DOMINICAN REPUBLIC

LAND AREA 48,730 km² ALTITUDE -40–3,087 m HUMAN POPULATION 9,365,800 CAPITAL SANTO DOMINGO IMPORTANT BIRD AREAS 21, totalling 7,416 km² IMPORTANT BIRD AREA PROTECTION 14% BIRD SPECIES 306 THREATENED BIRDS 23 RESTRICTED-RANGE BIRDS 34

Laura Perdomo and Yvonne Arias (Grupo Jaragua)



Sierra Martín García IBA—a poorly studied area in need of conservation action.

(PHOTO: RICARDO BRIONES)

INTRODUCTION

The Dominican Republic occupies the eastern two-thirds of the island of Hispaniola which, at 77,900 km², is the second largest island in the Caribbean. The Republic of Haiti, with which the Dominican Republic shares a 360-km border, occupies the rest of Hispaniola. The island lies 80 km east of Cuba, 90 km west of Puerto Rico, and 150 km from northeastern Jamaica. The topography of the Dominican Republic is dominated by four principal mountain systems that run from north-west to south-east, namely the Cordillera Septentrional (Northern Mountain Range); the Cordillera Central (Central Mountain Range), which extends into Haiti where it is called the Massif du Nord; the Sierra de Neiba, which extends into Haiti as the Montagnes du Trou d'Eau; and Sierra de Bahoruco, which in Haiti continues as the Massif de la Selle. These parallel mountain ranges are responsible for the longest and most voluminous rivers in the Caribbean: Yaque del Norte, Yaque del Sur, Yuna-Camú, and Nizao. The country also contains the largest number of lakes and lagoons in the insular Caribbean, including Lago Enriquillo, the largest body of still-water in the region. The diverse habitats (five distinct ecoregions are recognised) include 1,500 km of coastline, freshwater and brackish wetlands, dry

forest, broadleaf forest and pine forest, xeric areas, savannas, and dunes. The climate is warm, with a mean annual temperature of 27°C.

Hispaniola is considered to have the highest biodiversity in the Caribbean, distributed across an intricate mosaic of environments and microclimates that have formed as a result of a complex geological history. This has produced sites which range from 40 m below sea- level (e.g. Hoya de Enriquillo), to those at more than 3,000 m above (within the Cordillera Central), as well as sites such as Isla Alto Velo that supports unique species confined to only 1 km². Rates of endemism across most taxonomic groups are high. However, most habitats (but especially cloud forest and moist broadleaf forest) that support these endemic species have been (and continue to be) severely affected by deforestation and other human pressure. With the growing human population concentrated in coastal regions, habitats in these areas (e.g. beaches, coastal wetlands and mangroves) are suffering from multiple threats. Not only are the habitats being destroyed directly by cutting forests, draining or polluting wetlands and urban and agricultural expansion, but invasive alien species (including plants, predatory and grazing animals) are impacting what habitat remains and the species that rely upon them.



The Vulnerable Hispaniolan Amazon and Hispaniolan Parakeet are both captured for the illegal pet trade.

(PHOTO: LANCE WOOLAVER)

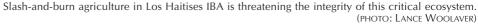
Conservation

The Environment and Natural Resources General Law (No.64-00) is the legal framework that protects wild areas and biodiversity in the Dominican Republic. This law allows for the creation of sector-specific laws such as the Law of Protected Areas (No.202-04) which regulates the National System of Protected Areas (NSPA). However, attempts in 2004–2005 by the president and the legislature to eviscerate the national parks system by selling-off protected lands for tourism and development activities shows how fragile the parks are from a legal standpoint. In response, conservation and academic groups are working towards modifying the

nation's constitution to declare the National System of Protected Areas as inalienable, non-sequestrable national treasures, and not subject to statutory limitations.

The National System of Protected Areas has improved in terms of the quantity of protected areas and their management categories over the last 20 years. In 1980, only nine areas (4.2% of the country's land area) were legally protected, but this number increased to 19 (11.2%) from 1981 to 1990, and to 86 areas (25.4%) between 2002 and 2008. The Jaragua-Bahoruco-Enriquillo Biosphere Reserve is unique in the country, embracing a number of protected areas and the Lago Enriquillo Ramsar Site. The Directorate of Protected Areas administers the management of protected area system, although a number of NGOs collaborate with or have been assigned to protected areas (e.g. Grupo Jaragua to Jaragua National Park, and Fundación Moscoso Puello to Valle Nuevo) under co-management agreements with the Directorate. However, in spite of this enlightened approach to management, only 10 of the Dominican Republic's national parks have management plans, and for only six is there some level of implementation.

The protected areas of the Dominican Republic face multiple threats to the effective conservation of their biodiversity. These include uncertainties in land ownership, the lack of an appropriate system of compensation for the expropriation of land for conservation purposes, lack of clear policies for the administration and management of funds generated by protected areas, inadequate management of the areas, as well as delayed local development as a result of centralised policies. Knowledge of regulations and permitted uses of the protected areas is lacking, as is a general awareness of their importance, value and the ecological services they provide. Together with imprecise boundaries, these deficiencies lead to disturbances such as expansion of agricultural activities (including cattle grazing), as well as forest fires, deforestation, illegal hunting, fishing, and trafficking of endangered species. Other threats relate to the expansion of unsustainable tourism,





mining, and hydro-electric projects. Finally, poverty levels in communities adjacent to the parks have led to unsustainable land-use practices and illegal human settlement both within the protected areas and their buffer zones. The threats faced by the nation's protected areas (many of which are IBAs) are indicative of what is happening to biodiversity across the country.

Birds

Of the 306 bird species reported for the Dominican Republic c.140 are breeding residents. Hispaniola is also an important over-wintering area for Neotropical migrants, with 136 species recorded. The Hispaniolan avifauna exhibits exceptional levels of endemism. The island is an Endemic Bird Area (EBA) with 36 restricted-range species, 34 of which are known from the Dominican Republic. The remaining two species, Greycrowned Palm-tanager Phaenicophilus poliocephalus and Thick-billed Vireo Vireo crassirostris, have only been recorded in Haiti. A total of 28 of the restricted-range birds are endemic to the island, the others being shared with adjacent EBAs. For example, Vervain Hummingbird Mellisuga minina, 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 over 35 subspecies described from Dominican Republic.

There are records of 23 threatened species in the Dominican Republic, including one Critically Endangered, four Endangered, nine Vulnerable, and nine Near Threatened species. However, three of the Near Threatened species were excluded from the IBA analysis since they are not considered to sustain significant populations in the country, namely Back Rail *Laterallus jamaicensis*, Piping Plover *Charadrius melodus* and Golden-winged Warbler *Vermivora chrysoptera*. The

The Critically Endangered Ridgway's Hawk is confined to Los
Haitises IBA where the population is declining.

(PHOTO: FLADIO FERNÁNDEZ)



threat category and national population sizes (where known) of the globally threatened birds are listed in Table 1. The Critically Endangered Ridgway's Hawk *Buteo ridgwayi* is now confined to Los Haitises IBA (DO018) where the small population is declining. The Endangered Black-capped Petrel *Pterodroma hasitata* maintains a small breeding colony in the Sierra de Bahoruco IBA (DO006), and this IBA also supports critical populations of the other Endangered species, namely Hispaniolan Crossbill *Loxia megaplaga*, La Selle Thrush *Turdus swalesi* and Bay-breasted Cuckoo *Coccyzus rufigularis*. Many of the globally threatened birds are restricted to the high altitude broadleaf and pine forests.

The Dominican Republic is also important for large breeding and wintering populations of waterbirds and seabirds. Laguna Limón (DO019) and Laguna Cabral (DO008) support the largest reported population of the Near Threatened Caribbean Coot *Fulica caribaea*, with up to 6,000 and 3,000 individuals, respectively. Laguna Cabral is also home to some of the largest wintering concentrations of ducks in the Caribbean with up to 160,000 individuals (of various species) reported. Seabirds are primarily concentrated on the satellite islands around the Dominican Republic's coast. They are relatively poorly known in terms of colony status and size, but the Sooty Tern Sterna fuscata colony (of 80,000 pairs) on Isla Alto Velo is one of the largest in the Caribbean. Monitoring of the other known breeding islands would provide valuable information that may result in new IBAs being defined.

IMPORTANT BIRD AREAS

Dominican Republic contains 21 IBAs—the country's international site priorities for bird conservation—cover c.14% of the land surface of the country. The IBAs have been identified on the basis of 49 key bird species (listed in Table 1) that variously meet the IBA criteria. These species include

A critical population of the Endangered Hispaniolan Crossbill occurs within the Sierra de Bahoruco IBA.

(PHOTO: ELADIO FERNÁNDEZ)



				D	O001	DO002	DO003	DO004	DO005	DO006	DO007	DO00
			National	iż.								I
(ey bird species	Crite	ria	population	Criteria	•	-	-	-			- 1	
Vest Indian Whistling-duck Dendrocygna arborea	VU 🔳								√		✓	
esser Scaup Aythya affinis			90,000									90,00
uddy Duck Oxyura jamaicensis			10,000									10,00
lack-capped Petrel Pterodroma hasitata	EN 🔳		60-120							60-120		
Aagnificent Frigatebird Fregata magnificens			250-999									
rown Pelican Pelecanus occidentalis			250-999								250	
idgway's Hawk Buteo ridgwayi	CR 🔳		240-360									
Caribbean Coot Fulica caribaea	NT		2,500-9,999									400-3,00
east Tern Sterna antillarum			250-999								300	
ridled Tern Sterna anaethetus			1,000-2,499	1,000-	-2,499							
ooty Tern Sterna fuscata			130,000								130,000	
rown Noddy Anous stolidus		•		5	0-380							
Vhite-crowned Pigeon Patagioenas leucocephala	NT		2,500-9,999								✓	
lain Pigeon Patagioenas inornata	NT											
Grey-headed Quail-dove Geotrygon caniceps	VU 🔳											
Hispaniolan Parakeet Aratinga chloroptera	VU =					✓	30			✓	30	
lispaniolan Amazon Amazona ventralis	VU 📕					✓	30	30	✓	✓	30	
lispaniolan Lizard-cuckoo Saurothera longirostris						✓	✓	✓	✓	✓	✓	
ay-breasted Cuckoo Coccyzus rufigularis	EN		2,500-9,999			✓	/	✓		33		
shy-faced Owl Tyto glaucops			,,,,,,,,,,			√	✓ /		√	√	√	
east Pauraque Siphonorhis brewsteri	NT		10,000–19,999				1	✓	✓ ·	✓ ·	√	
Hispaniola Nightjar Caprimulgus ekmani			.,				1	√		✓		
Intillean Mango Anthracothorax dominicus						✓	✓	✓	✓	✓	✓	
Hispaniolan Emerald Chlorostilbon swainsonii						✓	✓	✓	<u> </u>	✓		
'ervain Hummingbird Mellisuga minima						·	✓	✓	√	·	√	
lispaniolan Trogon Priotelus roseigaster	NT					<i>✓</i>	·	✓	•	30	•	
larrow-billed Tody Todus angustirostris						<i>✓</i>	, ,	✓		✓		
road-billed Tody Todus subulatus						· /	ſ	· /		· /	ſ	
antillean Piculet Nesoctites micromegas						./	./	./		./	./	
Hispaniolan Woodpecker Melanerpes striatus						√					/	
Greater Antillean Elaenia Elaenia fallax						· ·	· · · · · · · · · · · · · · · · · · ·	√	v	· · · · · · · · · · · · · · · · · · ·	•	
Hispaniolan Pewee Contopus hispaniolensis						√	√	√	,	√	/	
tolid Flycatcher Myiarchus stolidus						√	√	√	√	√	· · · · · · · · · · · · · · · · · · ·	
lat-billed Vireo Vireo nanus						v	v	√	√	√	√	
	NIT -					FO 240	00	√			v	
dispaniolan Palm Crow Corvus palmarum	NT -					50–249	90	√	90	90	30	
Vhite-necked Crow Corvus leucognaphalus almchat Dulus dominicus	VU 📕					√	√			30		
	V/I I =					√	√	√ 2€	√	✓ 20	✓	
Golden Swallow Tachycineta euchrysea	VU 📕					✓	✓	36		30	,	
early-eyed Thrasher Margarops fuscatus											✓	
ufous-throated Solitaire Myadestes genibarbis	V/I I	•				√	✓ 20	✓		√		
icknell's Thrush Catharus bicknelli	VU =					✓	30			√		
a Selle Thrush Turdus swalesi	EN						√	√		√		
antillean Siskin Carduelis dominicensis								✓		√		
dispaniolan Crossbill Loxia megaplaga	EN		3,100–3,500				50–249			3,000		
reen-tailed Warbler Microligea palustris						√	√	✓ 20		✓ 20	✓	
Vhite-winged Warbler Xenoligea montana	VU 📕					√	√	30		30		
lack-crowned Palm-tanager Phaenicophilus palmarum						√	√	√	✓	√	✓	
Chat Tanager Calyptophilus frugivorus	VU 📕					1	✓	✓		30		
Intillean Euphonia Euphonia musica						✓	✓	✓		✓		

DO02	DO020	DO019	DO018	DO017	DO016	DO015	DO014	DO013	DO012	ninican Republio DO011	DO010	DO009
1												
1		_							-			
	•	•		✓								
				· ·								
	540–600											
			240–360									
		1,000–6,000										
	2,500–9,999											
			30						30			30
						√		√		√		30
	30 ✓		30 ✓		✓	√ √		√ √	✓	√ √	30	30 ✓
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	✓		✓		✓	✓		✓	✓	✓	✓	✓
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	· ·		V		✓ ✓	√		√	√	√	√	√
	✓		✓		✓	✓		✓	✓	✓	✓	✓
						✓		✓	30	✓	✓	30
			✓		✓	✓		✓	✓	✓	✓	✓
	✓		✓		✓	✓		✓	✓	✓	✓	✓
	✓ ✓		✓		✓	√		√	√ √	√	√	√ √
	v					✓		√ √	✓ ✓	√ √	√ √	√
	✓		✓		√	√		✓	√	√	√	√
	✓		√		/	✓		✓	√	✓	✓	✓
	✓		✓						✓		✓	✓
				90		✓			90	✓	✓	✓
	✓		250–999									✓
	✓		✓		✓	✓		✓	√	✓ 20	✓	√ √
	✓								✓	30		√
	<u> </u>		✓			√		✓	✓	✓	✓	✓
	✓		√			✓	250–999	✓		30	30	
						✓				✓		
									✓	✓		✓
										50–249		
	✓		✓		✓	✓			✓	√	√	
	✓					,		,	√ √	√	✓ ✓	✓
	V		✓		√ √	✓		✓	30	√ 30	30	30
			1		✓ ✓			✓	√	30 ✓	30 ✓	J0 ✓



Cayos Siete Hermanos IBA supports globally significant numbers of breeding seabirds.

(PHOTO: RICARDO BRIONES)

20 threatened birds (see "Birds" above), all 34 restricted-range species, and 10 congregatory species. Of the 21 IBA identified, 20 support critical populations of globally threatened birds; 17 are home to important assemblages of restricted-range species; five support globally significant populations of congregatory waterbirds or seabirds; and four are important for congregatory birds at a regional level.

All but two IBAs belong partially or totally to the National System of Protected Areas, and thus are formally protected under a recognised management category. IBAs at Punta Cana (DO021) and Honduras (DO016) lack any type of formal protection, whilst Loma Nalga de Maco–Río Limpio IBA (DO002) protected in part as a national park. The majority of the country's life zones, habitats and vegetative associations are represented within the IBA network. Some of the IBA are recognised under other international designations, such as the Lago Enriquillo Ramsar Site, the Jaragua-Bahoruco-Enriquillo Biosphere Reserve, and Los Haitises and Sierra de Bahoruco as Alliance for Zero Extinction (AZE) sites.

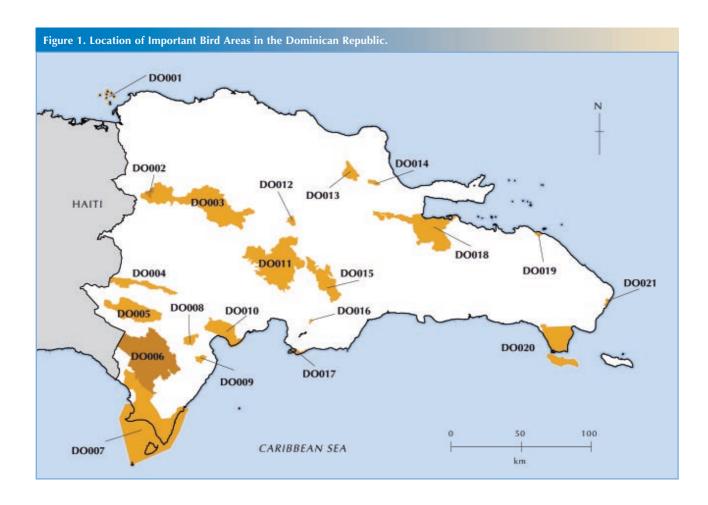
Grupo Jaragua has been coordinating the IBA program in the Dominican Republic since 2002. Grupo Jaragua is a nongovernmental, non-profit organisation established in 1987 and whose mission is to bring about the effective management of Dominican Republic's natural resources and biodiversity through research and projects aimed at solving local conservation problems. Despite most of their efforts being concentrated in the Jaragua National Park and surrounding communities, Grupo Jaragua pays special attention to the development of the Jaragua-Bahoruco-Enriquillo Biosphere Reserve (which embraces three IBAs) through community participation projects. The participation of multiple key actors from government institutions, the private sector, nongovernmental organisations, community organisations, international cooperation agencies, and interested individuals has enabled the successful development and implementation of the IBA program in the country, as well as the achievement

of local and national capacity building. The documentation of the Dominican Republic's IBAs represents a significant step in the program and will allow the development of more complete conservation agendas for these sites.

State, pressure and response scores have been collated for 11 (DO001 Cayos Siete Hermanos, DO003 Armando Bermudez National Park, DO005 Lago Enriquillo, DO006 Sierra de Bahoruco, DO007 Jaragua National Park, DO008 Laguna Cabral, DO011 Valle Nuevo, DO013 Loma Quita Espuela, DO018 Los Haitises, DO019 Laguna Limón and DO020 Del Este National Park) of the Dominican Republic's IBAs, but should be monitored annually at all IBAs to provide an objective status assessment and highlight management interventions that might be required to maintain these

Valle Nuevo IBA is one of 11 sites monitored for threats to IBAs ("Pressure"), the condition of IBAs ("State") and conservation actions taken at IBAs ("Response"). (PHOTO: RICARDO BRIONES)





internationally important biodiversity sites. Monitoring of the country's globally threatened birds (especially the Critically Endangered and Endangered species), waterbirds and seabirds is urgently needed, and can usefully inform the annual status assessment of the IBA network.

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■ Site description

Cayos Siete Hermanos IBA is in Montecristi province and comprises a group of small, barren islands on the Montecristi Bank, stretching 5–15 km from the north-westernmost coast of the Dominican Republic. The islands of Torurú, Monte Chico and Terrero form the closest group to the mainland while Monte Grande, Ratas, Muerto and Arenas make up the most distant, westward group. Low thorny shrubs, grasses, herbs and cacti make up the scarce vegetation present on these sandy islets. Marine areas up to 1 km from each island are included within the IBA. The coastal region of Montecristi Province is an important fishing area associated with the Yaque del Norte River.

Birds

This IBA is significant for its breeding seabirds, with the population of Bridled Tern *Sterna anaethetus* being globally important and that of Brown Noddy *Anous stolidus* regionally so. Other species such as Sooty Tern *S. fuscata* also nest on the islands. The most significant seabird colonies are reported from Monte Chico and Ratas islands, with nesting primarily concentrated between May and August.

■ Other biodiversity

The Critically Endangered hawksbill turtle *Eretmochelys* imbricata is present, along with the commercially-

important queen conch *Strombus gigas*. Cayos Siete Hermanos (and their coral reefs) support a diverse marine fauna and are important marine nursery grounds for the Montecristi Bank.

Conservation

Cayos Siete Hermanos IBA is part of Cayos Siete Hermanos Wildlife Refuge and supports activities such as fishing, marine research, ecotourism, birdwatching and traditional tourism. However, the cays have been subject to significant human disturbance, mainly by fishermen from both the Dominican Republic and Haiti. Disturbances include: cutting trees for firewood, establishment of camps (with their associated refuse), indiscriminate and inappropriate fishing practices (e.g. use of chemicals and harpoons), overfishing, and unsustainable collection of the eggs of Sterna anaethetus, S. fuscata and Anous stolidus (which are thought to have aphrodisiac properties) for food. Other threats include the removal of sea-turtle eggs and individuals, the presence of rats Rattus sp., unsustainable tourism, sand extraction, and an increasing sediment load in marine waters. Most human activity is concentrated on Torurú, Terrero, Rata, Muerto and Arenas islands. Guards from the refuge and the navy have, in the last few years, have been protecting the seabird colonies during the breeding season.



Loma Nalga de Maco-Río Limpio IBA is located in the northern region of the Dominican Republic, towards the westernmost end of the Cordillera Central, close to the border with the Republic of Haiti. Nalga de Maco National Park belongs to the municipality of Pedro Santana, province of Elías Piña. To the north it borders Los Almácigos municipality, Santiago Rodríguez province, to the east with the Armando Bermúdez National Park (DO003), to the west Restauración municipality, Dajabón province, and to the north-west with Río Limpio, a local coffee growing community. Communities surrounding the protected area are rural and generally lack basic services. A unique dwarf cloud forest survives in this IBA.

Birds

This IBA supports populations of 25 (of the 34) Hispaniolan EBA restricted-range birds, 10 of which are threatened including the Endangered Bay-breasted Cuckoo *Coccyzus rufigularis* (reported from the Río Limpio-Carrizal area) and the Vulnerable White-necked Crow *Corvus leucognaphalus*, Golden Swallow *Tachycineta euchrysea*, Bicknell's Thrush *Catharus bicknelli* (wintering), White-winged Warbler *Xenoligea montana*, and (Eastern) Chat Tanager *Calyptophilus frugivorus* (*frugivorus*).

Other biodiversity

Seven amphibian species are present (primarily in the riparian vegetation of the Río Limpio), representing 36% of those reported for the Cordillera Central. The flora is diverse with a high degree of endemism, particularly so in the summit area of the IBA.

Conservation

Loma Nalga de Maco-Río Limpio IBA is under mixed ownership. Nalga de Maco is a national park created in 1995 and ratified by law in 2000 and 2004. Río Limpio borders Nalga de Maco, but contains private lands and is not legally protected. Río Limpio offers visitor accommodation, and access to the national park via a two-day long hiking trail. Among the threats to this IBA are agriculture (including slash-and-burn practices), cattle ranching, forest fires, land invasions and human settlements, and disturbances caused by illegal migratory movements and scientific research. A visitor centre has been built at the end of what will become the "Hispaniola Trail", which will facilitate enjoyment of the national parks throughout the Cordillera Central.



■ Site description

Armando Bermudez National Park IBA is on the northern slope of the Cordillera Central, extending from Ciénaga de Manabao to Nalga de Maco National Park (IBA DO002). To the north it is bounded by the communities of Mata Grande, La Diferencia, Los Ramones, Lomita, and La Cidra. To the south is the José del Carmen Ramírez National Park with which it shares the highest peaks in the Cordillera Central, namely Pico Duarte, La Pelona and Pico Yaque. The most important rivers in the country originate from this IBA, including Yaque del Norte, Jagua, Bao, Amina, Guayubín, Mao, and Cenovi. The park is adjacent to small communities in Jarabacoa, San José de Las Matas, and Santiago Rodríguez districts.

Birds

This IBA supports populations of 31 (of the 34) Hispaniolan EBA restricted-range species. It is particularly significant for threatened species associated with montane and pine forests such as the Endangered Bay-breasted Cuckoo Coccyzus rufigularis, La Selle Thrush Turdus swalesi and Hispaniolan Crossbill Loxia megaplaga, and the Vulnerable White-winged Warbler Xenoligea montana, Golden Swallow Tachycineta euchrysea and (Eastern) Chat Tanager Calyptophilus frugivorus (frugivorus). The Vulnerable Hispaniolan Parakeet Aratinga chloroptera and Hispaniolan Amazona Amazona

ventralis also occur, and the IBA is a winter refuge for migratory species such as Vulnerable Bicknell's Thrush Catharus bicknelli.

Other biodiversity

Mammals include the Endangered Hispaniolan solenodon Solenodon paradoxus and Vulnerable Hispaniolan hutia Plagiodontia aedium. This is also one of the few areas where the endemic pine Pinus occidentalis occurs.

Conservation

The Armando Bermúdez National Park was created in 1956 and ratified in 2000 and 2004. The park is mostly used for conservation and research, although there is some agriculture. Pico Duarte is the primary "ecological" destination in the country. Popular visitor activities include hiking, camping, rafting and birdwatching. Local communities are actively involved in the area's management and conservation and generate income through ecotourism activities such as donkey rides and guided tours. The IBA has five visitor centres and a small eco-lodge. Main threats include agricultural expansion, cattle grazing, invasive alien species, fuelwood and timber extraction, dove hunting, fires, and rural infrastructure development. There are proposals to develop hydro-electric plants in the area.



Sierra de Neyba IBA is north of Lago Enriquillo (IBA DO005) and from the town of Galván it crosses into Haiti under the name of "Montagnes du Trou d'Eau". It extends south-east among the valleys of El Cercado, Hondo Valle, and Hoya de Enriquillo, descending gradually to the valley of the Río Yaque del Sur. The San Juan and Neyba valleys divide this IBA from the Cordillera Central and Sierra de Bahoruco respectively. The Sierra de Neyba is composed of limestone and now supports little primary forest. What does remain includes open pine forest (c.1% of the area), evergreen broadleaf forest, and dry forest (c.26% of the area). Nearly all forest below 1,600 m has been cut.

Birds

This IBA supports populations of 29 (of the 34) Hispaniolan EBA restricted-range species. It is particularly significant for the Endangered Bay-breasted Cuckoo *Coccyzus rufigularis* and La Selle Thrush *Turdus swalesi*, and the Vulnerable White-winged Warbler *Xenoligea montana*, Golden Swallow *Tachycineta euchrysea* and (Eastern) Chat Tanager *Calyptophilus frugivorus* (*frugivorus*). The Vulnerable Hispaniolan Parakeet *Aratinga chloroptera* was abundant but may have been extirpated due to poaching. The Critically Endangered Ridgway's Hawk *Buteo ridgwayi* may possibly still occur.

Other biodiversity

The Critically Endangered *Eleutherodactylus parabates* and the locally endemic *E. notitode* occur along with nine other endemic amphibians. Reptiles are represented by 39 island endemics including the locally endemic lizard *Anolis placidus*. Mammals include the Endangered Hispaniolan solenodon *Solenodon paradoxus* and Vulnerable Hispaniolan hutia *Plagiodontia aedium*. The flora includes over 170 endemics.

Conservation

The Sierra de Neyba National Park was created in 1995 (with boundaries set in 2004). Little conservation action has been undertaken, and there are numerous information gaps. Nevertheless, there are 24 park staff and a number of local conservation committees. Recreational activities include hiking, horse riding, mountain bikes, camping, agro-ecotourism, and birdwatching. Threats include slash-and-burn agriculture and agricultural expansion, livestock farming, charcoal production and logging. Landslides and floods are common. Illegal hunting of doves and trafficking of the parrot and parakeet are traditional local practices. Almost 40% of the park's dry forest area has been affected by shifting agriculture and other activities, resulting in erosion and habitat degradation. Uncontrolled immigration from Haiti is a serious problem.



■ Site description

Lago Enriquillo IBA is in the Neyba Valley between Independencia and Bahoruco provinces, south-western Dominican Republic. It comprises a closed system of hypersaline wetlands in Hoya de Enriquillo (40 m below sea-level), and receives waters from the Sierra de Neyba and Bahoruco mountain ranges, respectively to the north and south of the lake. Lago Enriquillo is flanked by marshy areas such as at Caño Boca de Cachón and Villa Jaragua. This is the largest lake in the insular Caribbean, with a surface area of 256 km² and a maximum depth of 24 m. It contains three islands, the largest being Isla Cabritos (24 km²), and Islita and Barbarita which connect to the lake shore when water levels drop.

Birds

This IBA is an important wetland site, supporting large numbers of waterbirds including hundreds of Caribbean Flamingos *Phoenicopterus ruber*, and ibises, egrets, herons and shorebirds. The Vulnerable West Indian Whistling-duck *Dendrocygna arborea* occurs. The areas adjacent to the lake support 14 (of the 34) Hispaniolan EBA restricted-range species, including the Vulnerable Hispaniolan Amazon *Amazona ventralis* and White-necked Crow *Corvus leucognaphalus*.

■ Other biodiversity

This IBA supports the country's only remaining viable population of the Vulnerable American crocodile *Crocodylus acutus*. The Critically Endangered Ricord's iguana *Cyclura ricordi* and Vulnerable rhinoceros iguana *C. cornuta* both occur. A rich ichthyofauna including *Limia sulphurophila* which is endemic to the lake.

■ Conservation

Isla Cabritos was declared as a national park in 1974, but it was not until 1996 that Lago Enriquillo and the surrounding marshy areas were incorporated into it. Lago Enriquillo and Isla Cabritos National Park is one of the core zones of the Jaragua-Bahoruco-Enriquillo Biosphere Reserve and was also Hispaniola's first Ramsar site. It is primarily used for fishing, aquaculture, and agriculture. However, the IBAs ecological integrity is threatened by cattle ranching, unsustainable fishing practices, hunting and capture of flamingos and crocodiles, destruction of vegetation, and the canalisation and deviation of water for irrigation and associated activities. In addition, the use of pesticides pollutes both the soil and water, and is impacting the preferred habitats of waterbirds and crocodiles. This IBA features key places for recreation and wildlife observation with great potential for sustainable tourism, conservation, research, and environmental education.



The Sierra de Bahoruco IBA is in south-west of the Dominican Republic, between the provinces of Pedernales, Independencia and Barahona. It is bordered to the north by Hoya de Enriquillo, to the south by Jaragua National Park (IBA DO007) and Barahona, and to the east by Jimaní. To the west it connects with Haiti's Massif de la Selle. Sierra de Bahoruco comprises an eastern section (represented in IBA DO009) and a western section embraced by this IBA. The highest peak is Loma del Toro, and the vegetation is a diverse range of forest types across a wide variety of life zones.

Birds

This IBA supports 32 (of the 34) Hispaniolan EBA restricted-range species. Threatened birds include the Endangered Black-capped Petrel *Pterodroma hasitata* (small numbers breed in the IBA), Bay-breasted Cuckoo *Coccyzus rufigularis*, La Selle Thrush *Turdus swalesi* and the largest known population of Hispaniolan Crossbill *Loxia megaplaga*. The IBA provides vital wintering habitat for 21 Neotropical migratory species including the Vulnerable Bicknell's Thrush *Catharus bicknelli*. The Critically Endangered Ridgway's Hawk *Buteo ridgwayi* occurred until 1994.

Other biodiversity

Threatened mammals include the Endangered Hispaniolan solenodon *Solenedon paradoxus* and Vulnerable Hispaniolan hutia *Plagiodontia aedium*. Many *Eleutherodactylus* frogs occur, all of which are Critically Endangered or Endangered, including the locally endemic *E. rufifemoralis* (Critically Endangered). Reptiles include the Vulnerable rhinoceros iguana *Cyclura cornuta* and Hispaniolan slider *Trachemys decorata*.

Conservation

Sierra de Bahoruco National Park was created in 1983 and its boundaries ratified by the Laws 64-00 and 202-04. It is one of the three core zones of the Jaragua-Bahoruco-Enriquillo Biosphere Reserve. The IBA contains important but unprotected sections in La Placa and Puerto Escondido. Activities include research, conservation, recreation and ecotourism. Main threats include agricultural expansion, introduced animals, forest fires, illegal logging, capture of parrot chicks and illegal hunting. Temporary settlement of illegal immigrants from Haiti moving through this area results in habitat damage and disturbances. Tree-nesting species are affected by the unsustainable removal of dead and diseased trees. Most of these problems are a result of weak park management and enforcement.



■ Site description

Jaragua National Park IBA is in the south-western corner of the Dominican Republic on the Barahona peninsula. It borders the Sierra Bahoruco IBA (DO006), and lies across the municipalities of Pedernales and Oviedo, close to the border with Haiti. Within the IBA are the Beata and Alto Velo islands, the Los Frailes and Piedra Negra cays, and Laguna Oviedo—a "Watchable Wildlife Pond" and a proposed Ramsar site. Surrounding communities are Juancho, La Colonia de Juancho, Oviedo, Los Tres Charcos, Manuel Goya, and Pedernales. About 4 km from Tres Charcos is Fondo Paradí, a popular birdwatching area and "Ecotourism Pilot Site".

Birds

This IBA is important for its wetlands and islands, although the forest harbours 18 (of the 34) Hispaniolan EBA restricted-range species including the Vulnerable Hispaniolan Amazon Amazona ventralis, Hispaniolan Parakeet Aratinga chloroptera and White-necked Crow Corvus leucognaphalus. The wetlands support more than 20,000 waterbirds including the Vulnerable West Indian Whistling-duck Dendrocygna arborea and regionally important populations of species including Caribbean Flamingo Phoenicopterus ruber. The Sooty Tern Sterna fuscata colony (80,000 pairs) on Isla Alto Velo is one of the largest in the Caribbean.

■ Other biodiversity

Reptiles include the Critically Endangered Ricord's iguana *Cyclura ricordi* and hawksbill turtle *Eretmochelys imbricata* and *Sphaerodactylus ariasae*—the smallest amniote vertebrate in the world. *Anolis altavelensis* is endemic to Isla Alto Velo. The IBA is an invertebrate hotspot including newly discovered species such as *Beatadesmus ivonneae*. The plants *Pseudophoenix ekmanii* (Critically Endangered), *Pimenta haitensis*, and *Coccothrinax ekmanii* are almost endemic to the IBA.

Conservation

Jaragua National Park was declared in 1983 and its boundaries set in 1986. There have been attempts to modify the legal framework that protects it. Since 1989, Grupo Jaragua and SEMARENA have jointly managed the IBA, facilitating and coordinating local community conservation actions. Lands are used for conservation, research, recreation, nature tourism and education, but small-scale fishing, agriculture, and livestock farming is practised in neighbouring communities. Main threats to this IBA include the development of tourist projects (although the beaches are unsuitable for large-scale tourism), agricultural expansion, introduced species, land invasions, mining, hunting, fishing, and extraction of eggs and chicks of the parrots, parakeets and seabirds.



Laguna Cabral IBA is located in the south-western region between the provinces of Barahona and Independencia, c.20 km inland from the Bahía de Neyba. Laguna Cabral is the largest freshwater wetland in the Dominican Republic, and the IBA includes the nearby wetlands of Laguneta Seca, and the Cristóbal and Peñón Viejo hills to the north. The IBA is surrounded by the communities of Cabral, Peñón, Cristóbal and La Lista. In the flat southern section of the IBA, plantains and coconuts are cultivated alongside pastures and other crops.

Birds

The IBA supports 12 (of the 34) Hispaniolan EBA restricted-range species, including the Vulnerable Hispaniolan Parakeet *Aratinga chloroptera* and Near Threatened Least Pauraque *Siphonorhis brewsteri*. However, it is for the waterbirds that this IBA is primarily significant. Huge (globally important) concentrations of duck have included counts of up to 90,000 Lesser Scaup *Aythya affinis* and 10,000 Ruddy Duck *Oxyura jamaicensis*. Up to 3,000 Near Threatened Caribbean Coot *Fulica caribaea* have also been recorded. Other duck present are American Wigeon *Anas americana* (up to 10,000), Bluewinged Teal *A. discors* (up to 25,000) and White-cheeked Pintail *A. bahamensis* (up to 22,000).

Other biodiversity

The Vulnerable toad Bufo guentheri, Hispaniolan slider Trachemys decorata and rhinoceros iguana Cyclura cornuta occur. The aquatic fauna of the lake in includes crustaceans such as Palaemon pandaliformis, the endemic fish including Nandopsis haitienensis and various species of the genera Limia and Gambusia. Eight plants are endemics, such as Justicia abeggii, Tournefortia sufruticosa, Neoabbottia paniculata, and Malpighia micropetala.

Conservation

Laguna Cabral IBA was declared a Scientific Reserve in 1983 and a Wildlife Refuge in 1996. It has been proposed as a Ramsar site. Habitat loss has resulted from agricultural activities such as cattle ranching; the planting of non-timber species, fires, and felling trees for charcoal production is reported. Fish stocks have also diminished because of overfishing, the introduction of exotic species, and pesticide pollution. Additionally, natural aquatic systems have been altered through canalisation. Other threats include land invasion, illegal constructions, the hunting of turtles, iguanas, coots and the persecution of Caribbean Flamingo *Phoenicopterus ruber*. Among the proposed initiatives for the sustainable management and conservation of this site are ecotourism, environmental education, and monitoring.



■ Site description

Bahoruco Oriental IBA is in south-west of the Dominican Republic, between the provinces of Pedernales, Independencia and Barahona. The Sierra de Bahoruco is the country's southernmost mountain range, and comprises an eastern section (this IBA) and a western section (represented in IBA DO006). Bahoruco Oriental IBA embraces the mountainous part of the province of Barahona, bounded to the north by the Valle de Neyba, to the east by the Caribbean Sea, to the south by the Nizaíto river valley, and to the west by the valleys of Polo and La Cueva. The landscape is a mosaic of primary forest (including Hispaniola's only magnolia *Magnolia hamori* forest, and the largest *Prestoea montana* forest), secondary forests, vast coffee plantations, farming and secondary vegetation areas.

Birds

This IBA supports populations of 26 (of the 34) Hispaniolan EBA restricted-range species including the Vulnerable Greyheaded Quail-dove *Geotrygon caniceps leucometopia*, Hispaniolan Amazon *Amazona ventralis*, Hispaniolan Parakeet *Aratinga chloroptera*, White-necked Crow *Corvus leucognaphalus*, Golden Swallow *Tachycineta euchrysea* and (Western) Chat Tanager *Calyptophilus frugivorus (tertius)*. The Vulnerable Bicknell's Thrush *Catharus bicknelli* has been recorded, but not in significant numbers.

Other biodiversity

Frogs include the Critically Endangered *Eleutherodactylus* rufifemoralis, the Endangered *E. armstrongi* and Vulnerable *E. audanti*. Endemic reptiles include *Anolis bahorucoensis*, *Chamaelinorops barbouri* and *Wetmorena haetiana*. Threatened mammals are represented by the Endangered Hispaniolan solenodon *Solenodon paradoxus*. Rare *Lephantes* orchids are also present, some restricted to microhabitats within the IBA.

Conservation

Bahoruco Oriental IBA was declared the Biological Reserve Padre Miguel Domingo Fuerte (Bahoruco Oriental) in 1996 (with boundaries ratified in 2000). The management category was changed into Wildlife Refuge/Natural Monument in 2004. Land use is mainly for agriculture. However, research and rural tourism activities are also carried out in this area, as well as projects and initiatives aimed at social, economic, and environmental sustainability. This IBA has suffered multiple impacts since the 1930s and 1940s from agriculture, cattle ranching, deforestation, slash-and-burn practices, mining (silica and "Larimar" or blue pectolite), and road construction. Other threats include bird hunting, extraction and illegal trade in flora (e.g. ferns) and fauna (e.g. parrot and parakeet chicks), introduced and invasive flora and fauna, as well as natural and intentionally lit forest fires.



Sierra Martín García IBA is in south-west Dominican Republic between the provinces of Azua and Barahona, next to Puerto Viejo. This limestone massif emerges from the sea opposite the city of Barahona, at the north-east end of the Bahía of Neyba, and runs from Puerto Alejandro to Punta Martín García. There is evidence of Taino (the original island settlers) presence in local caves, especially in the town of Barreral, where plant fossils and the oldest Taino settlements have been found.

Birds

This IBA supports 23 (of the 34) Hispaniolan EBA restrictedrange species including the Vulnerable (Eastern) Chat Tanager Calyptophilus frugivorus (frugivorous), White-winged Warbler Xenoligea montana, Hispaniolan Amazon Amazona ventralis and (wintering) Bicknell's Thrush Catharus bicknelli. The Near Threatened Least Pauraque Siphonorhis brewsteri is present. Poor management, regulation and enforcement resulted in the loss of the Critically Endangered Ridgway's Hawk Buteo ridgwayi from this IBA.

Other biodiversity

This is a key site for the conservation of rare endemic plants such as *Arcooa gonavensis*, *Cnidosculus acrandus*, and *Fuertesia domingensis*. The palm *Coccothrinax boschiana* is endemic to the sierra and forms stands known locally as "guanales".

Conservation

Sierra Martín García IBA has been legally protected at a national park since 1996. Its boundaries were defined in 2004 and an administrator was assigned for the first time in 2007. Local residents use this area for subsistence activities such as slash-and-burn agriculture, charcoal production and fishing. Other activities include limited scientific research, birdwatching and ecotourism. Threats include limestone extraction, intentional fires, excessive cattle and goat grazing, extraction of sand and gravel, as well as hunting of parrots and iguanas. Feral dogs, cats, and mongoose Herpestes auropunctatus prey on iguana eggs and juveniles and presumably birds. Human activities followed by the effects of rain and wind have removed vegetation and ground cover, resulting in a deteriorating, eroded and degraded landscape in which desertification is a real possibility. This IBA has been poorly studied and there are few conservation projects or actions being implemented.



■ Site description

Valle Nuevo İBA embraces the highlands at Alto de la Bandera hill, located in Constanza La Vega province, north-central Dominican Republic. It is surrounded by the provinces of Monseñor Nouel, La Vega, Azua and San José de Ocoa and is bordered to the east by Loma La Humeadora (DO015). With five river basins and more than 700 rivers, Valle Nuevo is an important catchment area supplying water for the provinces of the northern and southern regions, and Santo Domingo. The area supports a range of forest types including pine, broadleaf, cloud and *Prestoea montana* forest. Approximately 20 communities with a total population of 3,500 inhabitants live within this IBA.

Birds

This IBA supports populations of 27 (of the 34) Hispaniolan EBA restricted-range species including the Endangered Hispaniolan Crossbill Loxia megaplaga and La Selle Thrush Turdus swalesi, and the Vulnerable Hispaniolan Amazon Amazona ventralis, Hispaniolan Parakeet Aratinga chloroptera, Golden Swallow Tachycineta euchrysea, (Eastern) Chat Tanager Calyptophilus frugivorus (frugivorous), Whitewinged Warbler Xenoligea montana. It also provides wintering habitat for Neotropical migrants such as the Vulnerable Bicknell's Thrush Catharus bicknelli.

Other biodiversity

Mammals such as the Endangered Hispaniolan solenodon *Solenedon paradoxus* and Vulnerable Hispaniolan hutia *Plagiodontia aedium* occur, and there are 29 endemic species of reptiles including *Anolis aliniger* and *Celestus darlingtoni*. There are 138 endemic plant species, including *Magnolia pallescens*. This is a critical area for *Vegaea pungens* and is important for the ferns *Cyathea insignis* and *C. harrissi*.

Conservation

Valle Nuevo IBA was declared as a restricted area (zona vedada) in 1961, a scientific reserve in 1983, and a national park in 1996. Lands have traditionally been used for forest exploitation, agriculture, and cattle ranching. Intentional fires have altered the natural fire regime of this IBA, which in 1983 suffered the worst forest fire in the history of the country. In recent years, nearly 5,000 ha have been lost to agricultural expansion and an additional 4,500 ha have been affected by forest fires. Other threats include agrochemical pollution, inadequate waste and waterway management, erosion, landslides, and road construction. All these threats affect biodiversity, ecological dynamics and succession, as well as water quality. Programs to develop the site's ecotourism potential are being implemented.



Ebano Verde Scientific Reserve IBA is in north-central Dominican Republic on the north-eastern slope of the Cordillera Central, La Vega province, and municipality of Jarabacoa. The IBA contains the catchment areas of the Jimenoa, Camú, Jatubey and Jayaco rivers. It is named after the local name (Ebano Verde) for the species *Magnolia pallescens*, characteristic of the area's broadleaf cloud forests. *Prestoea montana* forest also occurs in the IBA. Ebano Verde Scientific Reserve has a long history of forest exploitation, with forest lands and products still being used by people from surrounding communities.

Birds

This IBA provides habitat for 24 (of the 34) Hispaniolan EBA restricted-range species, and is critical for globally threatened birds including the Vulnerable Grey-headed Quail-dove *Geotrygon caniceps leucometopia*, Golden Swallow *Tachycineta euchrysea*, White-winged Warbler *Xenoligea montana* and (Eastern) Chat Tanager *Calyptophilus frugivorus* (*frugivorous*). The Hispaniolan endemic race of Rufous-collared Sparrow *Zonotricia capensis antillarum* occurs in the IBA.

Other biodiversity

Globally threatened frogs include the Endangered Hispaniolan giant tree-frog Osteopilus vastus, Eleutherodactylus auriculatoides and E. pituinus. The rare lizard Anolis insolitus and the endemic fish Poecilia dominicensis are present in this IBA. It also supports 156 species of endemic spermatophytes, and orchids are both prominent and highly endemic, with 81 species.

Conservation

Ebano Verde Scientific Reserve was created in 1989, ratified in 2000 and validated in 2004. Major threats to this IBA include introduced flora and fauna, livestock farming, intentional forest fires, timber extraction and trafficking, the capture of bird chicks, natural phenomena, habitat destruction and modification due to agricultural and urban expansion. Despite the IBAs restricted public use, it has huge potential for ecotourism. Activities such as birdwatching, hiking, enjoyment of landscapes and panoramic views are all activities enjoyed in the IBA. The Arroyazo Biological Station has acted as a central office for research conducted at this IBA.



■ Site description

Loma Quita Espuela IBA is c.15 km from the north-east of the city of San Francisco de Macorís in northern Dominican Republic. It lies on the eastern slope of the Cordillera Septentrional in the provinces Maria Trinidad Sanchez and Duarte, and it includes the areas of Quita Espuela and La Canela. This IBA includes five hills: Quita Espuela is the highest and at the centre of the IBA (985 m), Vieja (730 m), El Quemao (565 m), La Canela (560 m) and Firme Los Sabrosos (510 m). The forested slopes of these hills protect the sources of several streams that supply water to a number of nearby towns.

Birds

This IBA supports populations of 19 (of the 34) Hispaniolan EBA restricted-range species including the Vulnerable Hispaniolan Amazon Amazona ventralis and Hispaniolan Parakeet Aratinga chloroptera. The IBA is important for Neotropical migrants including the Vulnerable Bicknell's Thrush Catharus bicknelli.

Other biodiversity

Mammals such as the Endangered Hispaniolan solenodon *Solenedon paradoxus* and Vulnerable Hispaniolan hutia *Plagiodontia aedium* have been reported. The tree *Mora abbotti* is endemic to the Cordillera Septentrional and occurs within the IBA.

Conservation

Loma Quita Espuela is scientific reserve that was established in 1992. It is managed by the Office of the Subsecretary of Protected Areas and Biodiversity and the Loma Quita Espuela Foundation. Main uses include farming, charcoal production, research, conservation, ecotourism, local pilgrimages and recreation. Among the threats to this IBA are habitat loss related to forest fires, slash-and-burn farming, agricultural expansion, charcoal production, cattle grazing, and road and path construction. Other threats are related to extraction of flora and fauna, bird hunting, invasive alien fauna, and pollution of water sources. This IBA faces problems with land invasions, human settlements and management conflicts with neighbouring communities regarding land tenure and protected area boundaries.



Loma Guaconejo IBA is at the eastern end of the Cordillera Septentrional in the provinces of María Trinidad Sánchez and Duarte. It lies east of Loma Quita Espuela IBA (DO013) and is named after the local name (Guaconejo) of the plant *Stevensia ebracteata*. This IBA embraces the Río Helechal catchment area, which in turns feeds the Boba and Nagua rivers that finally supply water to the municipalities of Nagua and El Factor. Loma Guaconejo retains one of the best preserved moist broadleaf forests in the Cordillera Septentrional. Around 2,000 inhabitants from 16 communities live around this IBA.

Birds

This IBA is significant for supporting a large wintering population of the Vulnerable Bicknell's Thrush *Catharus bicknelli*. A range of other Neotropical migratory birds (including various *Dendroica* warbler species) winter in these forests. The avifauna has been poorly studied and other key bird species probably occur.

Other biodiversity

Four endemic frogs include the Critically Endangered *Eleutherodactylus parabates*, and *E. inoptatus*. The forests

include a large population of *Calyptronoma plumeriana*, intermixed with the endemic *Tabebuia ricardii*, *Plumeria magna* and other trees considered exclusive to Loma Quita Espuela and Los Haitises (IBA DO018).

Conservation

Loma Guaconejo was designated as a scientific reserve in 1996 and its boundaries were defined in 2004. The area is jointly managed by the State Secretariat of Environment and Natural Resources and the Society for the Integral Development of the Northeast (SODIN). The land is used for conservation, agriculture, and recreation. The Cuesta Colorada Ecotourism and Environmental Capacity Centre is also located in this area. SODIN has facilitated self-management and participatory processes, especially in María Trinidad Sánchez province. Since 1995 it has worked toward sustainable management of the IBAs natural resources. Currently the society is collaborating with local guides and Peace Corps Volunteers in developing an environmental education program for the buffer zone. Some threats to the area include water pollution, sand extraction, erosion, shifting agriculture, fires, trafficking of timber, livestock farming, deficient environmental sanitation, unemployment, low levels of education, and solid waste accumulation.



■ Site description

Loma La Humeadora IBA is on the south-easternmost slope of the Cordillera Central, 10 km to the south-west of the municipality of Villa Altagracia and to the north-east of San Cristóbal city. This IBA comprises Loma La Humeadora, with an area of c.84 km² and a surrounding group of lower-elevation hills which support forest remnants. Average annual rainfall is 2,300 mm and numerous rivers and streams originate within the area, representing an important hydrological resource for the surrounding area.

Birds

This IBA is home to 20 (of the 34) Hispaniolan EBA restricted-range species including the Endangered La Selle Thrush *Turdus swalesi*, and the Vulnerable Hispaniolan Amazon *Amazona ventralis* and Hispaniolan Parakeet *Aratinga chloroptera*. The IBA is important for Neotropical migrants including the Vulnerable Bicknell's Thrush *Catharus bicknelli*, and also for species with declining distributions on Hispaniola such as Limpkin *Aramus guarauna* and Scaly-naped Pigeon *Patagioenas squamosa*.

Other biodiversity

Restricted-range Hispaniolan plant endemics include *Pricramnia dyctioneura*, *Podocarpus hispaniolensis*, *Urera domingensis*, *Omphalea ekmanii*, and *Piper luteobaccum* (20% of the plant species are Hispaniolan endemics). Species previously considered exclusive to Lomas La Sal and La Golondrina (to the north of the IBA), such as *Chaetocarpus domingensis*, *Cinnamomum alainii*, and *Gonocalyx tetrapterus* have been found in Loma La Humeadora.

Conservation

In 1992 Loma La Humeadora IBA was declared as a restricted area (zona vedada) to protect the streams and rivers that originate in this area. In 1996 it was declared as national park (which was ratified in 2000, with boundaries set in 2004). Loma La Humeadora has been seriously disturbed by farming activities, slash-and-burn practices, firewood extraction and charcoal production. Only remnants of primary forest remain. This affects the landscape, the fauna and flora, the environmental services such as water production, and as a result, the general well-being of the human populations that depend on this resource. Apart from scheduled visits to fulfil management tasks and sporadic visits by birdwatchers, conservation actions within the IBA are scarce.



Honduras IBA is in the south-eastern region of the Dominican Republic, c.15–20 km north of Baní (in Peravia province, and the municipality of Matadero). About 90% of this IBA supports montane forest, although little has been documented concerning this IBA so details are unclear. There are also cultivated areas within the IBA.

Birds

This IBA supports populations of 16 (of the 34) Hispaniolan EBA restricted-range species including the Vulnerable (Eastern) Chat Tanager Calyptophilus frugivorus (frugivorus), and others such as Hispaniolan Lizard-cuckoo Saurothera longirostris, Ashy-faced Owl Tyto glaucops, Hispaniolan Nightjar Caprimulgus ekmani, Antillean Piculet Nesoctites micromegas, Palmchat Dulus dominicus, Green-tailed Warbler Microligea palustris and Black-crowned Palm-tanager Phaenicophilus palmarum. The Vulnerable Bicknell's Thrush Catharus bicknelli has been recorded, but numbers are unknown

Other biodiversity

New species, such as the spider *Pozonia andujari* have been reported, but the flora and fauna are poorly known and need further work.

Conservation

Honduras IBA is a mixture of private and state owned lands, and currently (2008) has no legal protection. Detailed information regarding threats to the IBA is lacking, but during recent exploratory visits human settlements, introduced animals, and the evidence of agriculture (over c.10% of the area) were observed in the area. Threats to the key species in the IBA are unknown and this requires further research. As well as the area's agricultural tradition; some lands (35% of the area) are used for research, recreation, and bird tourism, whilst others are unexploited (55% of the area). The Dominican Republic IBA Program is exploring the possibility of joint initiatives with the private sector to protect the remaining critical forests and perform more thorough research in this IBA. It is also facilitating discussions with the State Secretariat of Environment and Natural Resources about potential protection mechanisms for the site (e.g. Private Reserve, Reserve or Protected Municipal Area).



■ Site description

Bahía de las Calderas IBA is located in the Peravia province, in the south-eastern region of the Dominican Republic, about 115 km south-west of Santo Domingo. It is on the peninsula of Las Calderas, which is primarily covered by a hyper-saline pond—Salado del Muerto—used for salt extraction. Several towns are present in Las Calderas as well as a naval base. Bahía de las Calderas IBA also includes the dunes of Baní, that stretch 15 km from the town of Matanzas to Puerto Hermoso.

Birds

This IBA is significant for its populations of the Vulnerable West Indian Whistling-duck *Dendrocygna arborea* and Near Threatened Hispaniolan Palm Crow *Corvus palmarum*. A wide diversity of waterbirds use this IBA and nesting species include Snowy Plover *Charadrius alexandrinus*, Wilson's Plover *Charadrius wilsonia*, Least Tern *Sterna antillarum* and Willet *Catoptrophorus semipalmatus*. The Near Threatened Piping Plover *Charadrius melodus* has been recorded in small numbers. Many rare and vagrant species records come from this IBA.

■ Other biodiversity

There have been reports of the Vulnerable rhinoceros iguana *Cyclura cornuta* within the IBA. Many other reptile species

frequent the area. The ichthyofauna is represented by the endemic species *Limia perugiae* and *Cyprinodon* spp., and others such as *Elops saurus*, *Megalops atlanticus*, *Gerres cinereus* and *Centropomus undecimalis*. *Simarouba berteroana* is a dune-stabilising tree endemic to this region.

■ Conservation

Bahía de Las Calderas IBA has been legally protected as Dunas de las Calderas Natural Monument since 1996. Activities in this area include small-scale agriculture, aquaculture, fishing, scientific research, birdwatching, recreation, and traditional tourism. Mangroves along the lagoon have been used for charcoal production and firewood. Threats to this IBA include fires, introduced and feral animals, extraction of non-timber vegetation, and sand extraction for commercial and construction purposes. Other threats include water drainage and canalisation; housing, commercial and industrial development; land invasions, and human settlements. Furthermore, recreational activities such as the use of 4x4 vehicles and beach tourism result in solid waste pollution, disturbance and habitat damage. Ecotourism is promoted through the construction of trails and student visits.



Los Haitises IBA is located in the north-eastern region of the country, and extends from the southern portion of the Cibao Oriental Valley to the town of Sabana de la Mar, south-west of the Bahía de Samaná. The IBA is a national park, and lies across the provinces of Monte Plata, Hato Mayor and Samaná. Due to its size, the park has been divided into two administrative sectors, an eastern sector that includes Sabana de la Mar and adjacent areas, and a southern sector that includes Monte Plata and San Francisco de Macorís. The IBA embraces areas of limestone karst (supporting moist broadleaf forest), secondary forest, agricultural areas, and the Dominican Republic's largest area of mangroves. The park offers a vast cave system with pictograms and petroglyphs.

Birds

This IBA supports populations of 20 (of the 34) Hispaniolan EBA restricted-range species. However, it is as the last known refuge for the Critically Endangered Ridgway's Hawk *Buteo ridgwayi* that this IBA is significant. There are about 50 pairs within the IBA, but productivity is low and the species is becoming scarce, even within Los Haitises. Other threatened birds include the Vulnerable Hispaniolan Amazon Amazona ventralis, White-necked Crow Corvus

leucognaphalus and Bicknell's Thrush Catharus bicknelli, and the Near Threatened Least Pauraque Siphonorhis brewsteri.

Other biodiversity

The Endangered Hispaniolan solenodon *Solenodon paradoxus*, and Vulnerable Hispaniolan hutia *Plagiodontia aedium* and West Indian manatee *Trichechus manatus* occur within the IBA.

Conservation

Los Haitises IBA was first created as a forest reserve in 1968 and later as national park in 1976. Then, in 1996 its boundaries were extended and ratified in 2000 and 2004. Factors responsible for the current dire status of *Buteo ridgwayi* include habitat destruction and degradation (including the felling of trees used as nest sites by the species), agricultural expansion, fire-induced habitat fragmentation, nest destruction and reduction of feeding resources, hunting by poultry farmers, and lack of knowledge about the species. Other threats to this IBA include indiscriminate fishing, illegal hunting, cattle ranching, land invasions and human settlements, pollution and agrochemical use, forest fires, development projects, inadequate tourism, introduced animals, extraction of animal derivates (e.g. bat manure), and cave vandalism.



■ Site description

Laguna Limón IBA is located in the north-east of the Dominican Republic in the province of El Seibo, 27 km from the town of Miches. It is part of a system of coastal lagoons located on the coastal plain between the Cordillera Oriental and the Atlantic Ocean. It has a maximum depth of 2 m and receives waters from several streams such as Caño El Negro and Río Lisas, although it is still connected to the ocean. The vegetation in the area is dominated by *Typha domingensis* and the genus *Machaerium*.

Birds

This IBA supports a globally significant population of the Near Threatened Caribbean Coot *Fulica caribaea*. Up to 6,000 coots have been recorded from the lagoon. Many other waterbirds use this IBA including large (but not significant) numbers of Blue-winged Teal *Anas discors*, White-cheeked Pintail *A. bahamensis*, and Ruddy Duck *Oxyura jamaicensis*.

Other biodiversity

The Vulnerable fresh water turtle *Trachemys decorata* is present. More studies on the flora and the fauna of this site are needed.

■ Conservation

Laguna Limón IBA was declared a scientific natural reserve in 1983, a strict natural reserve in 1995, and a wildlife refuge in 2004. The surrounding lands are mostly privately owned. Activities around and within the lagoon include fishing, aquaculture, and farming, as well as coconut and rice cultivation. Some threats to this region include agrochemical pollution, disturbance by cattle, extraction of sand and gravel for construction, unsustainable hunting and fishing, disturbance from (tourist) motor boats, and natural and intentional fires. Another threat is the presence of the invasive aquatic plant *Hydrilla verticillata*. Changes in water levels within the lagoon appear to be the result of deforestation in the surrounding uplands leading to increased runoff and sedimentation. Conservation and research efforts are being performed through waterbird (duck) counts in the area.



Del Este National Park IBA is on the south coast at the easternmost end of the Dominican Republic. The park covers most of the peninsula that extends from the towns of Boca de Yuma and Bayahibe in the municipality of San Rafael del Yuma. It also includes the 110-km² Isla Saona (and the nearby 22-ha Isla Catalinita) from which it is separated by the Catuano channel. The park embraces coastal habitats, lagoons, mangroves, scrub forest and extensive woodlands. The park offers several tourist attractions such as its excellent beaches and evidence of the country's pre-Columbian heritage. It is the most visited protected area in the country.

Birds

This IBA supports 18 (of the 34) Hispaniolan EBA restrictedrange species including the Vulnerable Hispaniolan Amazon Amazona ventralis and White-necked Crow Corvus leucognaphalus. Other globally threatened species include the Vulnerable Bicknell's Thrush Catharus bicknelli, and the Near Threatened Least Pauraque Siphonorhis brewsteri and Whitecrowned Pigeon Patagioenas leucocephala. Isla Saona supports the country's larges breeding colony (200 pairs) of Magnificent Frigatebird Fregata magnificens. Other seabirds nest on Isla Saona (and nearby Isla Catalina), but numbers are unknown.

Other biodiversity

The Endangered Hispaniolan solenodon *Solenodon paradoxus* and Vulnerable Hispaniolan hutia *Plagiodontia aedium* occur, as does the Critically Endangered hawksbill turtle *Eretmochelys imbricata* and the Endangered frog *Eleutherodactylus probolaeus*. The endemic freshwater fish *Limia perugiae* is present, as are many endemic (and threatened plants.

Conservation

Del Este National Park was declared a protected area in 1975. Its boundaries have been considerably altered by law. Activities in the area include conservation, research and birdwatching. Approximately 8% of this IBA has been affected by agriculture (e.g. coconut crops), mostly on Isla Saona. The main threat to this IBA relates to the 260,000 tourists that visit the park (mostly Isla Saona) each year. The modification of the park boundaries has rendered the coastal area vulnerable to unsustainable tourist development. The IBA, it is still vulnerable to real estate speculation due to land tenure irregularities. Other threats include introduced species, indiscriminate and unsustainable fishing, hunting of pigeons, intentional forest fires, land invasions and illegal settlements inside the protected area, extraction and trafficking of parrot chicks.



■ Site description

Punta Cana IBA is at the easternmost tip of the Dominican Republic, in the province of Altagracia and north-east of Del Este National Park (DO020). The town of Bávaro lies to the north of the IBA, and to the east are the Mona channel and the Caribbean Sea. Little information has been documented concerning the vegetation or habitats of this IBA. However, it appears to comprise lowland moist forests, shrubland, pastureland and urban areas. Within the site is the Ojos Indigenous Reserve and Ecological Park, which is mostly used for recreation and tourism.

Birds

This IBA supports 13 (of the 34) Hispaniolan EBA restrictedrange species including Vulnerable Hispaniolan Amazon Amazona ventralis. The area supports many other native and migratory birds (116 species have been recorded) such as the rare Double-striped Thick-knee *Burhinus bistriatus* which in the Caribbean is confined to Hispaniola. It is present in the open pasturelands of this IBA.

Other biodiversity

Nothing recorded.

■ Conservation

Punta Cana IBA currently (2008) has no official protection status. Lands are privately owned, including the 610-ha Ojos Indigenous Reserve and Ecological Park, which was donated in 1994 by the Punta Cana Resort and Club to the Punta Cana Ecological Foundation. In general, main uses include tourism, recreation, and agriculture. There is no detailed information of threats to this IBA, but since it is located in one of the most popular tourist zones in the country, loss of habitat for tourist development could be considered as one of its main threats.