

# CUBA

LAND AREA **109,886 km<sup>2</sup>** ALTITUDE **0–1,974 m**  
 HUMAN POPULATION **11,239,043** CAPITAL **Havana**  
 IMPORTANT BIRD AREAS **28, totalling 231,657 km<sup>2</sup>**  
 IMPORTANT BIRD AREA PROTECTION **76%**  
 BIRD SPECIES **371**  
 THREATENED BIRDS **29** RESTRICTED-RANGE BIRDS **11**



COORDINATOR: SUSANA AGUILAR MUGICA  
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Alejandro de Humboldt IBA represents the largest and best preserved tract of tropical and montane forest in the insular Caribbean. (PHOTO: JULIO LARRAMENDI)

## INTRODUCTION

Cuba is the largest and most westerly island of the insular Caribbean, accounting for more than 50% of the region's land area. It is bordered by the Bahamas and the Florida peninsula to the north, Turks and Caicos Islands to the north-east, Hispaniola to the east, Cayman Islands to the south, Jamaica to the south-east, and the waters of the Gulf of Mexico to the west. Mainland Cuba is surrounded by four archipelagos: Sabana Camagüey (off the north coast of central Cuba); Los Canarreos (including the Isle of Pines of the south coast of western Cuba); Jardines de la Reina (south coast of eastern Cuba); and Los Colorados north coast of westernmost Cuba). Combined, these archipelagos comprise 4,195 islets and cays which cover c.3,715 km<sup>2</sup>.

Mainland Cuba is 1,250 km long and averages 150 km wide. Vast plains occupy 79% of the land area but are interrupted by four mountain systems: Guaniguanico Mountain Range (western Cuba), Guamuhaia Massif (on the southern side of central Cuba), the Nipe-Sagua-Baracoa Massif (easternmost Cuba), and the Sierra Maestra (the south coastal range of south-east Cuba). Pico Turquino in the Sierra Maestra, is the highest point on the island at 1,974 m. The climate is tropical–subtropical, with an average annual rainfall of 1,375 mm and

temperatures ranging from 21 to 27 °C. Annual rainfall varies between less than 200 mm on the south coast (around Guantánamo) to 3,400 mm in the Nipe-Sagua-Baracoa mountain range.

Climate, geography and topography have combined to produce a wide diversity of ecosystems on the island (including five terrestrial ecoregions, three biogeographical areas, and 39 floristic districts). The flora of the island is particularly rich, with 921 species of bryophytes, 500 pteridophytes and 6,519 higher plant species. Cuba is the most biologically diverse island in the West Indies and exhibits exceptional levels of endemism, particularly at higher elevations and in the east of the country. More than 50% of flora and 32% of vertebrate fauna are endemic to Cuba, with these proportions especially high among vascular plants (52%) and herpetofauna (86%). Many of these endemic species are locally restricted. Mammals are represented by 42 species, including hutias (*Capromys pilorides*, *Mysateles melanurus*, *M. prehensilis*, and *Mesocapromys auritus*), the Cuban solenodon *Solenodon cubanus*, and various species of bats, including *Nyctiellus lepidus*, the smallest bat in the world. Among the 204 species of herpetofauna, *Eleutherodactylus iberia* is notable for being the smallest frog in the Northern Hemisphere. At least 13,000 invertebrate species have been reported, and among these,

molluscs and in particular land snails, have significant levels of endemism. There are also unique species of arachnids, such as the scorpion *Microfityus fundorai*. Marine life is also extremely diverse (although endemism is not high) and in a healthy state, with 963 fish species, 58 corals, 160 sponges, and 68 gorgonids.

The growth of the sugarcane industry in the early twentieth century led to the destruction and alteration of habitats across the plains of Cuba. This was followed by deforestation for urban development and livestock farming and as a result all Cuban habitats have been affected, either by fragmentation, pollution, degradation, modification or introduction of exotic species. Fortunately, reforestation efforts that started in 1960 have borne fruit, and forest now covers 21% of the country. Tourist development has also caused major disturbances, especially in the northern cays which have been severely impacted. Finally, Cuba is frequently affected by hurricanes and storms, and recent climate changes have contributed to increased cyclonic activity, drought periods, and fires.

### ■ Conservation

Conservation efforts began on the island in the 1930s, with the creation of the Sierra Cristal National Park. This was followed by the designation of other areas, albeit as a formal exercise rather than on-the-ground management action. By 1959, nine national parks, and the first natural reserves and national monuments had been created, and the first proposal for a national system of protected areas (Sistema Nacional de Áreas Protegidas, SNAP) made. However, these early protected areas had no structured protection categories, adequate personnel nor infrastructure. In 1980, the Empresa para la Protección de la Flora y la Fauna (National Enterprise for the Protection of Flora and Fauna, ENPFF) of the Ministry of Agriculture was created to manage c.30 protected areas. Installations were built and technical and administrative personnel were assigned to individual areas, and a proposal was made to expand this capacity development to a further

73 protected areas. Four biosphere reserves were declared at this time through UNESCO.

The creation of the Ministerio de Ciencia Tecnología y Medio Ambiente (Ministry of Science, Technology, and Environment, CITMA) and within it the Centro Nacional de Áreas Protegidas (National Centre for Protected Areas, CNAP) in 1995 marked a new era in the realisation of the national protected area system. CNAP is responsible for planning and management of the overall national system of protected areas in Cuba. ENPFF is also responsible for the administration of the majority of them. CITMA manages a smaller portfolio of sites, primarily those with fragile ecosystems or in need of strict protection. The national system of protected areas follows the 1994 IUCN protected area management classification scheme (with some Cuba-specific modifications).

Significant progress has been made in the development and institutionalisation of Cuba's protected areas in recent years. The protected area system currently includes 263 proposed areas (80 of which are considered nationally significant and 183 locally significant), covering c.22% of the country's area. There are 96 protected areas currently functioning at a practical level within Cuba, of which 45 areas have been legally approved by the Comité Ejecutivo del Consejo de Ministros (Executive Committee of the Ministerial Council), whilst 14 are waiting for formal recognition.

The protected areas provide a framework for quite considerable research, conservation, education and awareness efforts of CNAP, ENPFF and other institutions including Instituto de Ecología y Sistemática (IES), the Museo Nacional de Historia Natural, the Facultad de Biología de la Universidad de la Habana, and the Centro Oriental de Ecosistemas y Biodiversidad (BIOECO). However, in spite of these efforts, the protected areas (and the land surrounding them) still face multiple threats from habitat destruction and degradation, hunting, alien invasive species, illegal trade in species and pollution. Specific threats to the Important Bird Areas (IBAs) are detailed under each individual IBA profile.

The protected areas network and IBAs provide a framework for education and awareness activities, such as this in Delta del Cauto, by a number of institutions. (PHOTO: OMAR LABADA)







Bee Hummingbird—the world’s smallest bird—is endemic to Cuba. (PHOTO: TIM STEWART)

## ■ Birds

Of the 371 bird species reported for Cuba about 42% breed on the island, and 70% are migratory (c.114 species are regular winter residents). Of the breeding species, 135 are resident (including eight introduced birds) and 14 arrive from South America to breed on the island in the summer. The island is home to six endemic genera (namely *Cyanolimnus*, *Starnoenas*, *Xiphidiopicus*, *Ferminia*, *Teretistris* and *Torreornis*), 28 endemic birds (including the world’s smallest bird, the Bee Hummingbird *Mellisuga helenae*) and 60 endemic subspecies. Cuba is an Endemic Bird Area (EBA), but only 11 species have ranges of less than 50,000 km<sup>2</sup> (which is the threshold that defines a restricted-range bird). However, there are 48 species confined to the Greater Antilles biome (which include all the island endemics and the restricted-range birds), and these have been used to define IBAs in Cuba (see below). Some of the restricted-

The Vulnerable Cuban Parakeet is one of a number of species threatened by the illegal pet trade in Cuba. (PHOTO: PETE MORRIS)



The Endangered Cuban Sparrow represents one of six bird genera endemic to Cuba, and occurs in three localised populations (such as this one from Cayo Coco) across the island. (PHOTO: PETE MORRIS)

range species are shared with neighbouring islands (e.g. Thick-billed Vireo *Vireo crassirostris* and Olive-capped Warbler *Dendroica pityophila* with Bahamas, Palm Crow *Corvus palmarum* with Hispaniola, Bahama Mockingbird *Mimus gundlachi* with Bahamas and Jamaica).








































































There are 29 threatened birds known from Cuba, three of which are Critically Endangered (namely, Cuban Kite *Chondrohierax wilsonii*, Ivory-billed Woodpecker *Campephilus principalis* and Bachman’s Warbler *Vermivora bachmanii*), eight Endangered, seven Vulnerable, and 11 Near Threatened. However, five of these threatened birds have been excluded from the IBA analysis, as the island is not currently known or suspected to support viable populations. The five species are the Critically Endangered *V. bachmanii*, the Vulnerable Bahama Swallow *Tachycineta cyaneoviridis* and Cerulean Warbler *Dendroica cerulean*, and the Near Threatened Caribbean Coot *Fulica caribaea* and Golden-winged Warbler *Vermivora chrysoptera*. The threat category and national population sizes of the threatened birds are listed in Table 1.

The endemic Cuban Macaw *Ara tricolor* became extinct in the nineteenth century due to heavy hunting. Other species heading in the same direction as the macaw are: the Cuban Kite *Chondrohierax wilsonii* which was once widespread, but habitat destruction has caused its decline, and it is presently confined to the Alejandro de Humboldt IBA (CU027); and Ivory-billed Woodpecker *Campephilus principalis*, a small population of which may survive in south-eastern Cuba, although it has not been observed since 1987. A number of the threatened species have very localised populations which contributes to their endangerment, as is the case with the Endangered Zapata Rail *Cyanolimnas cerverai* and Zapata Wren *Ferminia cerverai* (both confined to Ciénaga Zapata, CU006) and Cuban Sparrow *Torreornis inexpectata* (confined to three small, disjunct areas in Cuba).

Cuba’s location within the Caribbean makes the island an important migratory corridor and wintering site for a large number of Neotropical migratory birds. It is located on both the Mississippi and East Atlantic migratory flyways, and thousands of raptors, ducks, shorebirds and landbirds are recorded each year across the country. Cuba is extremely important for waterbirds, and the country’s network of natural and artificial wetlands (which includes the two largest wetlands in the Caribbean, namely Ciénaga Zapata and Delta del Cauto) provides critical habitat for the largest recorded concentrations in the Caribbean of a number of species (including flamingos, ibises, cormorants, egrets, anhingas and spoonbills). Major seabird breeding colonies are concentrated on the offshore cays of the Sabana-Camagüey Archipelago.

Apart from the widespread loss and degradation of habitats, Cuba’s birds are threatened by hunting (both sport hunting and illegal poaching), collecting eggs, and illegal capture and trade of Cuban psittacids (i.e. Cuban Amazon *Amazona*

Table 1. Key bird species at Important Bird Areas in Cuba.

Key bird species	Criteria	National population	Criteria	CU001	CU002	CU003	CU004	CU005	CU006	CU007
				  	  	 	  	   	   	 
Northern Bobwhite <i>Colinus virginianus</i>	NT 					✓	✓	24,000	✓	
West Indian Whistling-duck <i>Dendrocygna arborea</i>	VU   	5,000–9,999		✓		50–100		✓	✓	✓
Blue-winged Teal <i>Anas discors</i>		100,000–999,999								
Black-capped Petrel <i>Pterodroma hasitata</i>	EN  	250–499								
Caribbean Flamingo <i>Phoenicopterus ruber</i>		100,000–999,999							3,000	8,400
White Ibis <i>Eudocimus albus</i>		10,000–24,999								
Glossy Ibis <i>Plegadis falcinellus</i>		25,000–99,999				20,000				3,412
Magnificent Frigatebird <i>Fregata magnificens</i>		1,000–4,999								
Brown Pelican <i>Pelecanus occidentalis</i>		1,000–4,999				146				
Double-crested Cormorant <i>Phalacrocorax auritus</i>		10,000–24,999				820				
Osprey <i>Pandion haliaetus</i>										
Cuban Kite <i>Chondrohierax wilsonii</i>	CR  	50–249								
Gundlach's Hawk <i>Accipiter gundlachi</i>	EN  	300–400		✓	✓		6		6	
Black Rail <i>Lateralus jamaicensis</i>	NT 	500–999							✓	
Zapata Rail <i>Cyanolimnas cerverai</i>	EN    	<50							✓	
Sandhill Crane <i>Grus canadensis</i>		500–999						171	120	
Piping Plover <i>Charadrius melodus</i>	NT 	100–249								
Short-billed Dowitcher <i>Limnodromus griseus</i>		10,000–24,999				10,000				
Lesser Yellowlegs <i>Tringa flavipes</i>		10,000–24,999								
Least Sandpiper <i>Calidris minutilla</i>		10,000–24,999								
Laughing Gull <i>Larus atricilla</i>		10,000–24,999								
Gull-billed Tern <i>Sterna nilotica</i>		1,000–4,999								
Royal Tern <i>Sterna maxima</i>		5,000–9,999								
Sandwich Tern <i>Sterna sandvicensis</i>		500–999								
Common Tern <i>Sterna hirundo</i>		100–249								
Least Tern <i>Sterna antillarum</i>		1,000–4,999								
Bridled Tern <i>Sterna anaethetus</i>		1,000–4,999								
White-crowned Pigeon <i>Patagioenas leucocephala</i>	NT 			✓		✓	✓	800,000	✓	✓
Plain Pigeon <i>Patagioenas inornata</i>	NT  			✓	✓				✓	
Grey-headed Quail-dove <i>Geotrygon caniceps</i>	VU  	2,500–9,999			✓		30		✓	
Key West Quail-dove <i>Geotrygon chrysa</i>				✓	✓			✓	✓	
Blue-headed Quail-dove <i>Sturnoenas cyanocephala</i>	EN  	1,000–2,499		✓	✓		✓		✓	
Cuban Parakeet <i>Aratinga euops</i>	VU  	2,500–9,999			30				8	
Cuban Amazon <i>Amazona leucocephala</i>	NT  			✓	✓			580	100	
Great Lizard-cuckoo <i>Saurothera merlini</i>				✓	✓		✓	✓	✓	
Bare-legged Owl <i>Gymnolaux lawrencii</i>				✓	✓		✓	✓	✓	
Cuban Pygmy-owl <i>Glaucidium siju</i>				✓	✓		✓	✓	✓	
Antillean Nighthawk <i>Chordeiles gundlachi</i>				✓			✓		✓	
Cuban Nightjar <i>Caprimulgus cubanensis</i>				✓			✓	✓	✓	
Antillean Palm-swift <i>Tachornis phoenicobia</i>				✓			✓	✓	✓	
Cuban Emerald <i>Chlorostilbon ricardii</i>				✓	✓		✓	✓	✓	
Bee Hummingbird <i>Mellisuga helenae</i>	NT  			✓	20		✓		✓	
Cuban Trogon <i>Priotelus temnurus</i>				✓	✓		✓	✓	✓	
Cuban Tody <i>Todus multicolor</i>				✓	✓		✓	✓	✓	
West Indian Woodpecker <i>Melanerpes superciliosus</i>				✓	✓		✓	✓	✓	
Cuban Green Woodpecker <i>Xiphidiopicus percussus</i>				✓	✓		✓	✓	✓	
Fernandina's Flicker <i>Colaptes fernandinae</i>	VU  	600–800			✓		8		450	
Ivory-billed Woodpecker <i>Campephilus principalis</i>	CR  	<50								
Greater Antillean Pewee <i>Contopus caribaeus</i>				✓	✓		✓	✓	✓	
Loggerhead Kingbird <i>Tyrannus caudifasciatus</i>				✓	✓		✓		✓	
Giant Kingbird <i>Tyrannus cubensis</i>	EN  	250–999		✓	✓		✓	✓	✓	
La Sagra's Flycatcher <i>Myiarchus sagrae</i>				✓	✓		✓	✓	✓	
Cuban Vireo <i>Vireo gundlachii</i>				✓	✓		✓	✓	✓	
Thick-billed Vireo <i>Vireo crassirostris</i>										
Cuban Palm Crow <i>Corvus minutus</i>	EN   	2,500–9,999								
Cuban Crow <i>Corvus nasutus</i>				✓	✓			✓	✓	
Cuban Martin <i>Progne cryptoleuca</i>							✓	✓	✓	
Zapata Wren <i>Ferminia cerverai</i>	EN   	1,000–2,499							✓	
Cuban Gnatcatcher <i>Poliophtila lembeyi</i>										
Bahama Mockingbird <i>Mimus gundlachii</i>										
Cuban Solitaire <i>Myadestes elisabeth</i>	NT  				40		50			
Bicknell's Thrush <i>Catharus bicknelli</i>	VU  									
Olive-capped Warbler <i>Dendroica pityophila</i>					✓		100			
Yellow-headed Warbler <i>Teretistris fernandinae</i>				✓	✓		✓	✓	✓	
Oriente Warbler <i>Teretistris fornsi</i>										
Greater Antillean Oriole <i>Icterus dominicensis</i>				✓	✓		✓	✓	✓	
Cuban Blackbird <i>Dives atrovirens</i>				✓	✓		✓	✓	✓	
Red-shouldered Blackbird <i>Agelaius assimilis</i>				✓				✓	4	
Tawny-shouldered Blackbird <i>Agelaius humeralis</i>									✓	
Greater Antillean Grackle <i>Quiscalus niger</i>				✓	✓		✓	✓	✓	
Cuban Sparrow <i>Torreornis inexpectata</i>	EN   	250–999							✓	
Cuban Bullfinch <i>Melopyrrha nigra</i>				✓	✓		✓	✓	✓	
Cuban Grassquit <i>Tiaris canorus</i>					✓		✓	✓	✓	
Painted Bunting <i>Passerina ciris</i>	NT  			✓	✓				✓	✓
Western Spindalis <i>Spindalis zena</i>				✓	✓		✓	✓	✓	































































All population figures = numbers of individuals.

Threatened birds: Critically Endangered ; Endangered ; Vulnerable ; Near Threatened . Restricted-range birds . Biome-restricted birds . Congregatory birds .




## Important Bird Areas in the Caribbean – Cuba

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Table 1 ... continued. Key bird species at Important Bird Areas in Cuba.

Key bird species	Criteria	National population	Criteria	CU021	CU022	CU023	Cuba IBAs		CU026	CU027	CU028
											
Northern Bobwhite <i>Colinus virginianus</i>	NT 			✓	✓	✓			✓	✓	✓
West Indian Whistling-duck <i>Dendrocygna arborea</i>	VU 	5,000–9,999		✓		35					
Blue-winged Teal <i>Anas discors</i>		100,000–999,999									
Black-capped Petrel <i>Pterodroma hasitata</i>	EN 	250–499									
Caribbean Flamingo <i>Phoenicopterus ruber</i>		100,000–999,999									
White Ibis <i>Eudocimus albus</i>		10,000–24,999									
Glossy Ibis <i>Plegadis falcinellus</i>		25,000–99,999									
Magnificent Frigatebird <i>Fregata magnificens</i>		1,000–4,999									
Brown Pelican <i>Pelecanus occidentalis</i>		1,000–4,999				300					
Double-crested Cormorant <i>Phalacrocorax auritus</i>		10,000–24,999									
Osprey <i>Pandion haliaetus</i>								6,143			
Cuban Kite <i>Chondrohierax wilsonii</i>	CR 	50–249								✓	
Gundlach's Hawk <i>Accipiter gundlachi</i>	EN 	300–400		✓	✓	25	✓	✓		✓	✓
Black Rail <i>Laterallus jamaicensis</i>	NT 	500–999									
Zapata Rail <i>Cyanolimnas cerverai</i>	EN 	<50									
Sandhill Crane <i>Grus canadensis</i>		500–999									
Piping Plover <i>Charadrius melodus</i>	NT 	100–249									
Short-billed Dowitcher <i>Limnodromus griseus</i>		10,000–24,999									
Lesser Yellowlegs <i>Tringa flavipes</i>		10,000–24,999									
Least Sandpiper <i>Calidris minutilla</i>		10,000–24,999									
Laughing Gull <i>Larus atricilla</i>		10,000–24,999									
Gull-billed Tern <i>Sterna nilotica</i>		1,000–4,999									
Royal Tern <i>Sterna maxima</i>		5,000–9,999									
Sandwich Tern <i>Sterna sandvicensis</i>		500–999									
Common Tern <i>Sterna hirundo</i>		100–249									
Least Tern <i>Sterna antillarum</i>		1,000–4,999									
Bridled Tern <i>Sterna anaethetus</i>		1,000–4,999									
White-crowned Pigeon <i>Patagioenas leucocephala</i>	NT 			✓		300	✓		✓	✓	✓
Plain Pigeon <i>Patagioenas inornata</i>	NT 									✓	
Grey-headed Quail-dove <i>Geotrygon caniceps</i>	VU 	2,500–9,999		✓	✓		✓	✓		✓	✓
Key West Quail-dove <i>Geotrygon chrysa</i>				✓			✓	✓			
Blue-headed Quail-dove <i>Sturnoenas cyanocephala</i>	EN 	1,000–2,499								✓	
Cuban Parakeet <i>Aratinga euops</i>	VU 	2,500–9,999			✓		✓			250	
Cuban Amazon <i>Amazona leucocephala</i>	NT 				✓		✓			150	
Great Lizard-cuckoo <i>Saurothera merlini</i>				✓	✓	✓	✓	✓	✓	✓	✓
Bare-legged Owl <i>Gymnoglaux lawrencii</i>				✓	✓	✓	✓	✓		✓	✓
Cuban Pygmy-owl <i>Glaucidium siju</i>				✓	✓	✓	✓	✓	✓	✓	✓
Antillean Nighthawk <i>Chordeiles gundlachi</i>					✓	✓	✓			✓	✓
Cuban Nightjar <i>Caprimulgus cubanensis</i>				✓	✓	✓	✓	✓	✓	✓	✓
Antillean Palm-swift <i>Tachornis phoenicobia</i>				✓	✓	✓				✓	
Cuban Emerald <i>Chlorostilbon ricardii</i>				✓	✓	✓	✓	✓	✓	✓	✓
Bee Hummingbird <i>Mellisuga helenae</i>	NT 				✓		✓		✓	40	34
Cuban Trogon <i>Priotelus temnurus</i>				✓	✓		✓	✓	✓	✓	✓
Cuban Tody <i>Todus multicolor</i>				✓	✓	✓	✓	✓	✓	✓	✓
West Indian Woodpecker <i>Melanerpes superciliosus</i>				✓	✓	✓	✓	✓	✓	✓	✓
Cuban Green Woodpecker <i>Xiphidiopicus percussus</i>				✓	✓	✓	✓	✓	✓	✓	✓
Fernandina's Flicker <i>Colaptes fernandinae</i>	VU 	600–800									✓
Ivory-billed Woodpecker <i>Campephilus principalis</i>	CR 	<50								✓	
Greater Antillean Pewee <i>Contopus caribaeus</i>				✓	✓	✓	✓	✓	✓	✓	✓
Loggerhead Kingbird <i>Tyrannus caudifasciatus</i>				✓	✓	✓	✓	✓	✓	✓	✓
Giant Kingbird <i>Tyrannus cubensis</i>	EN 	250–999					✓	✓		✓	
La Sagra's Flycatcher <i>Myiarchus sagrae</i>				✓	✓	✓	✓	✓	✓	✓	✓
Cuban Vireo <i>Vireo gundlachi</i>				✓	✓	✓	✓	✓	✓	✓	✓
Thick-billed Vireo <i>Vireo crassirostris</i>											
Cuban Palm Crow <i>Corvus minutus</i>	EN 	2,500–9,999									
Cuban Crow <i>Corvus nasutus</i>				✓	✓		✓			✓	
Cuban Martin <i>Progne cryptoleuca</i>				✓		✓	✓				✓
Zapata Wren <i>Ferminia cerverai</i>	EN 	1,000–2,499									
Cuban Gnatcatcher <i>Polioptila lembeyi</i>				✓			✓		✓	✓	✓
Bahama Mockingbird <i>Mimus gundlachi</i>											
Cuban Solitaire <i>Myadestes elisabeth</i>	NT 				✓		✓			✓	
Bicknell's Thrush <i>Catharus bicknelli</i>	VU 										
Olive-capped Warbler <i>Dendroica pityophila</i>					✓		✓				
Yellow-headed Warbler <i>Teretistris fernandinae</i>											
Oriente Warbler <i>Teretistris forsi</i>				✓	✓	✓	✓	✓	✓	✓	✓
Greater Antillean Oriole <i>Icterus dominicensis</i>				✓	✓	✓	✓	✓	✓	✓	✓
Cuban Blackbird <i>Dives atrovireaceus</i>				✓	✓	✓	✓	✓	✓	✓	✓
Red-shouldered Blackbird <i>Agelaius assimilis</i>											
Tawny-shouldered Blackbird <i>Agelaius humeralis</i>				✓	✓	✓		✓	✓	✓	✓
Greater Antillean Grackle <i>Quiscalus niger</i>				✓	✓	✓	✓	✓	✓	✓	✓
Cuban Sparrow <i>Torreornis inexpectata</i>	EN 	250–999									700
Cuban Bullfinch <i>Melopyrrha nigra</i>				✓	✓	✓	✓	✓	✓	✓	✓
Cuban Grassquit <i>Tiaris canorus</i>				✓	✓	✓	✓	✓	✓	✓	✓
Painted Bunting <i>Passerina ciris</i>	NT 			✓		100	✓				
Western Spindalis <i>Spindalis zena</i>				✓	✓	✓	✓	✓	✓	✓	✓

All population figures = numbers of individuals.

Threatened birds: Critically Endangered ; Endangered ; Vulnerable ; Near Threatened . Restricted-range birds . Biome-restricted birds . Congregatory birds .



*leucocephala* and Cuban Parakeet *Aratinga euops*) and other taxa such as Bee Hummingbird *Mellisuga helenae*, Cuban Bullfinch *Melopyrrha nigra*, and grassquits *Tiaris* spp. Also, the impacts of introduced species such as cats, pigs *Sus scrofa*, mongoose *Herpestes auropunctatus*, rats *Rattus* spp., and more recently, the catfish *Claria* sp. have not been evaluated yet, but are thought to be significant in some areas and for some species. The potential impact of catfish (which are present in the Ciénaga Zapata) on the Endangered *Cyanolimnas cerverai* is of particular concern.

## IMPORTANT BIRD AREAS

Cuba's network of 28 IBAs—the island's international site priorities for bird conservation—cover c.231,657 km<sup>2</sup>. The IBAs have been identified on the basis of 75 key bird species (listed in Table 1) that variously meet the IBA criteria. These species include 24 threatened birds, 11 restricted-range species, 48 biome-restricted species and 23 congregatory waterbird and seabird species. All 28 IBAs support populations of globally threatened birds; 18 contain Cuba EBA restricted-range species and 24 IBAs support a significant proportion of the Greater Antilles biome-restricted species; 12 IBAs are home to globally significant congregations of seabirds or waterbirds, and seven have regionally significant congregations.

Most IBAs are partially or wholly included in the national system of protected areas, with some level of legal protection and management. However, there are several environmentally sensitive areas that lack any form of protection, such as Delta del Mayarí (CU023) and the Humedal Sur de Pinar del Río (CU003), both of which support important habitat for resident and migratory waterbirds. Five of Cuba's six Ramsar sites are part of the IBA network: Ciénaga de Lanier y Sur de la Isla de la Juventud (CU005), Río Máximo (CU014), Gran Humedal del Norte Ciego de Ávila (CU012), Delta del Cauto (CU020),



The Cuban IBA program has facilitated the collection of baseline data and some population estimates for a number of IBAs. (PHOTO: ARTURO KIRKCONNELL)

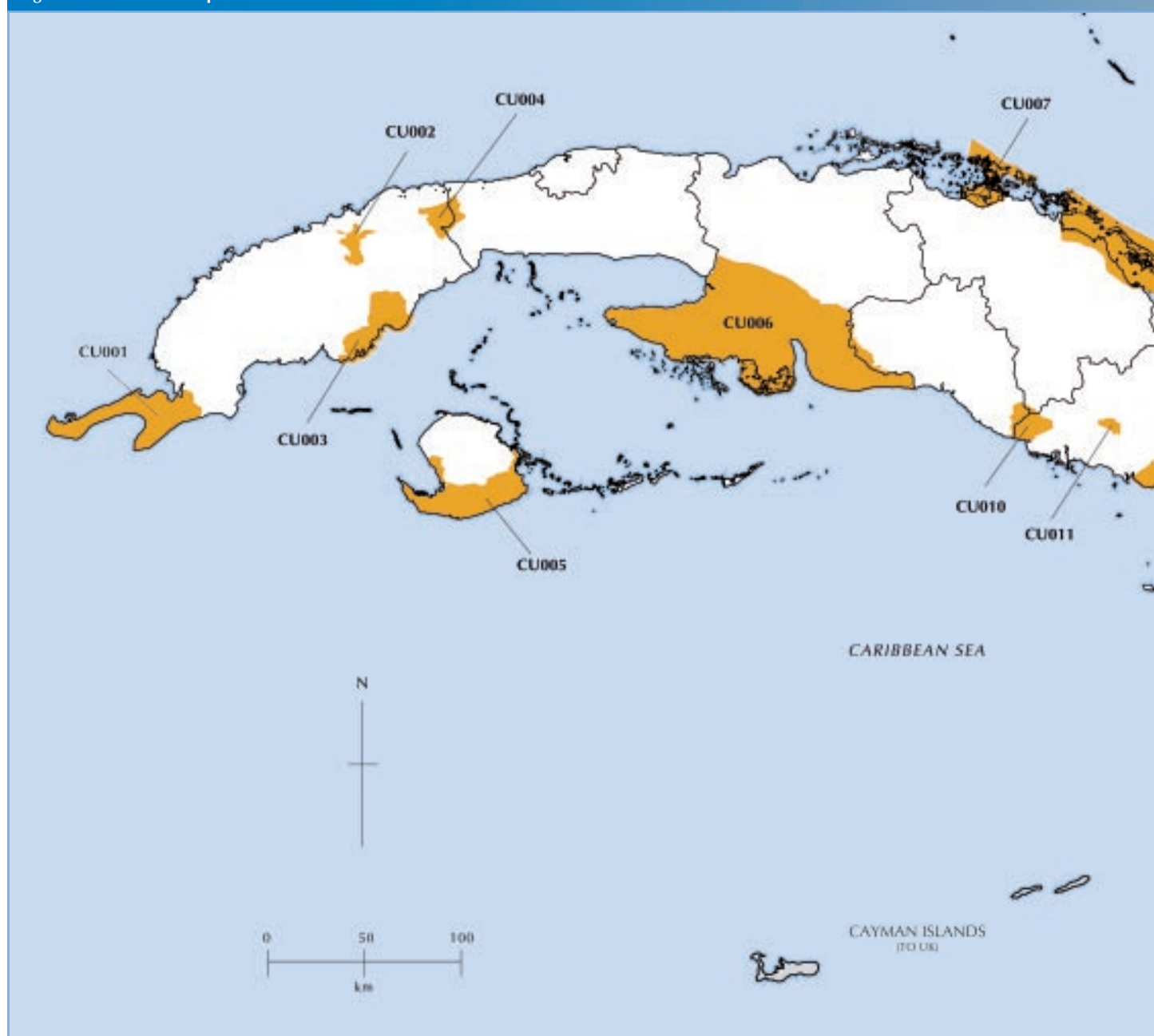
and Ciénaga de Zapata (CU006). Additionally, six of the IBAs are designated biosphere reserves and the Desembarco del Granma National Park (CU019) and the Alejandro de Humboldt National Park (CU027) have been declared World Heritage Sites.

The Centro Nacional de Áreas Protegidas (CNAP) is responsible for coordinating the Cuban Important Bird Area (IBA) program which started in 2000 through the project “Eastern Cuba: saving a unique Caribbean wilderness” with funds from the British Birdwatching Fair and BirdLife International. This project focused on an extensive fieldwork program in eastern Cuba, implemented by CNAP, Instituto de Ecología y Sistemática, Museo Nacional de Historia Natural, Facultad de Biología de la Universidad de la Habana,

Río Máximo IBA is one of six Ramsar sites in Cuba, and supports the largest breeding colony of Caribbean Flamingos in the Caribbean, with more than 50,000 pairs. (PHOTO: ANIET VENEREO)



Figure 1. Location of Important Bird Areas in Cuba.



and Centro Oriental de Ecosistemas y Biodiversidad. Results from this fieldwork have contributed to the information presented in this chapter (which was otherwise an output of three participatory national IBA workshops), and many of the proposals for the establishment of new protected areas that are detailed within the various IBA profiles below. These same institutions (and others) have been involved in public education and awareness initiatives, campaigns and events, including the Society for the Conservation and Study of Caribbean Birds' annual Caribbean Endemic Bird Festival and West Indian Whistling-Duck and Wetlands Conservation Program. Increasing awareness at a local, community level is critical to the development of effective IBA conservation actions.

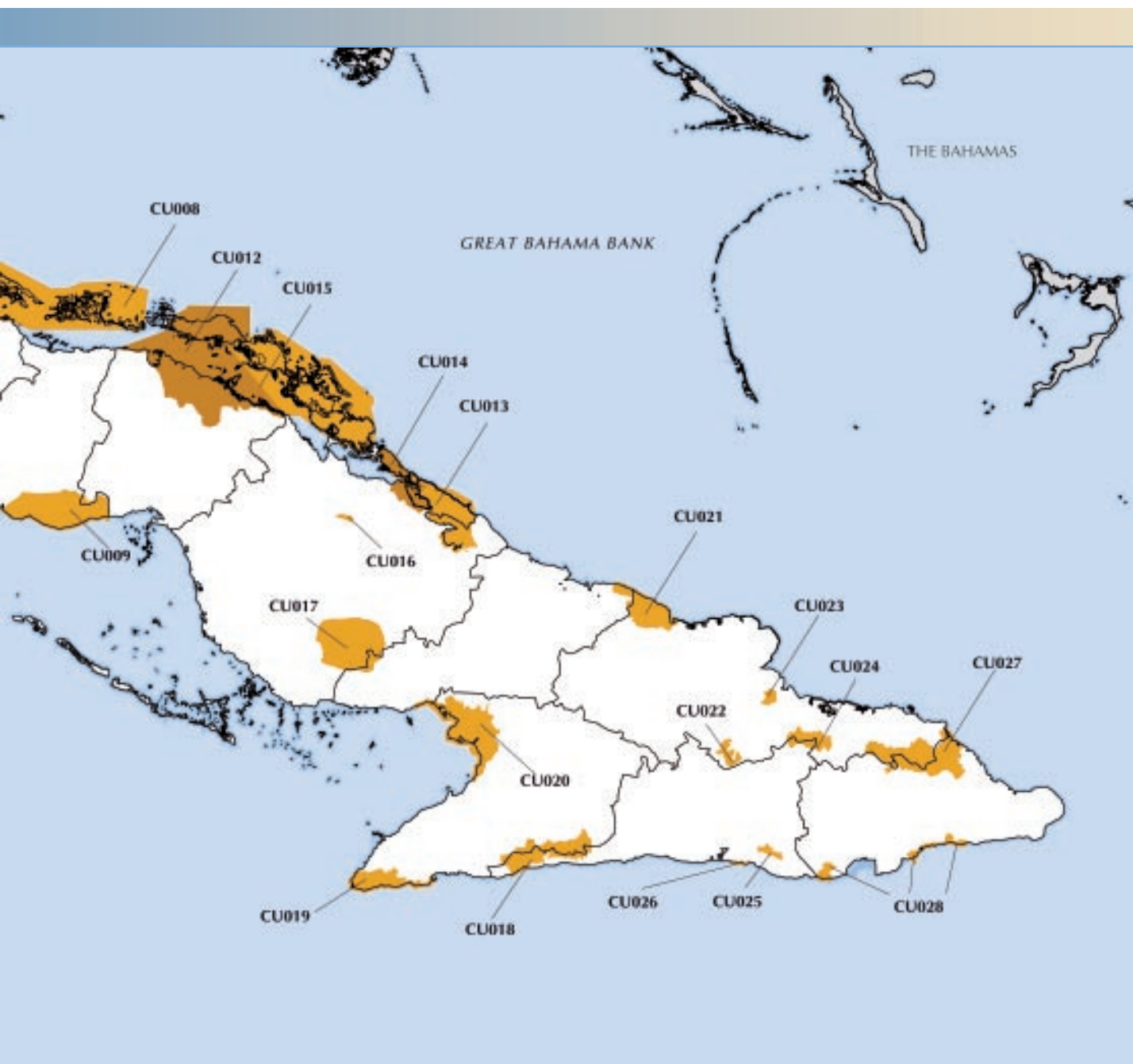
The IBA program and other initiatives have facilitated the collection of baseline data (including some population estimates) for many of the IBAs (especially in eastern Cuba, and also for waterbirds). These data need to be built on to monitor the status of key bird species listed in Table 1 (especially the globally threatened birds) at each IBA. Information concerning the status of these key species can be used to inform the annual assessment of state, pressure and response variables

at each of Cuba's IBAs in order to provide an objective status assessment and highlight management interventions that might be required to maintain these internationally important biodiversity sites.

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### CU001 Guanahacabibes

### National Park/Managed Resources Protected Area/Biosphere Reserve

COORDINATES 21°55'N 84°30'W

ADMIN REGION Pinar del Río

AREA 101,116 ha

ALTITUDE 0–19 m

HABITAT Mangroves, marsh, coast, semi-deciduous and evergreen forests



THREATENED BIRDS 9

RESTRICTED-RANGE BIRDS 2

BIOME-RESTRICTED BIRDS 31

CONGREGATORY BIRDS

### Site description

Guanahacabibes IBA is located in the municipality of Sandino, Pinar del Río province, in westernmost Cuba. It comprises the forested, flat limestone plain of the Guanahacabibes peninsula, itself formed by the peninsulas of Cabo de San Antonio and Corrientes. Cliffs rise to 19 m on the south coast from where the land slopes gently across the peninsula down to sea level on the north coast. A range of limestone formations, including caves, are found within the IBA. The Cueva la Barca, contains a rich, nationally important cave biota. The town of La Bajada (1,146 inhabitants) is located within the IBA.

### Birds

This IBA supports 190 bird species (31 of which are biome-restricted species), including 11 Cuban endemics and nine globally threatened species of which the Blue-headed Quail Dove *Starnoenas cyanocephala*, Giant Kingbird *Tyrannus cubensis* and Gundlach's Hawk *Accipiter gundlachi* are all Endangered. The Cuban EBA restricted-range Yellow-headed Warbler *Teretistris fernandinae* and Red-shouldered Blackbird *Agelaius assimilis* both occur. Guanahacabibes forms part of the migratory corridor of the Mississippi flyway, and is a bottleneck site during fall migration. Bird capture rates during migration mist-netting studies have been higher in this IBA than anywhere else in Cuba.

### Other biodiversity

The Endangered (and endemic) frog *Eleutherodactylus guanahacabibes* occurs, as do other endemic reptiles including *Anolis quadriocellifer* and *Antillophis andreae peninsulae*. A number of endemic rodents and bats occur, and 14 plant species are confined to the IBA.

### Conservation

In 1959, the areas of El Veral and Cabo Corrientes within the Guanahacabibes IBA were designated as natural reserves, and as strict conservation areas in 1963. The whole IBA was declared a biosphere reserve in 1987, within which the core zone, Guanahacabibes National Park, was approved by the government in 2001. Residents of La Bajada work mainly in forestry, apiculture, cattle farming, and cultivation of tobacco and other crops. Some are employed in a nearby scuba-diving centre. Other land uses include selective logging and pig foraging. Scientific research is the only activity conducted in the core zone. Threats to the IBA include ecosystem degradation, invasive species, tourism-related development and disturbance. Fishing, hunting and harvesting of natural resources also exert pressure on the ecosystem.

HIRAM GONZÁLEZ, ALINA PÉREZ, ALEJANDRO LLANES, ENEIDER PÉREZ

**CU002 Mil Cumbres****Managed Resources Protected Area****COORDINATES** 22°43'N 83°24'W**ADMIN REGION** Pinar del Río**AREA** 16,930 ha**ALTITUDE** 100–680 m**HABITAT** Pine forests, serpentinite forests, karst vegetation, rainforests, semi-deciduous forests**THREATENED BIRDS** 11**RESTRICTED-RANGE BIRDS** 2**BIOME-RESTRICTED BIRDS** 32**CONGREGATORY BIRDS****Site description**

Mil Cumbres IBA embraces a complex landscape within the municipalities of Los Palacios, La Palma and Bahía Honda, in Pinar del Río province. The landscape comprises agricultural plains, karst valleys, mojotes, slate cliffs, sinkholes, sulphur springs and hills, and includes the Sierra de los Órganos, Sierra del Pan de Guajabón, and the Cajalbana Plateau. The IBA protects an important aquifer and the catchment areas of the San Marcos and San Diego rivers.

**Birds**

This IBA supports 32 biome-restricted species, 15 of which are Cuba endemics and 11 globally threatened birds. The Endangered Blue-headed Quail-dove *Starnoenas cyanocephala*, Giant Kingbird *Tyrannus cubensis*, and Gundlach's Hawk *Accipiter gundlachi* occur and the area is particularly important for the Vulnerable Fernandina's Flicker *Colaptes fernandinae*, and Near Threatened Painted Bunting *Passerina ciris*, Cuban Solitaire *Myadestes elisabeth*, and Plain Pigeon *Patagioenas inornata*.

**Other biodiversity**

The herpetofauna includes the Critically Endangered frog *Eleutherodactylus symingtoni* and other Pinar del Río endemics

*Anolis vermiculatus* and *A. bartschi*. Mammals include the hutias *Mysateles prehensilis* and *Capromys pilorides*, and 10 bat species. Two locally endemic freshwater fish are also present. Of a flora with 1,143 species, 52 are endemic to Cajalbana and 24 to Sierra de la Güira.

**Conservation**

Mil Cumbres IBA is a Managed Resources Protected Area created in 1976. It is currently awaiting approval to be included as a site of national significance in the National System of Protected Areas. It is administered by the Empresa para la Protección de la Flora y la Fauna (EPFF). Since the late nineteenth century, this area has suffered from excessive forest exploitation (for timber) and clearance of lands for agriculture and livestock farming. Only the highest (least accessible) areas have retained their forest cover. In spite of this, a species-rich flora, diverse fauna, and attractive landscapes still remain in the area. Among the main threats are illegal hunting and logging, uncontrolled grazing, and the use of agrochemicals in the tobacco plantations. The presence of nearby mineral reserves and an active timber industry will maintain pressure on the area.

HIRAM GONZÁLEZ, ARTURO KIRKCONNELL

**CU003 Humedal Sur de Pinar del Río****COORDINATES** 22°25'N 83°18'W**ADMIN REGION** Pinar del Río**AREA** 66,691 ha**ALTITUDE** 0–5 m**HABITAT** Wetlands, mangrove, agricultural areas**Unprotected****THREATENED BIRDS** 3**RESTRICTED-RANGE BIRDS****BIOME-RESTRICTED BIRDS****CONGREGATORY BIRDS** ✓**Site description**

Humedal Sur de Pinar del Río IBA includes the coastal zone between the municipalities of Los Palacios and Consolación del Sur, in the south of Pinar del Río province. It comprises a fringe of natural coastal wetlands associated with rice cultivation and cattle farming. The coastal wetlands, which include several lagoons such as Maspotón and Casa Media, are bordered by mangroves. More than 90% of the IBA consists of wetland habitat, 30% of it is natural (mangroves, coastal lagoons, salt marshes, intertidal mudflats) and the rest is artificial (i.e. seasonal rice paddies).

**Birds**

This IBA supports more than 101 bird species and holds significant numbers of resident and migratory waterbirds, particularly shorebirds and ducks. More than 10,000 dowitchers *Limnodromus* spp. have been observed. Other common waterbirds include Little Blue Heron *Egretta caerulea*, Glossy Ibis *Plegadis falcinellus*, West Indian Whistling-duck *Dendrocygna arborea* (Vulnerable), Blue-winged Teal *Anas discors*, and Brown Pelican *Pelecanus occidentalis*. The largest concentration of American White Pelican *Pelecanus erythrorhynchos* recorded in the Caribbean (c.400 individuals) was in this IBA where it is a common winter resident.

**Other biodiversity**

The coastal lagoons support populations of the Vulnerable American crocodile *Crocodylus acutus* and the hutia *Capromys pilorides*.

**Conservation**

Humedal Sur de Pinar del Río IBA has no legal protection status, but conservation projects and environmental education campaigns are being implemented in the area. The coastal strip is managed by the Empresa para la Protección de la Flora y la Fauna (EPFF), and the rice paddies by Los Palacios Agro-industrial Complex. Although this area has traditionally been used for hunting, it has valuable coastal wetland remnants that are critical for sustaining waterbird populations. These wetlands are partly affected by residents from Los Palacios, la Cubana, Paso Real de San Diego, Alonso de Rojas, and Consolación del Sur, who use them to gain access to the rice paddies. Despite the agricultural uses of the IBA, the application of fertilisers has decreased by 50% in the last 15 years, due to the economic crisis in Cuba.

LOURDES MUGICA, MARTÍN ACOSTA



**CU004 Sierra del Rosario****Natural Resources Protected Area/Biosphere Reserve****COORDINATES** 22°51'N 82°57'W**ADMIN REGION** La Habana, Pinar del Río**AREA** 26,686 ha**ALTITUDE** 19–565 m**HABITAT** Evergreen forests, semi-deciduous forests, pine forests, karstFernandina's  
Flicker**THREATENED BIRDS****9****RESTRICTED-RANGE BIRDS****2****BIOME-RESTRICTED BIRDS****31****CONGREGATORY BIRDS****✓****■ Site description**

Sierra del Rosario IBA is located to the east of Cordillera de Guaniguanico, in the municipalities of Artemisa, Candelaria, and Bahía Honda, straddling the border between Pinar del Río and Havana provinces. Las Peladas Natural Reserve and El Salón Ecological Reserve comprise the core zone of the biosphere reserve. The IBA boundaries are the same as those of the biosphere reserve. The reserve's eastern entrance is located 50 km south-west of Havana. The IBA supports 4,800 people in eight communities, one of which, Las Terrazas has developed a sustainable rural economy and is also an ecotourism centre. There are remains of seventeenth century French coffee plantations around Las Terrazas.

**■ Birds**

This IBA is home to 93 bird species (32 of which are biome-restricted species), including 16 Cuba endemics and 10 globally threatened birds. These threatened species include the Endangered Blue-headed Quail-dove *Starnoenas cyanocephala*, Giant Kingbird *Tyrannus cubensis* and Gundlach's Hawk *Accipiter gundlachi*, the Vulnerable Fernandina's Flicker *Colaptes fernandinae* and the Near Threatened Northern Bobwhite *Colinus virginianus* and White-crowned Pigeon *Patagioenas leucocephala*.

**■ Other biodiversity**

Mammals include the endemic hutias *Capromys pilorides* and *Mysateles prehensilis*, and 11 species of bats. The lizards *Anolis vermiculatus*, *A. bartschi*, and *A. mestrei* are endemic to the Pinar del Río karst, and five amphibians are also local endemics.

**■ Conservation**

Sierra del Rosario IBA was the first biosphere reserve to be declared in Cuba (in 1985). The core zones of Las Peladas and El Salón were approved by the government in 2008. Farming is fundamental to the livelihoods of the reserve's residents. Activities in the transition zone include cattle ranching, forestry, mixed crops, tourism (around Las Terrazas and Soroa), and conservation. However, the core zones are limited to research, monitoring, and environmental education. Sustainable livelihood practices are implemented in this IBA, in particular by the Las Terrazas community. Threats include illegal hunting and logging, forest fires, erosion, and pollution caused by untreated discharges from pig and poultry farms. Access to the zone is still regulated, but very large numbers of visitors have been reported at camp sites. The reserve has also been affected by the construction of two large dams in the transition zone.

ALINA PÉREZ, HIRAM GONZÁLEZ, FIDEL HERNÁNDEZ

**CU005 Ciénaga de Lanier y Sur de la Isla de la Juventud****Managed Resource Protected Area/Ramsar Site****COORDINATES** 21°33'N 82°49'W**ADMIN REGION** Isla de la Juventud**AREA** 92,216 ha**ALTITUDE** 0–40 m**HABITAT** Semi-deciduous forest, wetlands, marsh, mangrove, coral reef, sea-grass bedsSandhill  
Crane**THREATENED BIRDS****5****RESTRICTED-RANGE BIRDS****2****BIOME-RESTRICTED BIRDS****26****CONGREGATORY BIRDS****✓****■ Site description**

Ciénaga de Lanier y Sur de la Isla de la Juventud IBA is in the southern part of Isla de la Juventud, in the Canarreos Archipelago, off the south coast of western Cuba. It includes the Ciénaga de Lanier, which stretches from Ensenada de Siguanea to the eastern Ensenada of San Juan, and divides the north of the island from the karstic plains and coastal zones to the south. The IBA supports a wide diversity of wetland and coastal habitats. Cocodrilo and Cayo Piedras with 300 and 20 inhabitants, respectively, are located within the IBA, whereas the communities of Santa Fé, Mella, and La Reforma are in surrounding areas.

**■ Birds**

This IBA is notable for its resident and migratory waterbirds, including globally significant populations of the Vulnerable West Indian Whistling-duck *Dendrocygna arborea* and the resident subspecies of Sandhill Crane *Grus canadensis nesiotis*. Terrestrial species include the Endangered Giant Kingbird *Tyrannus cubensis* and a huge population of Near Threatened White-crowned Pigeon *Patagioenas leucocephala*.

**■ Other biodiversity**

Reptiles include the Endangered Cuban crocodile *Crocodylus rhombifer*, and the Vulnerable American crocodile *C. acutus*

and Cuban ground iguana *Cyclura nubila*. The hutia *Mysateles meridionalis* is endemic to Isla de la Juventud, and the fish *Atractosteus tristoechus* is restricted to Zapata and Lanier swamps.

**■ Conservation**

Ciénaga de Lanier y Sur de la Isla de la Juventud IBA was declared a managed resource protected area in 1990 and in 1998 the southern part of the island and the eastern cays were declared a special region of sustainable development. Its core zones, Punta Francés National Park and Punta del Este Ecological Reserve are awaiting approval as nationally significant areas. The Los Indios Ecological Reserve is also awaiting approval. The IBA was declared a Ramsar site in 2002. Local uses of the area include small-scale fishing (by a cooperative in Cocodrilo) and small-scale forest exploitation through selective logging. Limestone was quarried near Cayo Piedras, and could be resumed in the future. This IBA is threatened by a large-scale tourism development plan as well as the impacts of introduced invasive species. Dams constructed to the north of the marsh are restricting the freshwater input to the wetland.

SUSANA AGUILAR, JUAN PEDRO SOY, ARYANNE CERRANO

**CU006 Ciénaga de Zapata****National Park/Wildlife Refuge/Ramsar Site/Biosphere Reserve****COORDINATES** 22°19'N 81°21'W**ADMIN REGION** Matanzas**AREA** 530,695 ha**ALTITUDE** 0–5 m**HABITAT** Grassy marshes, wetlands, mangroves, semi-deciduous forest, salinas**THREATENED BIRDS** 17**RESTRICTED-RANGE BIRDS** 5**BIOME-RESTRICTED BIRDS** 40**CONGREGATORY BIRDS** ☒**■ Site description**

Embracing the entire Zapata Peninsula in southern Matanzas province, this IBA is the largest wetland in the Caribbean. It has extensive cave lake systems with spectacular blue holes, flooded caves and important water resources. The IBA also provides critical habitat in the form of forest, flooded palm savannas, open water and salinas, reefs and mangroves. It has unique submerged marine terraces and coral reefs, valuable archaeological and paleontological sites, and a history of traditional use of natural resources in the surrounding rural communities.

**■ Birds**

This IBA is home to 40 biome-restricted birds, including 21 Cuba endemics and 17 globally threatened species. The Endangered Zapata Wren *Ferminia cerverai* and Zapata Rail *Cyanolimnas cerverai* are endemic to the IBA. The Endangered Cuban Sparrow *Torreornis inexpectata inexpectata*, Gundlach's Hawk *Accipiter gundlachi*, Blue-headed Quail-dove *Starnoenas cyanocephala* and Giant Kingbird *Tyrannus cubensis* also occur. The area supports large concentrations of waterbirds, including breeding populations of Sandhill Crane *Grus canadensis nesiotis* and Wood Stork *Mycteria americana*. This is the last site in Cuba where the Critically Endangered Bachman's Warbler *Vermivora bachmanii* was observed, in 1964.

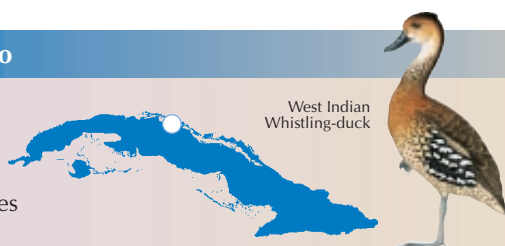
**■ Other biodiversity**

The Endangered Cuban crocodile *Crocodylus rhombifer*, Vulnerable American crocodile *C. acutus* and Critically Endangered dwarf hutia *Mesocapromys nanus* occur. Globally threatened sea-turtles nest on the beaches, and the IBA supports the largest population of the endemic Endangered fish *Atractosteus tristoechus*, considered a living fossil.

**■ Conservation**

Ciénaga de Zapata was declared a biosphere reserve in 2000 and currently awaits approval as a managed resource protected area. The proposed core zones are Ciénaga de Zapata National Park (approved by the Comité Ejecutivo del Consejo de Ministros in 2008), Bermejas Wildlife Refuge, and Los Sábalos Wildlife Refuge. Main activities are forestry, tourism and fishing. Tourism is concentrated in La Boca, Guamá, Playa Larga and Playa Girón, where wildlife watching, recreational fishing, hiking and beach tourism take place. The IBA has been affected by forest fires, storms, poor water management and restoration, as well as hunting, fishing, and illegal logging. Other threats include invasive plants and fauna (e.g. the carnivorous catfish *Clarias gariepinus*).

HIRAM GONZÁLEZ, ALEJANDRO LLANES, ARTURO KIRKCONNELL

**CU007 Las Picuas-Cayo Del Cristo****Wildlife Refuge****COORDINATES** 23°02'N 80°12'W**ADMIN REGION** Villa Clara**AREA** 56,290 ha**ALTITUDE** 0–5 m**HABITAT** Offshore cays, mangroves, dunes**THREATENED BIRDS** 3**RESTRICTED-RANGE BIRDS** ☐**BIOME-RESTRICTED BIRDS** ☐**CONGREGATORY BIRDS** ☒**■ Site description**

Las Picuas-Cayo Del Cristo IBA is located in the Sabana-Camagüey Archipelago, a group of cays off the north-east coast of Villa Clara province. The IBA extends from Cayo Blanquital to Cayo Cristo. These cays and islets are characterised by a muddy-sandy substrate, and are dominated by mangrove forests and dunes with associated shrubby vegetation. The administrative centre of the IBA is in the coastal town of Carahatas, with around 666 residents who mostly work in fishing through a state fisheries cooperative, but also in agriculture and cattle farming.

**■ Birds**

This IBA supports globally significant breeding colonies of Caribbean Flamingo *Phoenicopterus ruber*, Glossy Ibis *Plegadis falcinellus* and the Vulnerable West Indian Whistling-duck *Dendrocygna arborea*. It represents an important waterbird site with 46 species nesting including herons, ibises, spoonbills, cormorants, and pelicans. More than 17 waterbird species roost communally on several of cays and islets. The Near Threatened White-crowned Pigeon *Patagioenas leucocephala* breeds in the IBA.

**■ Other biodiversity**

Marine life includes the Vulnerable West Indian manatee *Trichechus manatus* and globally threatened sea-turtles. The Vulnerable Cuban ground iguana *Cyclura nubila* occurs on more than 20 cays. Two plants are Cuban endemics, one of which is the Endangered *Pilosocereus robinii*.

**■ Conservation**

Las Picuas-Cayo del Cristo IBA was approved as a wildlife refuge in 2001 and is currently managed by the Empresa para la Protección de la Flora y la Fauna (ENPFF). The most important threat facing this IBA is overfishing and excessive use of trawl nets. More than 15 trawlers operate year-round; an activity which is unregulated by local fishing authorities and significantly disturbs marine habitats and fauna. Illegal hunting of manatees occurs year-round and of sea-turtles during the nesting season. The queen conch *Strombus gigas* is also unsustainably harvested and used as bait. Other threats include dumping of construction waste, oil and lubricant spills from boats, exotic flora, hurricanes and other natural phenomena, as well as the cutting of *Coccolrinax litoralis* and *Eugenia* spp. to make fishing tools.

MARÍA MORALES, VICENTE BEROVIDES, SUSANA AGUILAR

## CU008 Cayería Centro-Oriental de Villa Clara

## Wildlife Refuge/National Park/Biosphere Reserve

COORDINATES 22°39'N 79°17'W  
 ADMIN REGION Villa Clara  
 AREA 284,091 ha  
 ALTITUDE 0–16 m  
 HABITAT Offshore cays



## THREATENED BIRDS 4

RESTRICTED-RANGE BIRDS

BIOME-RESTRICTED BIRDS

CONGREGATORY BIRDS

4

### Site description

Cayería Centro-Oriental de Villa Clara IBA is located in the Sabana-Camagüey Archipelago, and represents a group of cays off the north coast of Villa Clara province. The IBA embraces several cays including Cobos, Francés, Las Brujas, Ensenachos, Frágoso, and Santa María. These are flat cays, with diverse natural features including coastal evergreen forest, coastal scrub, mangroves, coral reefs, and sandy beaches. The towns of Caibarién, Camajuani, and Encrucijada are close to but outside of the IBA.

### Birds

This IBA supports globally significant breeding colonies of Laughing Gull *Larus atricilla*, Royal Tern *Sterna maxima*, Sandwich Tern *S. sandvicensis*, Common Tern *S. hirundo* and Least Tern *S. antillarum*. The area is a wintering site for the Near Threatened Piping Plover *Charadrius melodus* and there are also unconfirmed reports of Brown Noddy *Anous stolidus* breeding. A wide diversity of waterbirds use this area including the Vulnerable West Indian Whistling-duck *Dendrocygna arborea*.

### Other biodiversity

The Critically Endangered eared hutia *Mesocapromys auritus* is endemic to Cayo Frágoso. The lizard *Anolis pigmaequestrus*

is endemic to Cayo Francés. The most diverse coral reef of the Sabana-Camagüey Archipelago is within the IBA. Of the 248 plant species present, 29 are endemic.

### Conservation

The Lanzasillo-Pajonal-Fragoso Wildlife Refuge (the only protected area approved in the IBA) and the Las Loras Wildlife Refuge are managed by the Empresa para la Protección de la Flora y la Fauna (ENPFF). The Maja-Español Inner Cays and Francés-Español Outer Cays wildlife refuges have only been proposed and lack management. Portions of the Santa María-Los Caimanes National Park as well as the Buenavista Biosphere Reserve are within the IBA and are managed by the Ministry of Science Technology and Environment. Threats to the IBA include habitat destruction, fragmentation, disturbance, gas emissions, dust, and introduced species. Beach tourists cause disturbance to *C. melodus* and construction-related habitat loss might affect species such as Bahama Mockingbird *Mimus gundlachii* and Great Lizard-cuckoo *Saurothera merlini santamariae*. Furthermore, local fishermen harvest eggs and chicks of gulls, cormorants and flamingos for food.

EDWIN RUIZ, ANGEL ARIAS, DAISY RODRÍGUEZ, HIRAM GONZÁLEZ, ALEJANDRO LLANES, ENEIDER PÉREZ, PATRICIA RODRÍGUEZ, PEDRO BLANCO

## CU009 Humedal del Sur de Sancti Spiritus

## Wildlife Refuge

COORDINATES 24°47'N 77°53'W  
 ADMIN REGION Sancti Spiritus  
 AREA 82,377 ha  
 ALTITUDE 0–5 m  
 HABITAT Wetlands



## THREATENED BIRDS

RESTRICTED-RANGE BIRDS

BIOME-RESTRICTED BIRDS

CONGREGATORY BIRDS

### Site description

Humedal del Sur de Sancti Spiritus IBA is a wetland and coastal area between Las Nuevas, Mapo and Tunas de Zaza, on the south coast in Sancti Spiritus province. It comprises a group of natural coastal wetlands, rice paddies, and pastures for livestock farming. The rice paddies act as seasonal wetland ecosystems, with El Jíbaro being the most important in the country and a critical site for congregatory waterbirds. To the south the IBA is bordered with a fringe of mangrove forests and coastal wetlands including the El Basto and La Limeta lagoons. Access to this area is facilitated by the rice paddy embankments, although the lagoons can be reached by land. The rice paddies are managed by the Sur del Jíbaro Agroindustrial Complex.

### Birds

This IBA is notable for resident and migratory waterbirds, with congregations of migratory shorebirds exceeding 10,000 individuals, and over 20,000 Glossy Ibis *Plegadis falcinellus* observed on occasions. The migratory Blue-winged Teal *Anas discors* is particularly abundant (>100,000 individuals) in the coastal lagoons. Up to 100 Vulnerable West Indian Whistling-duck *Dendrocygna arborea* use the remote coastal wetlands as diurnal resting areas and the rice paddies as nocturnal feeding sites.

### Other biodiversity

The endemic hutia *Capromys pilorides* is present in the mangrove area, as are various endemic reptiles belonging to the genera *Anolis* and *Epicrates*.

### Conservation

Humedal del Sur de Sancti Spiritus IBA includes the locally significant Tunas de Zaza Wildlife Refuge approved by the Comité Ejecutivo del Consejo de Ministros in 2001. Conservation projects and environmental education campaigns are currently being implemented in the IBA. These wetlands are affected by activities of the residents of Las Nuevas, Jibaro, Mapo, Tunas de Zaza (and other areas) who traditionally use the IBA as a hunting site. Local residents use hand-made traps and nets to capture egrets, ibises, flamingos and ducks. Although use of fertilisers in the artificial wetlands has decreased in the last 15 years, natural wetlands, like those close to Tunas de Zaza, are being affected by sewage discharges, causing the death of mangroves.

MARTÍN ACOSTA, LOURDES MUGICA, ARIAM JIMÉNEZ



**CU010 Topes de Collantes**

COORDINATES 21°53'N 60°01'W

ADMIN REGION Sancti Spiritus

AREA 29,425 ha

ALTITUDE 200–1,140 m

HABITAT Pine forests, evergreen forest, rainforest

**Natural Protected Landscape**

THREATENED BIRDS 6

RESTRICTED-RANGE BIRDS

BIOME-RESTRICTED BIRDS 26

CONGREGATORY BIRDS

**Site description**

The Topes de Collantes IBA is an area of hills within the Sierra del Escambray (part of the Guamuhaya massif) in south-western Sancti Spiritus province. These hills are characterised by their structural and tectonic complexity (including areas of karst limestone) as well as their cool climate. This has resulted in a diverse range of vegetation types including evergreen forest, pine forest, riparian forest and grasslands, semi-deciduous forest, and secondary scrub containing *Dichrostachys cinerea* in deforested areas.

**Birds**

This IBA supports populations of 26 (of the 48) Greater Antilles biome-restricted including the Endangered Gundlach's Hawk *Accipiter gundlachi*, Vulnerable Cuban Parakeet *Aratinga euops* and Grey-headed Quail-dove *Geotrygon caniceps*, and Near Threatened Cuban Amazon *Amazona leucocephala*. Other species of interest include Cuban Green Woodpecker *Xiphidiopicus percussus*, Limpkin *Aramus guarauna*, Cuban Martin *Progne cryptoleuca*, Tree Swallow *Tachycineta bicolor*, Wood Thrush *Hylocichla mustelina*, Louisiana Waterthrush *Seiurus motacilla*, Ovenbird *Seiurus aurocapilla*, and Red-legged Honeycreeper *Cyanerpes cyaneus*.

**Other biodiversity**

Of the 488 higher plant species present, 53 are endemic, 22 of which with some category of global threat. Twenty-five endemics of the Guamuhaya sector have been reported in Pico Potrerillo, including local endemics such as *Vernonia potrerilloana*, *Rondeletia potrerilloana* and *Psychotria martii*.

**Conservation**

Topes de Collantes IBA has been proposed as a natural protected landscape within the National System of Protected Areas. It is managed by the Topes de Collantes Touristic Complex of the Gaviota Touristic Enterprise. Land is mostly used for agriculture, forestry and tourism. The principal threat to the IBA is the high demand for nature tourism and related activities such as the commercialisation and extraction of species, mostly orchids, by tourists. Natural areas suffer from heavy human pressure and a high incidence of erosion, as well as water pollution (especially in the Río Vegas Grandes). Other threats include dry season forest fires and invasive plants such as *Dichrostachys cinerea*.

DAYSÍ RODRÍGUEZ

**CU011 Alturas de Banao**

COORDINATES 23°02'N 80°12'W

ADMIN REGION Sancti Spiritus

AREA 6,126 ha

ALTITUDE 200–843 m

HABITAT Semi-deciduous forest, evergreen forest, riparian forest, karst forest

**Ecological Reserve**

THREATENED BIRDS 6

RESTRICTED-RANGE BIRDS

BIOME-RESTRICTED BIRDS 25

CONGREGATORY BIRDS

**Site description**

Alturas de Banao IBA is in the Guamuhaya massif of the Cordillera de Banao, central Cuba. It comprises an area of low, karstic hills in the municipalities of Sancti Spiritus, Fomento and Trinidad, and includes the uppermost part of the Banao and Higuanojo river basins. The landscape is one of canyons, valleys and sinkholes. The IBA is surrounded by the communities of Banao, El Pinto, Cacahual, Cuarto Congreso, Santa Rosa, Gavilanes, La Veintitrés, La Güira, and Los Limpios.

**Birds**

This IBA supports 72% (77 species) of Cuba's breeding resident birds including 25 (of the 48) Greater Antilles biome-restricted species. Of particular note is the presence of the Endangered Gundlach's Hawk *Accipiter gundlachi*, Vulnerable Cuban Parakeet *Aratinga euops* and Grey-headed Quail-dove *Geotrygon caniceps*, and the Near Threatened Cuban Amazon *Amazona leucocephala*, Northern Bobwhite *Colinus virginianus* and Painted Bunting *Passerina ciris*. The Near Threatened Cerulean Warbler *Dendroica cerulea* has also been recorded in the IBA on passage.

**Other biodiversity**

The herpetofauna in this IBA is particularly rich. Amphibians include the Endangered frogs *Eleutherodactylus emiliae* and *E. caspari*, and the Vulnerable *E. limbatus*. The Endangered Cuban long-nosed toad *Bufo longinasus dunni* is restricted to Caja de Agua. Of the 900 species of plant recorded, 225 are endemic.

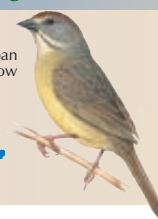
**Conservation**

The IBA follows the boundaries of the Alturas de Banao Ecological Reserve which is awaiting approval by the Comité Ejecutivo del Consejo de Ministros. The reserve is divided into the following administrative areas: Jarico, María Antonia, El Regalo, Hoyo del Naranjal, Caja de Agua, and La Sabina. There are pasture areas for grazing animals, including horses, cattle and buffalo, the latter in the Hoyo del Naranjal management area. The IBA is primarily used for research and nature tourism by students, visitors, and residents of the surrounding communities. Activities such as illegal logging and hunting, firewood extraction and recreation are threatening the area.

MAIKEL CAÑIZARES, SUSANA AGUILAR

**CU012 Gran Humedal del Norte Ciego de Ávila****Ecological Reserve/Wildlife Refuge/Ramsar Site****COORDINATES** 22°30'N 78°26'W**ADMIN REGION** Ciego de Ávila**AREA** 268,728 ha**ALTITUDE** 0–13 m**HABITAT** Wetlands, offshore cays, forest, mangroves, coastal dry scrub

Cuban Sparrow

**THREATENED BIRDS** 10**RESTRICTED-RANGE BIRDS** 5**BIOME-RESTRICTED BIRDS** 29**CONGREGATORY BIRDS** ☒**■ Site description**

Gran Humedal del Norte Ciego de Ávila IBA is in the north-eastern portion of Ciego de Ávila province, covering nearly all of its coastal zone as well as the Cayo Guillermo and Cayo Coco. It also includes part of La Yana catchment area and limestone formations located in the northern part of the province. Wetlands include Laguna de la Leche and Laguna la Redonda which feed the underground rivers of the area. Communities in the area include La 21, Marbella, La Loma, Rinconada, Malezal, Santa Bárbara, and Delia, among others.

**■ Birds**

This IBA supports globally significant populations of the Vulnerable West Indian Whistling-duck *Dendrocygna arborea*, Near Threatened Piping Plover *Charadrius melodus*, and Sandhill Crane *Grus canadensis nesiotis*, and regionally important populations of Royal Tern *Sterna maxima* and Magnificent Frigatebird *Fregata magnificens*. Cayo Guillermo has Cuba's largest gull and tern colonies, and Cuba's only breeding site for "Cayenne" Tern *S. sandvicensis eurygnatha* and Audubon's Shearwater *Puffinus lherminieri*. Endangered Cuban Sparrow *Torreornis inexpectata varonai* and Great Lizard-cuckoo *Saurothera merlini santamariae* subspecies are endemic to Cayo Coco and the Sabana-Camagüey Archipelago, respectively.

**■ Other biodiversity**

Fauna includes the hutia *Capromys pilorides*, the Vulnerable Cuban ground iguana *Cyclura nubila* and the Vulnerable American crocodile *Crocodylus acutus*. On Cayo Paredón, the endemic bat *Phyllops falcatus* can be found.

**■ Conservation**

Administered within the Gran Humedal del Norte Ciego de Ávila IBA are the Centro Oeste de Cayo Coco Ecological Reserve, El Venero Wildlife Refuge and the (approved) Sierra de Judas de La Cunagua Wildlife Refuge. Other protected areas have been proposed (but are not yet administered) within the IBA, namely Elemento Natural Destacado Dunas de Cayo Guillermo, Reserva Florística Manejada Monte El Coy and Refugio de Fauna Cayo Alto. The IBA is a Ramsar site. Tourism and its related activities (e.g. hotel and road construction, pest fumigation) are major threats. Both Cayo Guillermo and Cayo Coco have tourist infrastructure and activities that are incompatible with sustainable management, and there are mid-term plans for to develop Cayo Paredón Grande. Other threats include invasive species, and disturbance of nesting seabirds.

DAYSÍ RODRÍGUEZ, YARELYS FERRER, ALAIN PARADA, PATRICIA RODRÍGUEZ, PEDRO BLANCO, RAÚL INGUANZO, IDAEL RUIZ, OSCAR ORTIZ

**CU013 Cayos Sabinal y Ballenatos, y Manglares de la Bahía de Nuevitas****Wildlife Refuge/Managed Resources Protection Area****COORDINATES** 21°36'N 77°14'W**ADMIN REGION** Camagüey**AREA** 66,490 ha**ALTITUDE** 0–54 m**HABITAT** Offshore cays, mangroves, forest, wetlands

Least Tern

**THREATENED BIRDS** 5**RESTRICTED-RANGE BIRDS** 2**BIOME-RESTRICTED BIRDS** 28**CONGREGATORY BIRDS** ☒**■ Site description**

Cayos Sabinal y Ballenatos, y Manglares de la Bahía de Nuevitas IBA is off the north coast of Camagüey province, between the Gran Humedal del Norte Ciego de Ávila IBA (CU012) and Río Máximo IBA (CU014). Surrounded by fringing mangroves, and extending from Ensenada del Gremio to Punta Júcaro, Bahía de Nuevitas contains a group of limestone cays that, together with Cayo Libertad, form the Cayos Ballenatos. Low, permanently flooded marshy areas formed by numerous islets, inner lagoons, channels and brackish lagoons are abundant. Cayo Sabinal belongs to the Sabana-Camagüey Archipelago and is connected to the mainland by a 2 km causeway.

**■ Birds**

This IBA supports globally significant populations of Caribbean Flamingo *Phoenicopterus ruber* (>15,000 individuals), the Near Threatened Piping Plover *Charadrius melodus* and Vulnerable West Indian Whistling-duck *Dendrocygna arborea* and a number of other waterbirds. Seabirds include regionally important numbers of Laughing Gull *Larus atricilla*, Gull-billed Tern *Sterna nilotica*, and Least Tern *S. antillarum*. Terrestrial species include the restricted-range Cuban Gnatcatcher *Polioptila lembeyi* and Oriente Warbler *Teretistris fornsi* and a number of globally threatened birds.

**■ Other biodiversity**

The Vulnerable Cuban ground iguana *Cyclura nubile*, West Indian manatee *Trichechus manatus* and American crocodile occur. The endemic hutia *Capromys pilorides* is present on the Cayos Ballenatos.

**■ Conservation**

Cayo Sabinal has been proposed as a managed resources protected area and includes parts of the protected areas of Maternillo-Tortuguilla Ecological Reserve and Laguna Larga Managed Floristic Reserve. The Empresa para la Protección de la Flora y la Fauna (ENPFF) manages the cay, albeit without a remit or guidance to ensure its sustainable development. Land use includes conservation, apiculture, extraction of forest and non-forest products, recreational fishing, and beach and nature tourism. Threats include illegal hunting and logging, exotic species, and different degrees of habitat modification and pollution. Fires on the cays and on the coastal strip are also a risk. This site is close to the tourist region of Camagüey (Santa Lucía Beach). A proposal exists to develop Cayo Sabinal for sustainable tourism.

JARENTON PRIMELLES, OMILCAR BARRIOS, SUSANA AGUILAR, HIRAM GONZÁLEZ, ENEIDER PÉREZ

**CU014 Río Máximo**

COORDINATES 21°43'N 77°28'W

ADMIN REGION Camagüey

AREA 35,562 ha

ALTITUDE 0–5 m

HABITAT Coastal forests, wetlands, offshore cays



Caribbean Flamingo

**Wildlife Refuge/Ramsar Site**

THREATENED BIRDS	8
RESTRICTED-RANGE BIRDS	2
BIOME-RESTRICTED BIRDS	32
CONGREGATORY BIRDS	✓

**■ Site description**

Río Máximo IBA is a wildlife refuge in north-eastern Camagüey province and is bordered by the deltas of the Máximo and Cagüey rivers in the municipality of Minas. The area is characterised by coastal and marine ecosystems with numerous cays, the largest of which are Cayo Güajaba and Cayo Sifonte. Río Máximo also has biodiverse terrestrial ecosystems. There are four human settlements with c.2,170 residents near the wildlife refuge, but closest to the site is Mola.

**■ Birds**

This IBA is home to some of the largest concentrations of waterbirds (including shorebirds) in the Caribbean. It supports the world's largest breeding population of Caribbean Flamingo *Phoenicopterus ruber* (c.100,000 birds), 40,000 Double-crested Cormorant *Phalacrocorax auritus*, significant numbers (c.1,000) of the Vulnerable West Indian Whistling-duck *Dendrocygna arborea* and the largest population of Snowy Plover *Charadrius alexandrinus* in the Caribbean.

**■ Other biodiversity**

The Vulnerable West Indian manatee *Trichechus manatus* and American crocodile occur, as does the endemic fish *Cichlasoma tetraodon*. The Cagüey River delta is important for plants

and supports a population of the threatened *Copernicia rigida* along with other rare species such as *C. vespertilionum* and *Trichillia pungens*.

**■ Conservation**

The Río Máximo IBA is a nationally significant protected area that has been managed by the Empresa para la Protección de la Flora y la Fauna (ENPFF) since 1986. It was approved as a wildlife refuge in 2001 and as a Ramsar site in 2002. Activities in the area are concentrated on habitat and species conservation, with an emphasis on birds. Management and protection measures have contributed to an increase in the flamingo population, from 5,000 nests in 1987 to more than 50,000 in 2007. The canalisation of Río Máximo has modified the ecosystem and increased the impact of droughts. During 2003–2005 a prolonged drought caused the salinisation of a large portion of the river and the reduction of freshwater habitats. Other problems relate to illegal fishing, and inappropriate fishing methods which represent a threat to manatees and dolphins, whilst also disturbing nesting and feeding areas for the waterbirds.

JOSÉ MORALES, LOYDI VÁZQUES, ARIAM JIMÉNEZ

**CU015 Cayos Romano-Cruz-Mégano Grande**

COORDINATES 22°12'N 77°56'W

ADMIN REGION Camagüey

AREA 241,161 ha

ALTITUDE 0–62 m

HABITAT Mangroves, offshore islands, coastal forests, wetlands



Wood Stork

**Managed Resources Protected Area/Faunal Refuge**

THREATENED BIRDS	6
RESTRICTED-RANGE BIRDS	3
BIOME-RESTRICTED BIRDS	29
CONGREGATORY BIRDS	✓

**■ Site description**

Cayos Romano-Cruz-Mégano Grande IBA is at the eastern end of the Sabana-Camagüey Archipelago off the north coast of Cuba. It comprises the large cays of Romano and Cruz and many small cays and islets in a landscape of mangrove forests, beaches, sinkholes, waterholes, marshes, and isolated areas of higher ground, such as Alto del Aji and Silla de Romano. There is a coral barrier reef bordering the northern side of the cays. Mangrove forests predominate on lowland marshy zones. Other vegetation types include evergreen forests and semi-deciduous forests, bog forests, coastal dry scrub, and salt marsh.

**■ Birds**

This IBA is important for its great diversity and density of waterbirds, including Roseate Spoonbill *Platalea ajaja*, White Ibis *Eudocimus albus*, Vulnerable West Indian Whistling-duck *Dendrocygna arborea*, Wood Stork *Mycteria americana*, and a globally important population of the Near Threatened Piping Plover *Charadrius melodus*. The woodland areas support 29 (of the 48) Greater Antilles biome-restricted species including the Endangered Gundlach's Hawk *Accipiter gundlachi*. The IBA is also an important wintering site for species such as the Near Threatened Painted Bunting *Passerina ciris*.

**■ Other biodiversity**

The snail *Liguus fasciatus romanoensis* is a local endemic. There are 16 species of introduced mammals present on Cayo Romano. Plants include 151 Cuban endemics, 12 of which are local endemics and 23 are threatened.

**■ Conservation**

Cayo Romano has been proposed as a managed resources protected area and the Empresa para la Protección de la Flora y la Fauna (ENPFF) has an administrative unit within the area. The Cayo Cruz Wildlife Refuge and the Refugio de Fauna Centro y Oeste de Cayo Paredón Grande are also proposed protected areas, but they lack any kind of protection or administration at the present time. Land uses include natural resource conservation, extraction of forest and non-forest products, sport and commercial fishing, and beach tourism. Among the main threats are modification and pollution of the cay, as well as invasive alien species. Introduced fauna includes horses, pigs, deer, antelope and ankole-watusi cattle.

DAYSÍ RODRÍGUEZ, SUSANA AGUILAR



**CU016 Limones-Tuabaquey**

COORDINATES 21°35'N 77°46'W

ADMIN REGION Camagüey

AREA 1,962 ha

ALTITUDE 100–500 m

HABITAT Caves, forest, rocky areas

**Ecological Reserve**

THREATENED BIRDS 7

RESTRICTED-RANGE BIRDS

BIOME-RESTRICTED BIRDS 27

CONGREGATORY BIRDS

**Site description**

Limones-Tuabaquey IBA is an ecological reserve situated in the east-central part of the Sierra de Cubitas, northern Camagüey province. It is an area of complex karst limestone landforms including closed sinkholes (dolines), deep eroded channels (karren) and more than 50 caves. There are important archaeological and historic sites in the IBA, as well as aboriginal pictographs in the Matías, Las Mercedes, María Teresa, and Pichardo caves. The towns of Lesca and Vilató lie just outside the IBA, the latter having the largest population in Sierra de Cubitas and the best preserved indigenous traditions of the region.

**Birds**

This IBA supports populations of 27 (of the 48) Greater Antilles biome-restricted species, 13 of which are endemic to Cuba. Globally threatened birds include the Endangered Blue-headed Quail-dove *Starnoenas cyanocephala* and Gundlach's Hawk *Accipiter gundlachi*. The Vulnerable Fernandina's Flicker *Colaptes fernandinae* also occurs. Each year, the Near Threatened White-crowned Pigeon *Patagioenas leucocephala* migrates to the region of Cubitas from adjacent areas to breed.

**Other biodiversity**

The fauna of this IBA includes 46 Cuban endemic species (with Mirador de Limones being particularly important). Mammals are represented by the hutias *Capromys pilorides* and *Mysateles prehensilis*, and 12 species of bats.

**Conservation**

Limones-Tuabaquey IBA is a nationally significant protected area that was approved as an ecological reserve in 2008. The area is owned by the Military Farm Enterprise of Camagüey and is jointly managed by the Ministry of Science, Technology and Environment and the Integral Military Farm La Cuba. Livestock farming, mining, and agriculture occur in the buffer zone and surrounding areas. A nature tourism project is currently being implemented. About 60% of the IBA is selectively logged, but the proliferation of roads and trails that has facilitated deforestation and burning, resulting in structural changes to the forest. Approximately 11% of the IBA is untouched and the potential for recovery in the remaining forest is good if the correct management is put in place. Other problems are mining related dust emissions and sound pollution.

JUAN CARLOS REYES, LUIS RAMOS, SUSANA AGUILAR

**CU017 Sierra del Chorrillo**

COORDINATES 21°02'N 77°42'W

ADMIN REGION Camagüey

AREA 83,322 ha

ALTITUDE 324 m

HABITAT Semi-deciduous forest, riparian forest, shrubland

**Managed Resources Protected Area**

THREATENED BIRDS 12

RESTRICTED-RANGE BIRDS 2

BIOME-RESTRICTED BIRDS 32

CONGREGATORY BIRDS

**Site description**

Sierra del Chorrillo IBA is a large area of hills in the centre of the municipality of Najasa, south-eastern Camagüey province. It embraces the higher elevation points of Sierra del Chorrillo, Sierra de Najasa, and Guaicanámar, as well as the Monte Quemado Mirador and Sierra El Martillo. Local rivers include Najasa, Yáquimo and Sevilla. The area comprises a mosaic forest, shrubland, rivers and agricultural land. The communities of Arrollo Hondo and La Belén are located within the IBA.

**Birds**

This IBA supports populations of 32 (of the 48) Greater Antilles biome-restricted species, 11 of which are endemic to Cuba. Globally threatened birds include the Endangered Blue-headed Quail-dove *Starnoenas cyanocephala*, Gundlach's Hawk *Accipiter gundlachi*, Giant Kingbird *Tyrannus cubensis* and Cuban Palm Crow *Corvus minutus*. The IBA is home to the largest known populations for both *T. cubensis* (with 35 pairs) and *C. palmarum*. It also supports Cuba's most important population of the Near Threatened Plain Pigeon *Patagioenas inornata*, and significant breeding populations of the Vulnerable Cuban Parakeet *Aratinga euops* and Near Threatened Cuban Amazon *Amazona leucocephala*.

**Other biodiversity**

Seven reptile species are Cuban endemics including the Near Threatened snake Maja de Santa Maria *Epicrates angulifer*. Frogs include the endemic Endangered *Eleutherodactylus thomasi* and Vulnerable *E. limbatus*, and the mammals include one species of hutia and seven bat species (including the Near Threatened *Phyllonycteris poeyi* and *Brachyophylla nana*).

**Conservation**

Sierra del Chorrillo IBA has been managed by the La Belén unit of the Empresa para la Protección de la Flora y la Fauna (ENPFF) since 1998. In 2001 it was declared a managed resources protected area. The site has been affected by forestry, agriculture, road and house construction, and the introduction of exotic species. There are areas with different levels of human-induced modification. Another important impact is livestock farming, which disturbs vegetation, destroys part of the understory, compacts soil, and pollutes waters. Additionally, cattle compete with native fauna for shelter, space, and food, and can destroy nests of ground-nesting birds. Some of the 11 introduced mammals include blackbuck *Antilocapra cervicapra*, nilgai *Boselaphus tragocamelus*, water buffalo *Bubalus bubalis*, ankole-watusi *Bos* sp. and zebra *Equus zebra*.

SUSANA AGUILAR, ARTURO KIRKCONNELL

**CU018 Turquino-Bayamesa****National Park**

**COORDINATES** 20°00'N 76°44'W  
**ADMIN REGION** Granma, Santiago de Cuba  
**AREA** 48,462 ha  
**ALTITUDE** 1,972 m  
**HABITAT** Montane rainforest, cloud forest, páramo, subpáramo

**THREATENED BIRDS** **9****RESTRICTED-RANGE BIRDS****BIOME-RESTRICTED BIRDS** **27****CONGREGATORY BIRDS** **Site description**

Turquino-Bayamesa IBA is within the Sierra Maestra massif. The landscape is one of rugged mountains including the highest peaks in the country, namely Pico Real del Turquino (1,972 m), Pico Cuba (1,872 m) and Pico La Bayamesa (1,752 m). The area has its own characteristic microclimate, with some of the lowest temperatures and the highest rainfall in Cuba, resulting in montane rainforest, cloud-forest and páramo-type vegetation, but with notable differences between northern and southern slopes. La Mula, Palma Mocha, and Potrerillo rivers originate within the IBA.

**Birds**

This IBA supports populations of 27 (of the 48) Greater Antilles biome-restricted species including the Endangered Blue-headed Quail-dove *Starnoenas cyanocephala*, Gundlach's Hawk *Accipiter gundlachi* and Giant Kingbird *Tyrannus cubensis*. The Endangered Black-capped Petrel *Pterodroma hasitata* has been recorded flying inland into these mountains and almost certainly breeds. The IBA is an eastern Cuba stronghold for the Vulnerable Fernandina's Flicker *Colaptes fernandinae*, and Cuba's only known wintering area for the Vulnerable Bicknell's Thrush *Catharus bicknelli*. An endemic subspecies of Oriente Warbler *Teretistris forsi turquiniensis* occurs.

**Other biodiversity**

Local endemics include the Critically Endangered frogs *Eleutherodactylus albipes* and *E. turquiniensis*, the Endangered *E. melacara*, and the lizard *Anolis guazuma*. Flora includes the Endangered *Magnolia cubensis*, the Vulnerable *Juniperus saxicola* and *Tabebuia oligolephis*, and *Pinus maestrensis*, as well as 26 local and 100 Sierra Maestra endemics.

**Conservation**

The IBA comprises Turquino National Park (created in 1991 and approved in 2001) and La Bayamesa National Park (recently created and awaiting approval), both managed by the Empresa para la Protección de la Flora y la Fauna (ENPFF). Residents of the surrounding communities work with conservation, as well as in agriculture and silviculture. Ecotourism has also been widely implemented in Turquino National Park. Threats include deforestation and habitat degradation (e.g. through illegal logging), forest fires, soil erosion due to run-off, road construction, illegal hunting, abandoned agricultural land encouraging invasive flora, and introduced fauna. Some landowners within the IBA do not follow land management protocols appropriate to the protected area.

ENEIDER PÉREZ, ALEJANDRO LLANES

**CU019 Desembarco del Granma****National Park/World Heritage Site**

**COORDINATES** 19°52'N 77°34'W  
**ADMIN REGION** Granma  
**AREA** 32,660 ha  
**ALTITUDE** 0–360 m  
**HABITAT** Mangroves, coastal forest, semi-deciduous forest, evergreen forest

**THREATENED BIRDS** **11****RESTRICTED-RANGE BIRDS** **2****BIOME-RESTRICTED BIRDS** **31****CONGREGATORY BIRDS****Site description**

Desembarco del Granma IBA is in the Sierra Maestra district of south-eastern Granma province. It forms part of the Cabo Cruz Marine Terraces Complex, the second largest and best preserved system of emergent and submerged marine terraces in the world. This limestone area is one of forested slopes, coastal cliffs, lagoons, mangroves, sinkholes, and cave systems and includes scenic sites such as Hoyo de Morlotte and Cueva del Fustete. Within the area are three communities, one of which (Cabo Cruz) originated from a community fishing cooperative. The communities of Las Coloradas, Río Nuevo, and Las Palmonas are located near the site.

**Birds**

This IBA supports populations of 31 (of the 48) Greater Antilles biome-restricted species, 14 of which are endemic to Cuba, including the Endangered Blue-headed Quail-dove *Starnoenas cyanocephala*, Gundlach's Hawk *Accipiter gundlachi* and Giant Kingbird *Tyrannus cubensis*. The Vulnerable West Indian Whistling-duck *Dendrocygna arborea*, Grey-headed Quail-dove *Geotrygon caniceps* and Fernandina's Flicker *Colaptes fernandinae*, and Near Threatened Cuban Amazon *Amazona leucocephala leucocephala* and White-crowned Pigeon *Patagioenas leucocephala* (which nests in Cabo Cruz) also occur. This IBA

is one of the few known breeding sites for White-tailed Tropicbird *Phaethon lepturus* in Cuba, albeit in small numbers.

**Other biodiversity**

Endemics include the snails *Polymita venusta* and *Liguus vittatus*, the lizards *Anolis guafe* and *A. confusus*, and the primitive Cuban night lizard *Cricosaura typical* (a monotypic genus). Flora includes 12 local endemics. The Vulnerable tree cactus *Dendrocereus nudiflorus* is present, with some individuals exceeding 500 years old.

**Conservation**

The Desembarco del Granma National Park was created in 1985 and approved in 2001—the first area within this category to be declared in Cuba. It is managed by the Empresa para la Protección de la Flora y la Fauna (ENPFF). It was also the first Cuban site to be declared a World Heritage Site in 1999. Threats invasive flora and fauna (particularly fish species escaped from fish farms), soil erosion and compacting, as well as habitat fragmentation and degradation associated with deforestation. The Cabo Cruz lagoons are threatened by pollution and hyper-salinisation.

ERNESTO REYES, YUSELF CALA DE LA HERA

## CU020 Delta del Cauto

COORDINATES 20°36'N 77°09'W  
 ADMIN REGION Granma, Las Tunas  
 AREA 75,372 ha  
 ALTITUDE 0–3 m  
 HABITAT Wetlands



## Wildlife Refuge/Ramsar Site

THREATENED BIRDS 7

RESTRICTED-RANGE BIRDS

BIOME-RESTRICTED BIRDS 25

CONGREGATORY BIRDS ☒

## ■ Site description

Delta del Cauto IBA is in south-eastern Cuba and embraces the most extensive, complex and best preserved deltaic system in the insular Caribbean. It is also the second largest wetland in the region after Ciénaga de Zapata (IBA CU006). It is a difficult area to access which has left the mosaic of diverse estuaries, marshes, saltmarshes, lagoons (such as Biramas and Leonero) and open areas relatively undisturbed. Well preserved mangrove predominates, reaching up to 30 m in height. The communities of Cabezada, Manajuana, El Yarey, and Guasimilla are located within the wildlife refuge.

## ■ Birds

Numbers of duck and shorebirds in this IBA exceed 100,000 during the winter. Principal species include Blue-winged Teal *Anas discors*, Fulvous Whistling-duck *Dendrocygna bicolor*, Northern Shoveler *A. clypeata*, Least Sandpiper *Calidris minutilla*, and Short-billed Dowitcher *Limnodromus griseus*. Globally significant numbers of Caribbean Flamingo *Phoenicopterus ruber* and Glossy Ibis *Plegadis falcinellus* breed. The Vulnerable West Indian Whistling-duck *Dendrocygna arborea*, Gundlach's Hawk *Accipiter gundlachi*, Cuban Parakeet *Aratinga euops* and Fernandina's Flicker *Colaptes fernandinae* occur.

## ■ Other biodiversity

The herpetofauna includes the local endemic lizard *Anolis birama* and the endemic (and Vulnerable) Cuban small-eared toad *Bufo empusus*. The IBA supports the largest breeding population of the Vulnerable American crocodile *Crocodylus acutus*. Mammals include the endemic hutia *Capromys pilorides* and bat *Noctilio leporinus*.

## ■ Conservation

Delta del Cauto Wildlife Refuge was established in 1991 and approved as a nationally significant protected area in 2001. It became a Ramsar site in 2002. The Empresa para la Protección de la Flora y la Fauna (ENPFF) manages its two administrative units of Monte Cabaniguan Wildlife Refuge (Las Tunas province) and Delta del Cauto Wildlife Refuge (Granma). Main threats include illegal hunting, fishing and logging, forest fires, and dumping waste. Problems have also resulted from the damming of the Río Cauto, leading to changes in river dynamics, saltwater intrusion during storms, land salinisation and changes to the mangrove and swamp forests. Commercial fishing in Biramas and Leonero lagoons has a negative impact on the waterbird breeding colonies.

MARTÍN ACOSTA, OMAR LABRADA, LOURDES MUGICA, SUSANA AGUILAR

## CU021 Gibara

COORDINATES 21°09'N 76°14'W  
 ADMIN REGION Holguín  
 AREA 40,564 ha  
 ALTITUDE 0–450 m  
 HABITAT Coastal forest, evergreen forest, semi-deciduous forest, mangroves, wetlands



## Wildlife Refuge/Ecological Reserve

THREATENED BIRDS 6

RESTRICTED-RANGE BIRDS 2

BIOME-RESTRICTED BIRDS 29

CONGREGATORY BIRDS

## ■ Site description

Gibara IBA is on the coast of north-eastern Cuba. It comprises a flat coastal plain along a stretch of c.35 km of shore that becomes more rugged inland with karstic limestone caverns, sinkholes and elevated formations such as at Cupeicillo la Candelaria. The Gibara and Cacoyoguin rivers reach the sea at Bahía de Gibara. Gibara itself is a town of c.17,000 inhabitants. The coast has areas of mangroves and lagoons whilst inland are forested areas of varying types.

## ■ Birds

This IBA supports populations of 30 (of the 48) Greater Antilles biome-restricted species, including the Endangered Giant Kingbird *Tyrannus cubensis* and Gundlach's Hawk *Accipiter gundlachi*, and the Vulnerable Grey-headed Quail-dove *Geotrygon caniceps*. The Vulnerable West Indian Whistling-duck *Dendrocygna arborea* and Near Threatened White-crowned Pigeon *Patagioenas leucocephala* also occur. This area is one of the main migratory corridors in the Cuban Archipelago, with numerous vagrant and "occasional" bird records coming from the IBA. Over 200 resident and migratory bird species have been recorded.

## ■ Other biodiversity

The area is home to many local and regional endemic species and subspecies including lizards such as *Leiocephallus stictigaster gibarensis*, *L. raviceps delavarai* and *Anolis jubar gibarensis*.

## ■ Conservation

The Gibara IBA includes the Balsas de Gibara Wildlife Refuge and the Caletones Ecological Reserve both of which have been proposed as protected areas but are awaiting approval and currently lack any management. Programs related to land use, local ecosystem management on the coastal plain, as well as environmental education campaigns have been implemented in the area. Until recently, migratory birds were banded at Playa Caletones. Threats include cutting coastal forest for charcoal, shifting agriculture in the coastal forest, overfishing, and the removal of mangrove bark for tanning leather. Birds have long been captured in the mangroves of Gibara for the national pet trade, including migrants such as Piping Plover *Charadrius melodus*. This 100-year-old practice is still very much alive within the IBA and at Santa Fé de Havana, the final destination for most birds captured in Gibara. The construction of a wind farm is a potential threat for birds during their spring migration.

NILS NAVARRO



## CU022 La Mensura

## National Park

COORDINATES 20°28'N 75°49'W

ADMIN REGION Holguín

AREA 8,467 ha

ALTITUDE 995 m

HABITAT Rainforest, charrascal, pine forest



THREATENED BIRDS

7

RESTRICTED-RANGE BIRDS

2

BIOME-RESTRICTED BIRDS

30

CONGREGATORY BIRDS

1

## ■ Site description

La Mensura IBA is in the Nipe-Cristal region of the Nipe-Sagua-Baracoa massif in eastern Cuba. It is an area of complex limestone peaks that surround the Sierra de Nipe. The prominent peaks include La Mensura, La Mensurita, and El Gurugú. The area has a great diversity of ecosystems such as rainforest, Cuban pine *Pinus cubensis* forests, charrascal, and karst vegetation. Close to the IBA are the communities of Biran Uno and Guamutas (in Cueto municipality), and Pueblo Nuevo de Pinares, Mensura Uno and Mensura Dos on the plateau of Mayarí.

## ■ Birds

This IBA supports populations of 30 (of the 48) Greater Antilles biome-restricted species, 16 of which are endemic to Cuba, including the Endangered Gundlach's Hawk *Accipiter gundlachi*, the Vulnerable Cuban Parakeet *Aratinga euops* and Grey-headed Quail-dove *Geotrygon caniceps*, the Near Threatened Bee Hummingbird *Mellisuga helenae* (occurring at low densities), the rare Bare-legged Owl *Gymnoglaux lawrencii*, and pine-forest specialist Olive-capped Warbler *Dendroica pityophila*. The subspecies of Stygian Owl *Asio stygius siguapa* is endemic. The IBA is home to numerous wintering Neotropical migrants.

## ■ Other biodiversity

Land molluscs include 60 endemic species (nine of which are local endemics) including the snails *Alcadia euglypta*, *Polydotes sobrina*, *Polymita venusta*, and *Xenopoma hendersoni*. The endemic lizards *Anolis anfiliquioi*, *A. cupeyalensis* and *A. isolepis*, and snake *Tropidophis wrighti* are present. La Mensura is home to 268 endemic plants, 90 of which are locally endemic.

## ■ Conservation

La Mensura National Park was created in 1992 and was approved by Comité Ejecutivo del Consejo de Ministros in 2008. It is managed by the Empresa para la Protección de la Flora y la Fauna (ENPFF). Residents from surrounding communities have historically used timber and other resources (guano, yarey and royal palm) for building houses and fuel. Subsistence farming is the main activity, but cattle grazing and nature tourism also occur in the area. There are guided interpretative trails close to the administrative and service areas. Some portions of the IBA, specifically in Casimba are considered as a mining reserve. Some threats to the area include fires, soil erosion and intense exploitation of forest resources around the periphery of the park.

ERNESTO REYES, BÁRBARA SÁNCHEZ

## CU023 Delta del Mayarí

## Unprotected

COORDINATES 20°44'N 75°37'W

ADMIN REGION Holguín

AREA 4,660 ha

ALTITUDE 0–5 m

HABITAT Wetlands, mangrove



THREATENED BIRDS

5

RESTRICTED-RANGE BIRDS

1

BIOME-RESTRICTED BIRDS

25

CONGREGATORY BIRDS

✓

## ■ Site description

Delta del Mayarí IBA comprises a significant wetland and mangrove areas within the Bahía de Nipe near the north coast of south-eastern Cuba. The Bahía de Nipe is the largest semi-closed bay in the Caribbean and one of the largest in the world. Almost half of it is covered by mangrove forests of which the Delta del Mayarí, with its sub-tidal estuaries and brackish lagoons forms and important part. The Río Mayarí is the main river that drains towards the bay, the others being the Nipe and Tacajó rivers. The northern and eastern parts of this IBA are surrounded by the waters of Bahía de Nipe, and the south and west parts by land, with the nearest community being Guatemala.

## ■ Birds

This IBA supports populations of 25 (of the 48) Greater Antilles biome-restricted species, nine of which are Cuban endemics. A wide diversity of waterbirds (79 species) occur, including regionally significant numbers of Brown Pelican *Pelecanus occidentalis*. Globally threatened birds include the Endangered Gundlach's Hawk *Accipiter gundlachi*, Vulnerable West Indian Whistling-duck *Dendrocygna arborea*, and Near Threatened White-crowned Pigeon *Patagioenas leucocephala*. The Near Threatened Painted Bunting *Passerina ciris* is one of many Neotropical migrants that use this IBA on passage or over winter.

## ■ Other biodiversity

The endemic bat *Phyllonycteris poeyi* and regional and national endemic species of snail, such as *Chondropoma confertum*, *Obeliscus bacillus*, and *Oleacina solidula* all occur, as do several endemic *Anolis* lizard species and the turtle *Trachemys decussata*.

## ■ Conservation

Delta del Mayarí IBA has no protection status at present, but a proposal to declare it a wildlife refuge is underway. The main socio-economic activity in Guatemala was related to the sugarcane industry, but this ceased after a nationwide restructuring of agro-industrial complexes. The local economy currently relies on the fishing industry, including platform fishing, aquaculture (for mangrove oysters), as well as blue crab *Callinectes sapidus* and clam harvesting. Important threats to the area include the unsustainable extraction of mangrove wood (for charcoal) and bark (for tanning leather), and forest clearance for agriculture. These activities have reduced the mangrove area from 1,630 ha in 1983 to 994 ha in 2003.

CARLOS M. PEÑA

**CU024 Pico Cristal****National Park**

**COORDINATES** 20°32'N 75°25'W  
**ADMIN REGION** Holguín, Santiago de Cuba  
**AREA** 18,537 ha  
**ALTITUDE** 400–1,231 m  
**HABITAT** Upland forests, pine forests, dry thorny brush



<b>THREATENED BIRDS</b>	<b>9</b>
<b>RESTRICTED-RANGE BIRDS</b>	<b>3</b>
<b>BIOME-RESTRICTED BIRDS</b>	<b>33</b>
<b>CONGREGATORY BIRDS</b>	

**Site description**

Pico Cristal IBA is located in the Nipe-Cristal mountain region of the Nipe-Sagua-Baracoa massif in eastern Cuba. The area comprises a mosaic of upland forests, pine forests, dry thorny brush over serpentine soils, and upland scrub. Within the IBA are two communities: La Zanja (in Frank País municipality), and Batista (in Segundo Frente municipality). The communities of Baconal, El Palenque, and El Culebro are located in the areas surrounding the IBA.

**Birds**

This IBA supports populations of 33 (of the 48) Greater Antilles biome-restricted species. Globally threatened species include the Endangered Gundlach's Hawk *Accipiter gundlachi* and Giant Kingbird *Tyrannus cubensis* (EN), the Vulnerable Cuban Parakeet *Aratinga euops* and Grey-headed Quail-dove *Geotrygon caniceps*, and the Near Threatened Cuban Amazon *Amazona leucocephala* and Cuban Solitaire *Myadestes elisabeth*.

**Other biodiversity**

Vulnerable Cuban solenodon *Solenodon cubanus* (confined to eastern Cuba) occurs along with the hutias *Capromys pilorides*, *Mysateles melanurus* and *M. prehensilis*. Endemic reptiles (of which there are 35, with nine confined to eastern Cuba) include

*Sphaerodactylus celicara*, *Chamaeleolis porcus* and *Epicrates angulifer*. This IBA is part of an important speciation centre for Cuban serpentine flora, with more than 300 endemics, 50 of which are locally endemic.

**Conservation**

Pico Cristal was Cuba's first national park. It was declared in 1930, but its legal status was not implemented until it was approved by the Comité Ejecutivo del Consejo de Ministros in 2001. The IBA follows the national park boundaries. Activities in areas surrounding the park include conservation and coffee cultivation. Constant threats include logging, hunting, the capture of parrot chicks, and invasive species such as rats *Rattus* spp. and feral dogs, cats, and pigs. Forestry companies are very interested in exploiting the area's pine forests. Additionally, 10% of the area (1,500 ha) is within an area zoned for mining. Intense mining and forestry activities have provoked soil and road erosion, and have led to the establishment of new human settlements, habitat fragmentation, and deforestation caused by the logging itself as well as forest fires. These economic activities have proven to be incompatible with conservation efforts.

JUAN PEDRO SOY, ERNESTO REYES

**CU025 Gran Piedra-Pico Mogote****Ecological Reserve/Natural Protected Landscape/Biosphere Reserve**

**COORDINATES** 20°00'N 75°37'W  
**ADMIN REGION** Santiago de Cuba  
**AREA** 4,532 ha  
**ALTITUDE** 600–1,224 m  
**HABITAT** Forest



<b>THREATENED BIRDS</b>	<b>3</b>
<b>RESTRICTED-RANGE BIRDS</b>	
<b>BIOME-RESTRICTED BIRDS</b>	<b>25</b>
<b>CONGREGATORY BIRDS</b>	

**Site description**

Gran Piedra-Pico Mogote IBA is located in Sierra de la Gran Piedra, on the south-eastern coast of Cuba, between the Santiago de Cuba tectonic basin to the west and the Río Baconao River to the north and east. The coastal terraces of the karstic limestone plateau of Santiago de Cuba lie to the south. The city of Santiago de Cuba is 25 km to the west of the western edge of the IBA. There are several dispersed settlements within the area.

**Birds**

This IBA supports populations of 25 (of the 48) Greater Antilles biome-restricted species, 10 of which are Cuban endemics. The Endangered Gundlach's Hawk *Accipiter gundlachi* and Giant Kingbird *Tyrannus cubensis*, and Vulnerable Grey-headed Quail-dove *Geotrygon caniceps* all occur. Studies at this IBA have shown it to be an important migratory corridor for raptors, with 3,793 Osprey *Pandion haliaetus* recorded on passage in 2006 (one of the largest concentrations of this species in the world). A new migratory route for American Swallow-tailed Kite *Elanoides forficatus* was discovered in the IBA.

**Other biodiversity**

The dragonfly *Hypolestes trinitatis*, frog *Eleutherodactylus guantanamera*, and several species of reptiles are Vulnerable. Endemism is high within the flora, herpetofauna and snails.

**Conservation**

Gran Piedra-Pico Mogote IBA embraces the Gran Piedra Natural Protected Landscape (approved in 2008) and the Pico Mogote Ecological Reserve (awaiting approval as a locally significant protected area), both part of the core zone of the Baconao Biosphere Reserve. There is an ecological station at Gran Piedra at which diverse studies have been undertaken. Some of the threats to this IBA include cutting trees for charcoal, illegal logging, shifting agriculture on steep slopes, introduced animals and plants. The primary activity of the local community is agriculture, mostly centred in the Gran Piedra Integral Forestry Enterprise and to a lesser degree at a hotel installation and other service centres in the community. In Gran Piedra an intensive community environmental education program is being implemented.

FREDDY RODRÍGUEZ

**CU026 Siboney-Juticí****Ecological Reserve**

COORDINATES 19°57'N 75°46'W

ADMIN REGION Santiago de Cuba

AREA 1,857 ha

ALTITUDE 0–120 m

HABITAT Coastline, shrubland, limestone hills



THREATENED BIRDS	4
RESTRICTED-RANGE BIRDS	2
BIOME-RESTRICTED BIRDS	23
CONGREGATORY BIRDS	✓

**Site description**

Siboney-Juticí IBA is an area of marine terraces and limestone karst just to the east of the city of Santiago de Cuba. The landscape is one of gorges, canyons, closed sinkholes (dolines), deep eroded channels (karren), caves and grottos. The topography, climate and location of the area have resulted in this IBA being home to a diverse and unique biota. The seasonal creeks of Sardinero and Juticí only run after intense downpours. Outside the IBA, the coastal community of Siboney (1,023 residents) receives a large number of visitors each year.

**Birds**

This IBA supports populations of 23 (of the 48) Greater Antilles biome-restricted species, 10 of which are Cuban endemics. The Endangered Gundlach's Hawk *Accipiter gundlachi* and the restricted-range Cuban Gnatcatcher *Poliophtila lembeyi* and Oriente Warbler *Teretistris fornsi* all occur. The IBA is very important for Neotropical migrants, primarily passerines and raptors. An unprecedented 6,143 Osprey *Pandion haliaetus* have been recorded on passage, as have the largest numbers of migrant American Swallow-tailed Kite *Elanoides forficatus*, Merlin *Falco columbarius*, and Peregrine Falcon *Falco peregrinus* noted in the insular Caribbean.

**Other biodiversity**

There are 21 endemic land molluscs species within the IBA (including the locally endemic snail *Macroceramus jeannereti*), and also three endemic amphibians, 13 endemic reptiles and 167 endemic plants (12 of which are Endangered and two Vulnerable).

**Conservation**

Siboney-Juticí IBA is an Ecological Reserve which was approved in 2001 by the Comité Ejecutivo del Consejo de Ministros and is now managed by the Centro Oriental de Ecosistemas y Biodiversidad (BIOECO). In 1970, a 67-ha area west of Siboney beach was declared a speleological natural reserve (one of the first protected areas in the country). There is an ecological station in the IBA that has served as an important centre for research on the area's forests. The dry coastal scrub on karren is threatened by fire (both natural and human-caused). Wood extraction by the community has been a significant threat, mostly during periods of economic crisis, although this has decreased considerably in recent years. However, illegal sand extraction is affecting certain areas in the IBA.

FREDDY RODRÍGUEZ

**CU027 Alejandro de Humboldt****National Park/Biosphere Reserve/World Heritage Site**

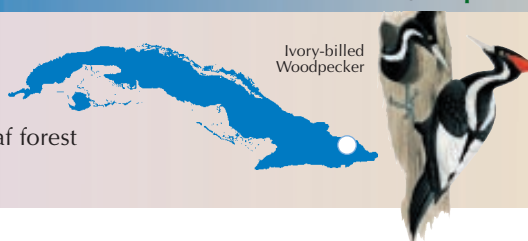
COORDINATES 20°27'N 74°50'W

ADMIN REGION Guantánamo, Holguín

AREA 70,630 ha

ALTITUDE 0–1,175 m

HABITAT Rainforest, pine forest, broadleaf forest



THREATENED BIRDS	13
RESTRICTED-RANGE BIRDS	2
BIOME-RESTRICTED BIRDS	35
CONGREGATORY BIRDS	

**Site description**

Alejandro de Humboldt IBA is in the Nipe-Sagua-Baracoa massif, stretching inland from the coast between Moa and Baracoa. This area represents the largest and best preserved tract of tropical and montane forest in the insular Caribbean, and supports the highest species diversity and levels of endemism in the country. It has a unique landscape of non-calcareous karst, pristine rivers, pools and waterfalls, extensive tracts of pine and broadleaf tropical forest, and stunning panoramic vistas. Eleven communities (totalling more than 5,000 people) are within the IBA, and another nine are within the buffer zone.

**Birds**

This IBA supports populations of 35 (of the 48) Greater Antilles biome-restricted species, 10 of which are Cuban endemics, and what might be the last populations of the Critically Endangered Cuban Kite *Chondrohierax wilsonii* and Ivory-billed Woodpecker *Campephilus principalis*. The Endangered Gundlach's Hawk *Accipiter gundlachi*, Blue-headed Quail-dove *Starnoenas cyanocephala* and Giant Kingbird *Tyrannus cubensis*, the Vulnerable Cuban Parakeet *Aratinga euops* and Grey-headed Quail-dove *Geotrygon caniceps* also occur. Oriente Warbler *Teretistris fornsi* is the most abundant endemic and the central bird of mixed species flocks.

**Other biodiversity**

Fauna includes the Endangered Cuban solenodon *Solenodon cubanus*, the Critically Endangered frog *Eleutherodactylus iberia* and Endangered *E. principalis*, the endemic snail *Polymita picta* and the lizard *Anolis rubribarbus*. Funnel-eared bat *Nyctiellus lepidus* also occurs. Important plant species include *Podocarpus ekmani* and *Dracaena cubensis* (a primarily Old World genus).

**Conservation**

Alejandro de Humboldt IBA comprises what used to be the Jaguaní and Cupeyal del Norte natural reserves and the Ojito de Agua Wildlife Refuge. In 2001 these were merged into a national park which was declared a World Natural Heritage site the same year. It is managed by the Alejandro de Humboldt Environmental Services Unit and is a core zone of the Cuchillas del Toa Biosphere Reserve. Land use includes forestry, mining, and farming. There are nickel, chrome, iron, and cobalt deposits with mining potential. The coastal zone of Baracoa–Moa has good potential for ecotourism. The main threats are soil erosion, forest fires, unsustainable forest management, illegal logging, hunting and trafficking, invasive species, and unsustainable land use in the buffer zone.

ENEIDER E. PÉREZ, HIRAM GONZÁLEZ, GERARDO BEGUE, BÁRBARA SÁNCHEZ, ALEJANDRO LLANES



**CU028 Hatibonico-Baitiquirí-Imías****Ecological Reserve/Natural Reserve/Unprotected****COORDINATES** 19°59'N 74°59'W**ADMIN REGION** Guantánamo**AREA** 16,746 ha**ALTITUDE** 0–401 m**HABITAT** Dry forest, semi-desert shrubland, evergreen forest

Cuban Sparrow

**THREATENED BIRDS****7****RESTRICTED-RANGE BIRDS****3****BIOME-RESTRICTED BIRDS****29****CONGREGATORY BIRDS****0****■ Site description**

Hatibonico-Baitiquirí-Imías IBA is on the southern coast of Guantánamo province, in the Sagua-Baracoa sub-region of easternmost Cuba. The IBA is split into two areas either side of Guantánamo bay: Hatibonico (a small town in Caimanera municipality) just to the west of the bay, and the small towns of Baitiquirí (San Antonio del Sur municipality) and Imías to the east. This is the driest area of the Cuba resulting in characteristic semi-desert (shrubland and dry forest) and fauna, with numerous regional and local endemics. The area of Hatibonico (which also supports evergreen tropical forest) has naturally sculpted rock formations known as “monitongos”

**■ Birds**

This IBA supports populations of 29 (of the 48) Greater Antilles biome-restricted species, 12 of which are Cuban endemics including the Endangered Gundlach’s Hawk *Accipiter gundlachi*, the Vulnerable Grey-headed Quail-dove *Geotrygon caniceps* and Fernandina’s Flicker *Colaptes fernandinae* and the Near Threatened Bee Hummingbird *Mellisuga helenae*. A large population of the Endangered Cuban Sparrow *Torreornis inexpectata sigmani* is in the dry forest—one of only three areas for the bird. Large numbers of migrating Ospreys *Pandion haliaetus* take advantage of the wind currents along the ridges.

**■ Other biodiversity**

The Vulnerable Cuban ground iguana *Cyclura nubila* occurs along with the endemic hutia *Epicrates angulifer*. The flora includes 90 endemic species including three that are Endangered, namely *Apassalus parvulus*, *Melocactus harlowii*, and the fern *Notholaena ekmanii* which is confined to the monitongos of Hatibonico.

**■ Conservation**

Hatibonico-Baitiquirí-Imías IBA includes the Hatibonico Ecological Reserve which was approved as a protected area in 2001 and is managed by the Alejandro de Humboldt Environmental Services Unit (of the Ministry of Science Technology and Environment). Baitiquirí Ecological Reserve (soon to be administered) and the Imías Natural Reserve have been proposed as protected areas, but as yet lack approved status or any management. The main economic activities in this IBA are agroforestry (coffee, cacao and other crops) and salt production in Caimanera. The Hatibonico forest is threatened by the expansion of *Dichrostachys cinerea* which occupies c.15% of the area, as well as by forest fires, erosion, and silvicultural practices of a local farming enterprise.

FREDDY RODRÍGUEZ