus acutus* occurs, and the lake supports five endemic species of fish and an endemic turtle.

**Conservation**

Lac Azuéli IBA is state owned, and although listed by the government to become a protected area, it is not protected yet. The lake's waterbirds were surveyed by Ducks Unlimited (2002–2005) and birdwatchers visit the lake frequently. The crocodiles were surveyed in 1985. Due to the development of the indigo and sugar industry during colonial times, this area was heavily exploited for its hardwood to provide lumber for the railroad system and logs for energy. Rice, sugarcane and other staples are grown in the surrounding land, with vegetables under irrigation during the cool season. Over 300 fishermen work the lake, along with hunters (shooting ducks and flamingos). The slopes on the lower Massif de la Selle are being exploited for limestone building materials. Being very close to the transnational road and international border between Haiti and the Dominican Republic, the lake serves as a garbage “landfill” and as a toilet for passengers waiting to pass through immigration.

### HT007 Aux Diablotins

**COORDINATES** 18°20'N 72°15'W  
**ADMIN REGION** Département de l'Ouest,  
 Département du Sud-Est  
**AREA** 1,980 ha  
**ALTITUDE** 1,500–2,282 m  
**HABITAT** Rocky areas, forest



Black-capped  
Petrel

### National Park

THREATENED BIRDS	11
RESTRICTED-RANGE BIRDS	19
BIOME-RESTRICTED BIRDS	
CONGREGATORY BIRDS	

#### Site description

Aux Diablotins IBA extends along the escarpment that forms the northern boundary of La Visite National Park in the Massif de la Selle, south-eastern Haiti. The IBA embraces a narrow band c.20 km long from Morne d'Enfer (in the east) to Morne Kaderneau (in the west), including Morne La Visite, Morne Tête Opaque and Morne Cabaio (all of which are c.2,000–2,200 m high). It comprises the 1,500-ha of scarp face and cliffs (which drop down to 1,500 m in the north), and areas down to 1,600 m on the southern slopes. The scarp face supports montane broadleaf forest, with small remnant patches also on the southern slopes. There is pine (*Pinus occidentalis*) forest along the southern border. Almost all the forest (except on the scarp face) has been cleared for vegetable and corn cultivation. Aux Cornichons IBA (HT008) abuts this IBA to the south.

#### Birds

This IBA is home to one of the few known breeding sites of the Endangered Black-capped Petrel *Pterodroma hasitata*. Small numbers nest in colonies along the cliffs (Morne La Visite escarpment) north-east of Seguin. The IBA supports populations of 19 (of the 30) Hispaniola EBA restricted-range birds, eight of which are globally threatened, including the

Endangered La Selle Thrush *Turdus swalesi* and Hispaniolan Crossbill *Loxia megaplaga*, the Vulnerable Hispaniolan Parakeet *Aratinga chloroptera*, Hispaniolan Amazon *Amazona ventralis*, Golden Swallow *Tachycineta euchrysea* and (Western) Chat Tanager *Calyptophilus frugivorus tertius*. The Vulnerable Bicknell's Thrush *Catharus bicknelli* winters in this IBA in significant numbers.

#### Other biodiversity

The Vulnerable Hispaniolan hutia *Plagiodontia aedium* occurs along with many plants that are endemic to the area.

#### Conservation

Aux Diablotins IBA is state-owned land along the northern side of Parc National La Visite. It has been identified as a core zone of the park due to the endemism of the biodiversity, scenic view and water catchment importance. Various studies have been undertaken to document the biodiversity (especially birds in recent years) and develop management plans, but formal park management is non-existent. Local NGOs (e.g. Fondation Seguin) are working with communities in the park to try and reduce threats, although the socio-economic needs of the people are great. As a result there has been significant habitat loss and very little montane broadleaf forest remains.

### HT008 Aux Cornichons

**COORDINATES** 18°21'N 72°16'W  
**ADMIN REGION** Département du Sud-Est  
**AREA** 630 ha  
**ALTITUDE** 1,000–1,870 m  
**HABITAT** Forest



La Selle  
Thrush

### National Park

THREATENED BIRDS	8
RESTRICTED-RANGE BIRDS	17
BIOME-RESTRICTED BIRDS	
CONGREGATORY BIRDS	

#### Site description

Aux Cornichons IBA is situated in the centre of La Visite National Park in the Massif de la Selle, south-eastern Haiti. The IBA lies north-west of Seguin and is bordered to the north by Ti Place and the Aux Diablotins IBA (HT007), on the east by Bois Pin Jean Noel and to the west by Roche Plate. La Scierie, which was the centre of the area's logging industry in the 1950s (when the pine forest was harvested), is on the south-eastern edge of the IBA. This sloping karst limestone area was formerly covered in wet montane broadleaf forest (with tree ferns, orchids and bromeliads), but only remnants remain, the main one (20 ha) being along the ravine at Berac.

#### Birds

This IBA supports populations of 17 (of the 30) Hispaniola EBA restricted-range birds, including eight globally threatened birds, including the Endangered La Selle Thrush *Turdus swalesi*, the Vulnerable Hispaniolan Parakeet *Aratinga chloroptera*, Golden Swallow *Tachycineta euchrysea* and (Western) Chat Tanager *Calyptophilus frugivorus tertius*, and the Near Threatened Hispaniolan Trogon *Priotelus roseigaster* and Hispaniolan Palm Crow *Corvus palmarum*. The Vulnerable Bicknell's Thrush *Catharus bicknelli* winters in this IBA in significant numbers and the Near Threatened Plain Pigeon

*Patagioenas inornata* occurs. It is thought that Hispaniolan Amazon *Amazona ventralis* and White-winged Warbler *Xenoligea montana* have already been extirpated from this IBA.

#### Other biodiversity

The Vulnerable Hispaniolan hutia *Plagiodontia aedium* occurs along with many endemic plants including *Hypericum millefolium*, *Miconia rigidissima*, *Gesneria hypoclada*, *Siphocamyllus caudatus*, *Ilex blancheana*, and numerous orchids and epiphytes.

#### Conservation

Aux Cornichons IBA is state-owned and protected within the 3,000-ha Parc National La Visite. It has been identified as a core zone of the park due to the endemism of the biodiversity and water catchment importance. Aux Cornichons IBA is probably the most threatened remnant forest in Haiti. In spite of the legal protection, there is no formal park management and the forest is cleared by poor farmers to produce vegetables and herbs (some of which are proving to be invasive species), and is cut for fuelwood, both of which lead inevitably to erosion. Animals in the IBA are hunted, and plants are extracted to be sold as ornamentals in Pétiion-Ville and Port-au-Prince.

**HT009 Aux Bec-Croisés**

**COORDINATES** 18°20'N 73°58'W  
**ADMIN REGION** Département du Sud  
**AREA** 2,455 ha  
**ALTITUDE** 1,850 m  
**HABITAT** Forest


**National Park/Biosphere Reserve**

THREATENED BIRDS	5
RESTRICTED-RANGE BIRDS	11
BIOME-RESTRICTED BIRDS	
CONGREGATORY BIRDS	

**Site description**

Aux Bec-Croisés IBA is in the Massif de la Hotte, in the Southern Peninsula. Included in the core zone of the Macaya Biosphere Reserve, it lies north-east of Bois Musicien IBA (HT010). The IBA is situated in Plaine Boeuf on the Chaîne Formond, overlooking the Grande Ravine du Sud. Settlements in the area include Ti Chien, Kay Tilus and Kay Ogile. This is an area of mixed wet broadleaf and pine (*Pinus occidentalis*) forest growing on a mosaic of volcanic and limestone soils. The broadleaf forest is known locally as “rak bwa”.

**Birds**

This IBA supports populations of 11 (of the 30) Hispaniola EBA restricted-range birds, including the Endangered Hispaniolan Crossbill *Loxia megaplaga*, the Vulnerable Golden Swallow *Tachycineta euchrysea* and (Western) Chat Tanager *Calyptophilus frugivorus tertius*, and the Near Threatened Grey-crowned Palm-tanager *Phaenicophilus poliocephalus*. The Vulnerable Bicknell’s Thrush *Catharus bicknelli* winters in this IBA in significant numbers.

**Other biodiversity**

Chaîne Formond is the centre of biodiversity for the plant genus *Mecranium* and supports a number of plants endemic to the IBA such as *Ekmaniocharis* spp. Many Melastomataceae, ferns, bromeliads, *Peperomia* spp. and orchids are endemic.

**Conservation**

Aux Bec-Croisés IBA is state-owned land, and it shares its boundary with the main part of the Macaya Biosphere Reserve. Management of the area by University of Florida technicians in the early 1990s has not been continued, but the birds were surveyed in 2004 by Vermont Institute of Natural Science (in collaboration with the Société Audubon Haiti, Université Notre-Dame, and the Ministry of Environment). The area is subject to frequent fires (on the lower slopes), and forest is being lost to cultivation, lumber and fuelwood extraction, cutting of bamboo (*Arthrostyidium haisiense*), over-grazing and erosion. With a growing local population, the pressures on the forest are increasing.

**HT010 Bois Musicien**

**COORDINATES** 18°19'N 74°01'W  
**ADMIN REGION** Département du Sud  
**AREA** 1,060 ha  
**ALTITUDE** 950–1,200 m  
**HABITAT** Forest


**National Park/Biosphere Reserve**

THREATENED BIRDS	6
RESTRICTED-RANGE BIRDS	14
BIOME-RESTRICTED BIRDS	
CONGREGATORY BIRDS	

**Site description**

Bois Musicien IBA is in the Massif de la Hotte, in the Southern Peninsula. Located on the Morne Cavalier mountains, it forms the south-western spur of the Macaya Biosphere Reserve. To the east is the plain of Durand and to the south is the harsh karstic zone of Soulette. Nearby localities of Durand, Portal and Formond connect to Cavalier by paths used intensively on market days, and during planting and harvest seasons. The IBA comprises diverse wet broadleaf forest (“rak bwa” with numerous ferns, orchids and bromeliads) on limestone karst, and cloud cover is common at higher altitudes. The forest is in fact a mosaic of habitats resulting from cultivation (of very small fields), wood gathering and livestock grazing.

**Birds**

This IBA is significant for a diversity of globally threatened and restricted-range birds. The area supports populations of 14 (of the 30) Hispaniola EBA restricted-range birds, including the Vulnerable Golden Swallow *Tachycineta euchrysea*, White-winged Warbler *Xenoligea montana* and (Western) Chat Tanager *Calyptophilus frugivorus tertius*. Three Near Threatened birds also occur. The bird diversity in this IBA is higher than elsewhere in the Macaya Biosphere Reserve. The area is important for wintering Neotropical migrants.

**Other biodiversity**

There are many endemic species in this area, most notably among the snails, *Anolis* lizards and *Eleutherodactylus* frogs, including the Critically Endangered *E. amadeus*, *E. corona* and *E. dolomedes*. The Endangered Hispaniolan solenodon *Solenodon paradoxus* and Vulnerable Hispaniolan hutia *Plagiodontia aedium* occur, as do many bats such as the Near Threatened moustached bat *Pteronotus quadridens* and Brazilian free-tailed bat *Tadarida brasiliensis constanzae*.

**Conservation**

Bois Musicien is within Macaya Biosphere Reserve. Rich families “control” (but do not own) the land in Plain Durand and Plain Formond, and very poor families (living in “ajoupas” or thatch huts) farm this land, or raise free-roaming livestock. Forest is being lost to cultivation, lumber and fuelwood extraction, over-grazing and erosion. The birds are additionally threatened by hunting. This IBA is the most accessible part of the Macaya Biosphere Reserve and thus the most impacted, and also the most biologically studied. Conservation management (1989–2001) enabled some regeneration of forest, but there is currently no management within the IBA.