

Lynx and BirdLife International  
**FIELD**Guides



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# Birds of the **West Indies**

Guy M. Kirwan, Anthony Levesque, Mark Oberle & Christopher J. Sharpe

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Guy M. Kirwan, Anthony Levesque, Mark Oberle & Christopher J. Sharpe

with

Gustavo A. Rodríguez, Alex Berryman, Nárgila Moura, Juan F. Freile & Chris Bradshaw

### Colour plates by

Richard Allen	Douglas Pratt
Norman Arlott	David Quinn
Hilary Burn	Chris Rose
Clive Byers	Lluís Sanz
Martin Elliott	Brian Small
Al Gilbert	Lluís Solé
Alan Harris	Juan Varela
Ren Hathway	Ilian Velikov
Mark Hulme	Etel Vilaró
Àngels Jutglar	Lyn Wells
Francesc Jutglar	Jan Wilczur
Ian Lewington	Ian Willis
Toni Llobet	Martin Woodcock
Alex Mascarell	Tim Worfolk
Dave Nurney	



For contributions by family, see CONTENTS:

### **Text preparation**

AB — Alex Berryman  
CB — Chris Bradshaw  
JFF — Juan F. Freile  
GMK — Guy M. Kirwan  
NM — Nárgila Moura  
GAR — Gustavo A. Rodríguez  
CJS — Christopher J. Sharpe

### **Illustrations**

<i>RA</i> — Richard Allen	<i>DP</i> — Douglas Pratt
<i>NA</i> — Norman Arlott	<i>DQ</i> — David Quinn
<i>HB</i> — Hilary Burn	<i>CR</i> — Chris Rose
<i>CB</i> — Clive Byers	<i>LS</i> — Lluís Sanz
<i>ME</i> — Martin Elliott	<i>BS</i> — Brian Small
<i>AG</i> — Al Gilbert	<i>LSó</i> — Lluís Solé
<i>AH</i> — Alan Harris	<i>JV</i> — Juan Varela
<i>RH</i> — Ren Hathway	<i>IV</i> — Ilian Velikov
<i>MH</i> — Mark Hulme	<i>EV</i> — Etel Vilaró
<i>ÀJ</i> — Àngels Jutglar	<i>LW</i> — Lyn Wells
<i>FJ</i> — Francesc Jutglar	<i>JW</i> — Jan Wilczur
<i>IL</i> — Ian Lewington	<i>IW</i> — Ian Willis
<i>TL</i> — Toni Llobet	<i>MW</i> — Martin Woodcock
<i>AM</i> — Alex Mascarell	<i>TW</i> — Tim Worfok
<i>DN</i> — Dave Nurney	

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Project co-ordinators: Arnau Bonan-Barfull, Amy Chernasky, Guy M. Kirwan

Map production: Christian Jofré, Anna Motis

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Interior book design: Xavier Ruiz

Cover illustration by Ilian Velikov

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## GENERAL INTRODUCTION

In attempting a guide of this nature, we must accept both the debt and burden of those simultaneously blessed and unfortunate to 'stand on the shoulders of giants'. Catherine Levy (2008) in her recent paper on the history of ornithology in the region (to which interested readers should refer) traces the earliest contributions on West Indian birds to the early 1500s, although it almost goes without saying that most information prior to the advent of Linnean nomenclature is principally anecdotal, including multiple reports of endemic macaws, the majority of which almost certainly involve more myth than reality (e.g. Wiley & Kirwan 2013, Lenoble 2015). With the turn of the 19th century, however, Caribbean ornithology started to acquire a far more solid footing.

Given such a long and rich history, covering 27 different countries and territories, it would be rather invidious and potentially futile to attempt the only superficial résumé of the region's ornithological history possible in the space available, and impossible to detail every relatively significant contribution to the canon. In any case, as just mentioned, our colleague Levy has already rather done this job for us. Suffice to say that not only do we benefit from riding a wave of ornithological exploration that stretches back to the likes of Gosse and March (in Jamaica), Gundlach and Poey (Cuba, the former also in Puerto Rico), Alexander Wetmore (Hispaniola and Puerto Rico), Stuart Danforth (widespread contributions from across the region), Maurice and Hazel Hutt (Barbados), and a host of others who have attempted overviews of the avifaunas of one or more of the West Indies, but our efforts will also be judged against previous regional works.

Born in 1900 and following his first contribution on the region's birds in 1927 (the description of a new subspecies of Golden Warbler on St Lucia), in 1936 James Bond of the Academy of Natural Sciences of Philadelphia published his first field guide to the *Birds of the West Indies*, which was unique compared to subsequent editions in that he treated subspecies (as indeed we do too). Between then and his death, in 1989, Bond updated the book seven times, in addition to producing four editions of his *Check-list of Birds of the West Indies*, and augmented the information in the latter's fourth incarnation in 1956 via subsequent near-annual supplements. Bond's field guide revolutionized birdwatching in the Caribbean, while his checklist and their supplements remain invaluable to the region's ornithologists fully more than 30 years after the last was published.

Nevertheless, in 1998, Herb Raffaele, together with his wife Janis, the Cuban professional tennis player and outstanding all-round naturalist Orlando Garrido (arguably the father of Cuban ornithology, if Gundlach be its grandfather), and American ornithologists Allan Keith and the late Jim Wiley, produced a new handbook-sized work to West Indian birds. This was followed in 2003 by a true field guide by the same team using the same high-quality artwork. Raffaele had already published an earlier guide to Puerto Rico and the Virgin Islands (1983, revised 1989), while Keith produced two keynote works, to the birds of St Lucia (Keith 1987) and Hispaniola (Keith *et al.* 2003), the latter with Wiley, Steve Latta and Joe Wunderle. Wiley's own staggering contribution to Caribbean ornithology (see Kirkconnell 2019), in the modern age rivalling Bond himself, could be said to have pinnacled in his 800-page bibliography to the region (Wiley 2000), a work

that has remained close at hand throughout the gestation of the present volume.

Viewed against such illustrious predecessors, we might be deemed nigh-on impudent for believing that we might produce something even comparable. And yet, here we stand. Our aim has been to produce a guide that builds on the best traditions of those that preceded us; consequently, we have aimed for a book that is at once attractive, portable and discusses many of the key identification issues, but is also scientifically accurate, in the best traditions of James Bond.

The present work covers just over 700 species, of which a quite remarkable c. 190 are endemic to the West Indies, many of them to single islands. Furthermore, six families are confined to the region, all restricted to the Greater Antilles, several of them recent taxonomic 'creations' as the result of detailed genetic investigations: Todidae (todies, five species, throughout the large islands), Dulidae (one species, Palmchat, confined to Hispaniola), Teretistridae (Cuban warblers, two species, as their name implies only in Cuba), Phaenicophilidae (Hispaniolan tanagers, four species, all on Hispaniola), Nesospingidae (one species, Puerto Rican Tanager) and Calyptophilidae (chat-tanagers, two species, both on Hispaniola). Another family is virtually confined to the West Indies, Spindalidae (spindalises, four species). In addition, many genera are endemic, among them *Starnaenas* (Blue-headed Quail-dove, recently suggested to represent the sole member of a subfamily grouping), *Siphonorhis* (poorwills, but just one definitely extant species), *Eulampis* (two species of hummingbirds), *Cyanophaia* (Blue-headed Hummingbird), *Cyanolimnas* (Zapata Rail), *Pseudoscops* (Jamaican Owl), *Margarobyas* (Bare-legged Screech-owl), *Priotelus* (Cuban Trogon, sometimes also Hispaniolan Trogon), *Nesocittes* (Antillean Piculet), *Xiphidiopicus* (Cuban Green Woodpecker), *Ferminia* (Zapata Wren), *Allenia* (Scaly-breasted Thrasher), *Torreornis* (Zapata Sparrow), *Nesopsar* (Jamaican Blackbird) and *Euneornis* (Orangequit).

Consequently, for birders of whatever 'stripe'—family collectors, world listers or those fascinated by taxonomic 'oddballs'—the West Indies couples a host of avian endemism with an *al fresco* climate, generally safe travel opportunities and welcoming peoples.

## GEOGRAPHICAL SCOPE

Covering approximately 115 islands, but not including rocky islets and small, often sandy cays (Cuba alone possesses more than 1000 of the latter!), the land area of the West Indies is c. 240,000 km<sup>2</sup>, of which almost half (105,000 km<sup>2</sup>) belongs to Cuba. Three major physiographic divisions constitute the West Indies: the Greater Antilles, comprising the islands of Cuba, Jamaica, Hispaniola (Haiti and the Dominican Republic) and Puerto Rico; the Lesser Antilles, including the Virgin Islands, Anguilla, St Martin/St Maarten, St Barthélemy, Saba, St Eustatius, St Kitts and Nevis, Antigua and Barbuda, Montserrat, Guadeloupe, Dominica, Martinique, St Lucia, St Vincent and the Grenadines, Barbados and Grenada; and the isolated island groups of the North American continental shelf—the Bahamas and the Turks and Caicos Is—and those of the South American shelf, including Trinidad and Tobago, Aruba, Curaçao and Bonaire. However, in terms of their fauna and flora, biogeographers consider all of those islands lying on the

South American shelf to be more closely related to the continent, and consequently exclude them from faunal treatments of the West Indies. This has been as true for birds as any other group, and we do nothing more than follow Bond and others in defining the southernmost extent of the region. This is true too of our approach to the Colombian archipelago of San Andrés, Providencia and Santa Catalina, in the south-west corner of the region, which we, like Bond and Raffaele *et al.*, consider to be unequivocally Antillean given the obvious affinities of its endemic birds. All commentators, unsurprisingly, have treated the Cayman Is as part of the West Indies based on both geography and fauna, but the Swan Is (Honduras) were excluded from the region by Raffaele *et al.* Again in unison with Bond, we have no hesitation about including them, given that Vitelline Warbler is unique to the Swan and Cayman Is, and the Swan Is also formerly supported a population (and perhaps even separate race) of Red-legged Thrush, a species group unique to the West Indies. We also cover the Venezuelan islet of Isla de Aves, 185 km south-west of Montserrat, which was not explicitly treated in previous guides.

The shape and alignment of the Greater Antilles are determined by an ancient chain of folded and faulted mountains that originally extended west to east from Central America through the region. Nowadays, it is now mostly submerged, but remnants are visible in the Blue Mts of Jamaica, the Sierra de los Órganos and Sierra Maestra at the western and eastern extremities, respectively, of Cuba, and Mt Duarte, in the Dominican Republic, which at 3175 m is the highest peak in the Caribbean. Running north to south, another mostly submerged mountain chain forms the double arc comprising the Lesser Antilles. Stretching from St Kitts to Grenada, the mountainous inner arc consists of volcanic cones, some still active. The outer arc—between Anguilla and Barbados—comprises low, flat islands with limestone surfaces overlying older volcanic or crystalline rocks.

While the faunal division between the Greater and Lesser Antilles is typically considered to be straightforward, in fact it is subject to debate, some vague statements, and is potentially even dynamic; there is certainly a lack of unanimity on this issue. The Virgin Is have often been considered to be part of the Lesser Antilles. Nevertheless, it has been suggested, with a reasonable degree of authority, that the deep-water Aneгада Passage, which was apparently formed by the fault between the islands of Aneгада and Sombrero, and many of the northern Virgin Is west of Aneгада are sited on the relatively shallow Puerto Rican Bank, and were connected to Puerto Rico in the geologically recent past. Allocation of St Croix, the southernmost of the Virgin Is, is more problematic, it being separated from the Puerto Rican Bank to the west and the Anguilla Bank to the east by deep channels.

Comparatively few Greater Antillean endemic taxa persist as far east as the Virgin Is, among them Puerto Rican Mango (declining), Puerto Rican Screech-owl (probably extinct there) and Puerto Rican Flycatcher (still widespread). On the other hand, this part of the region, which might almost be viewed as a transition zone, has been invaded as a result of the recent northward spread of Lesser Antillean birds, such as Lesser Antillean Bullfinch. Although not biogeographically significant, the Virgin Is also represent the south-easternmost point at which many Nearctic–Neotropical passerine migrant birds are still reasonably numerous in winter; further south, their numbers tend to decline noticeably.

The final issue to mention is that the Old Bahama Channel, despite being just 19–24 km wide, is generally considered to represent a boundary between Cuba and thus the Neotropics (to the south) and the Holarctic, represented by the Bahamas, to the north. We concur with this view, widely accepted since the publication of Voous (1973), although it is nonetheless important and

interesting to note the degree of faunal interchange between the Bahamas and Cuba. So, for example there are relict (?) populations of Bahama Mockingbird in northern Cuba (and Jamaica), Bahamian populations of Bananaquit are perhaps invading the north-central Cuban cayerías, and two undeniably closely related taxa of lizard-cuckoos (usually treated as subspecies, but here as species) occur either side of the channel. Nevertheless, none of these facts impacts our recognition of this narrow strait as a significant biogeographic divide.

Note that in the main text, use of the term ‘Bahamas’ often refers to the Commonwealth of The Bahamas and the UK Overseas Territory of the Turks & Caicos Is, in recognition of their shared geological and biogeographic characteristics. This implies no political opinion.

## CLIMATE

The West Indies have a tropical maritime climate. All of the islands, especially the larger ones, are arguably subject to as many, if not more, local variations in temperature than seasonal differences. Seasonal variation is most apparent in rainfall, rather than temperature shifts. Daily maximum temperatures (°C) over most of the region range from the upper 20s in December to April, to the low 30s in May to November. Nocturnal temperatures are c. 6°C cooler. In Cuba, for example, annual mean temperature ranges from 24°C to 27.6°C, with regional monthly mean differences of c. 5°C and c. 7°C, while means from various islands in the Bahamas range between 24.3°C and 27.8°C. Similar ranges are registered on the Cayman Is, Hispaniola and St Lucia. Nevertheless, in Cuba, temperatures can reach 40°C in summer (and even 43°C in the Dominican Republic) but have dipped as low as 1–2°C on Pico Turquino, Cuba’s highest peak, in winter. Sub-zero temperatures have occasionally been recorded in the Dominican Republic and are perhaps regular in the country’s highest mountains. Such conditions are unlikely to be experienced on any of the other islands in the region, even in the highest areas of Jamaica. For instance, the lowest recorded temperature on Grand Cayman is c. 11°C. The coolest months on Jamaica are likely to be December to February, but this is relative.

Most islands experience a wet and a dry season; annual rainfall totals typically range from 300 to 2000 mm (e.g. typically 740–1360 mm across the Bahamas, 1100–1800 mm in the Cayman Is and 1300–1800 mm in Barbados), but reach up to 7500 mm on the highest peaks, with some of the areas of highest precipitation being Jamaica’s John Crow Mountains, the Moa / Baracoa region of eastern Cuba, and parts of the Massif de la Hotte in Haiti. Ironically, one of the driest, southern Guantánamo province, is also in eastern Cuba, and north-west Haiti also generally experiences very little rainfall, as do those parts of Hispaniola in the rain shadow of the higher mountains. Mean annual rainfall scarcely exceeds 1100 mm anywhere on the Cayman Is. In Cuba and Jamaica, there is also a trend for rainfall to increase away from the coast. The region’s moisture-laden trade winds produce heavy rainfall on the windward sides of the higher islands. Relative humidity is high throughout the year. The dominant wind direction is north-east (85% of the time on St Lucia), whilst relative humidity is 75% on St Lucia, 80% in Cuba and can reach almost 87% in some parts of the Dominican Republic. Drier regions may experience relatively lower average humidity, exceptionally values below 40% are experienced, albeit rarely, on the Cayman Is.

It can rain at any season (so a small umbrella is always useful to carry), but downpours rarely occur in the dry season (October–April in Cuba, November–April on Hispaniola and February–April

on Barbados), May and October are generally the wettest months on Jamaica, while June–November represents the wet season in the southern Lesser Antilles, e.g. in St Lucia and Barbados. Given that it can be cool in montane regions, such as La Güira on Cuba, the Blue Mountains of Jamaica, and in the south-west Dominican Republic on winter mornings, cool-weather clothing is advisable. A light jacket will also be useful if travelling to Zapata between late November and late February; evenings and nights can be quite surprisingly and deceptively cool in this region at this time of year. Cold fronts from North America can bring storms and lower temperatures to the Bahamas, Cuba and the Cayman Is, much more rarely the other islands, between December and March.

Hurricanes pass through the Caribbean region almost annually in June–October, occasionally as late as November. Winds in these storms regularly reach almost 120 km/h and up to 500 mm of rain can fall in just 24 hours. The low-lying Cayman Is can be extensively inundated by high seas during tropical storms, one of which, Hurricane Flora, brought winds of up to 320 km/hour to Hispaniola. Fortunately, the chances of witnessing one at any given location are very low, but most birders will want to avoid visiting the region at this season.

## HABITATS

### Tropical and subtropical humid broadleaved forests

These grow in areas of high annual rainfall (2000 mm), especially on windward mountain slopes, such as in eastern Cuba, northern Jamaica, eastern Hispaniola, northern Puerto Rico, and at higher elevations in the Lesser Antilles; also in some lowlands subject to prevailing north-easterly winds. These forests are evergreen, often with conspicuous presence of mosses, ferns and epiphytes. At higher elevations, they can receive as much moisture horizontally (from mist) as from rainfall, in which case they are known as cloud forests. These latter are the primary wintering habitat of the North American-breeding Bicknell's Thrush. Much of the original humid forest on the West Indian islands has been lost, and the remaining tracts persist largely in montane regions, where they are a refuge for threatened endemics such as Red-necked, St Lucia, Imperial and St Vincent Amazons, and Semper's, Whistling and Elfyn Woods Warblers, although the first-named of these three warblers has not been definitely recorded for several decades.

### Tropical and subtropical dry broadleaved forests

Found in areas of lower (1300 mm per year) and seasonal rainfall throughout, particularly on the leeward slopes of mountains. More open in structure than humid forests, tree species are semi-deciduous or deciduous, and there is often a well-developed understorey. Climate, fertile soils and adequate rainfall make these forests attractive for agriculture, and their area has been greatly reduced. Characteristic birds of dry forest include Caribbean Dove, Grenada Dove, White-breasted and St Lucia Thrashers, and Puerto Rican Nightjar.

### Tropical and subtropical pine forests

Lowland pine forests occur on poor soils in the Bahamas and Turks & Caicos, with both lowland and montane pine forests in Cuba and Hispaniola. Characteristic birds of Bahamian pine barrens include Bahamas Hairy Woodpecker and the now perilously close to extinction Bahama Nuthatch, while montane pine forests in the Greater Antilles are favoured by Hispaniolan Pewee, Hispaniolan Palm Crow, Olive-capped Warbler, and Hispaniolan Crossbill. Formerly, they were also a final bastion of the potentially extinct Cuban Ivory-billed Woodpecker.

## Savannas

Natural savannas occur in areas of seasonal drought in the Bahamas, Cuba and Hispaniola. Burning and clearance by humans has led to a great increase in their area, and they are now found on all islands where natural vegetation has been cleared. Savanna specialists include Double-striped Thick-knee, Burrowing Owl and Palmchat.

## Karst forest

Restricted to limestone outcrops in the Greater Antilles, notably in the *mogotes* of Puerto Rico, the Cordillera de Guaniguanico in western Cuba and in Cockpit Country in Jamaica. Floral components tend to be highly endemic. Typical bird species in the second-named country include Ring-tailed Pigeon, Crested Quail-dove, Chestnut-bellied Cuckoo, Black-billed Amazon, Jamaican Crow and Rufous-throated Solitaire.

## Shrubland

This type of vegetation is either a product of dry climatic, or impoverished soil, conditions or the result of forest removal. It is widespread, for example, in severely deforested Haiti, where it covers about one-third of the land area. The resultant avifauna tends to be a mix of dry forest birds and those of non-forest habitats.

## Dry thorn and cactus scrub

Found in drier areas of Cuba, throughout the Lesser Antilles and on many small islands. Characteristic species include a trio of warblers, namely Vitelline Warbler (Cayman Is and Swan Is), Adelaide's Warbler (Puerto Rico and recently some of the Virgin Is) and the eponymous Barbuda Warbler. In eastern Cuba, species like Cuban Grassquit and Zapata Sparrow can be common in such habitat, while in Dominican Republic the endemic Least Poorwill and Flat-billed Vireo are just two of the birds found in these areas. The probably extinct Jamaican Poorwill might also have been found in very dry habitats, and Bahama Mockingbird still is on the same island.

## Mangroves

Mangrove is a generic term applied to a suite of tree species that grow in tidal conditions around tropical coasts. Four species of mangrove occur in the West Indies, displaying different tolerances to salinity and submersion. The region is home to some of the most extensive and important mangrove forests in the world, with Cuba alone harbouring at least 5300 km<sup>2</sup>. Mangroves provide nesting sites for boobies and Magnificent Frigatebirds, as well as vital stopover and wintering habitat for migrants, especially waders. Typical species found in mangrove include West Indian Whistling-duck, White-crowned Pigeon, Puerto Rican Emerald, Mangrove Cuckoo, Clapper Rail, Cuban Black Hawk, Thick-billed Vireo, Martinique Oriole and Golden Warbler.

## Beaches

The large number of Caribbean beaches offer key sites for nesting waders, particularly Wilson's Plover, as well as wintering habitat for several North American breeders, the most important of which is Piping Plover.

## Coastal and freshwater wetlands

The 5000 km<sup>2</sup> Zapata Swamp, home to the eponymous rail, wren and sparrow, and much else besides, is the region's largest wetland of international importance, and designated a Ramsar Site. It comprises freshwater, brackish and saline environments. Inland lakes, reservoirs and pools are a feature of all of the islands, providing habitat for a diversity of resident waterbirds as well as

migrant waterfowl and waders. Artificial reservoirs, desalination and sewerage treatment plants have increased the availability of freshwater habitats, providing birders with welcome opportunities to find vagrant birds close to human habitation.

### Marine habitat

Marine environments account for the lion's share of the surface area of the West Indies. As a bird habitat, the Caribbean Sea remains little known due to its vast area, relative inaccessibility of pelagic regions, low average densities of birds, their often exclusively seasonal presence and difficulties in identification. Some exciting records are emerging from seawatches in, for example, Guadeloupe. To complement direct observations, the use of modern tracking technologies is just starting to reveal the use that seabirds make of the marine environment. This is particularly true of some jaegers and skuas, Arctic Tern, storm-petrels and the globally threatened Black-capped Petrel, which is endemic as a breeder to the region.

### Agricultural land

Makes up the majority of land coverage in the Greater Antilles and is home to a range of widely distributed generalist species. Sugar-cane—widely planted in Cuba (especially since the Revolution) and Hispaniola—is the least attractive habitat for birds, and pastureland scarcely better, whereas mixed silvicultural systems and plantations of shade coffee and cocoa can provide relatively good analogues of natural forest cover, especially if adjoining blocks of original vegetation, and can support more complex communities and appreciable numbers of migrants.

### Urban environments

Towns, cities and tourist infrastructures are home to a variety of birds, some of which are endemic to the West Indies. Cuban Martin is perhaps the most obvious example, nesting under the roof tiles in Havana's historic centre, but one of Hispaniola's endemic families, Palmchat, has adapted well to urban areas, while Cuban Blackbird and Antillean Palm-swift are two other species unique to parts of the West Indies that are regularly found in close proximity to man. One or other species of attractive red-legged thrush can usually be found in parks and gardens in the Greater Antilles and the Bahamas, while Barbados Bullfinch is common in Bridgetown. During the boreal winter, any plot of land with trees can attract migrant Nearctic warblers. Even enigmatic rarities like Stygian Owl can be seen taking advantage of streetlights in Cuba. Apart from native birds, built-up areas are often now habitat to a growing number of introduced species. Eurasian Collared-dove is as common in some towns and cities in the region as it is in its native range.

## BIRD CONSERVATION IN THE WEST INDIES

Of the 550 bird species that regularly occur in the West Indies 70 (12.7%) are threatened, and another 47 are considered Near Threatened. At least six bird species—at least four parrots (there is quite some dispute over the number of macaws that may have formerly existed in the region), a hummingbird and a thrush—have become extinct since European colonization of the region, due to hunting and habitat loss.

The major contemporary threats to birds are loss of habitats, introduced predators, hunting and the cagebird trade. Driven by the demand for land, the forests that once covered most of the West Indies were cut down in many areas by sugar plantation owners for firewood to heat their refining vats. This practice

resulted in soil impoverishment and erosion. The region's forests have been lost at alarming rates and now cover only a fraction of their original extent. Destruction of primary forest has also occurred due to the advance of slash-and-burn agriculture, and (in the case of Haiti) for charcoal production. Other habitats have also been affected by humans, notably wetlands which have been drained for agriculture and coastal ecosystems that have been modified by development of infrastructure for tourism. Non-native species such as mice, rats, cats and, especially, mongooses are serious predators of eggs, young and adult birds on many islands. Mongooses have been implicated in the apparent disappearance of an endemic tubenose, Jamaican Petrel, not seen since the late 19th century. Hunting for food targets mainly pigeons, wildfowl and waders, and with the precipitous declines in populations of some of the latter, has now become a factor in declines. Capture of wild birds for the cagebird trade affects parrots and a variety of songbirds.

Added to those anthropogenic threats, birds with restricted ranges, particularly single-island endemics, are vulnerable to the stochastic effects of natural phenomena like hurricanes and volcanic activity. Following a series of volcanic eruptions during the late 1990s, the population of Montserrat Oriole declined dramatically after two-thirds of its forest habitat were destroyed. Recent hurricanes have triggered fears for the survival of several of the region's endemic parrots, but many other species too, like the globally threatened Fernandina's Flicker in Cuba, are also negatively impacted by such once-freak weather events. Given that most species recover their populations after these storms within a few years, and have lived with them for millennia, it is their increasing frequency and ferocity, apparently at least in part due to our rapidly changing climate, that pose the real risk, especially to large-bodied birds that require longer periods to recoup and are least able to withstand more closely spaced hurricanes. The effects on birds of climate breakdown are increasingly well documented, but the extent to which it will exacerbate existing threats depends on securing concerted global action to address its causes.

Mindful of the need to conserve the natural systems that sustain both life and a thriving tourism industry, many West Indian countries have committed to the creation and management of national parks and entire protected areas systems, something that perhaps reaches its peak expression in Cuba, which has created a complex of more than 200 conservation units protecting more than 12% of the total land surface, several of which are internationally recognised: six Ramsar sites, six UNESCO-MAB Biosphere Reserves and two UNESCO Natural World Heritage Sites. In Haiti, the Pic Macaya and Grande Colline National Parks protect key parts of the Massif de la Hotte, a mountain range harbouring one of the world's highest densities of threatened species. Elsewhere protected areas conserve bird habitats and safeguard natural ecosystems and the services that they provide.

To guide the process, BirdLife International has identified 12,000 Important Bird and Biodiversity Areas (IBAs) throughout the world. In the West Indies, of the 268 identified (including sea area covering almost 47,500 km<sup>2</sup>), many have now been incorporated into conservation and development planning, and national legislation. For example, IBAs have been included in the National Master Plan for Protected Areas in the Bahamas, the 2009–2013 Strategic Plan for the National Protected Areas System in Cuba, Montserrat's National Physical Development Plan, and Grenada's System Plan for Protected Areas. They are also identified as high-priority eco-zones within the Nature Policy Plan for St Eustatius, Saba and (just outside our region) Bonaire.

Single-species conservation programmes have helped increase our knowledge of, for example, Black-capped Petrel. Targeted

awareness-raising campaigns to protect flagship species have been highly successful for Imperial, St Lucia and St Vincent Amazons on Dominica, St Lucia and St Vincent and the Grenadines, respectively.

The BirdLife Americas Partnership is a growing network of national conservation NGOs working for the joined-up conservation of birds from the tundra to Tierra del Fuego. In the West Indies specifically, there are currently four BirdLife Partner programmes:



Bahamas National Trust (BNT)



Cuba—Centro Nacional de Áreas Protegidas (CNAP)



Dominican Republic—Grupo Jaragua (GJI)



Puerto Rico (to USA)—Sociedad Ornitológica Puertorriqueña, Inc. (SOPI)

The official global conservation status, as defined by BirdLife International, and the main threats facing the most threatened West Indian birds (from a global perspective) are as follows.

### Critically Endangered (Possibly Extinct)

**Jamaican Poorwill**—Habitat destruction, introduced predators (not recorded since 1860; endemic)

**Jamaican Petrel**—Introduced predators (last recorded 1879; endemic)

**Eskimo Curlew**—Hunting, habitat loss (last record 1963, on Barbados, where was probably regular on migration)

**Bachman's Warbler**—Habitat destruction, both on breeding and wintering grounds (last report 1988, last well-documented record 1964)

### Critically Endangered

**Grenada Dove**—Habitat loss and fragmentation caused by hurricanes, clearance for infrastructural projects, grazing and predation by invasive species (endemic)

**Zapata Rail**—Invasive species, perhaps fires (endemic)

**Cuban Kite**—Habitat loss and fragmentation (endemic)

**Ridgway's Hawk**—Habitat loss and fragmentation, direct persecution (endemic)

**Cuban Ivory-billed Woodpecker**—Logging and clearance for agriculture, perhaps hunting (last record 1987; endemic subspecies)

**Puerto Rican Amazon**—Habitat loss (exacerbated by hurricanes), hunting for food and cagebird trade, parasitic botflies, predation (endemic)

**Bahama Nuthatch**—Forest loss, invasive species and hurricanes (endemic)

**Bahama Oriole**—Introduced species, infrastructural and agricultural development (endemic)

**Semper's Warbler**—Introduced mongooses, perhaps compounded by habitat loss (last definite record 1961; endemic)

### Endangered

**Blue-headed Quail-dove**—Hunting, habitat loss (endemic)

**White-fronted Quail-dove**—Habitat loss, hunting, introduced predators (endemic)

**Puerto Rican Nightjar**—Habitat loss and fragmentation, introduced mongooses and feral cats, fire (endemic)

**Bay-breasted Cuckoo**—Habitat loss, hunting (endemic)

**Atlantic Yellow-nosed Albatross**—Longline fishery bycatch (vagrant)

**Black-capped Petrel**—Habitat loss and degradation, hunting, invasive predators (endemic breeder)

**Gundlach's Hawk**—Hunting, habitat fragmentation and loss, mining, fires (endemic)

**White Cockatoo**—Forest loss, cagebird trade (introduced)

**Red-crowned Amazon**—Cagebird trade, long-term habitat loss (introduced)

**Imperial Amazon**—Habitat loss (including hurricane-related damage), hunting for food, trapping for cagebird trade (endemic)

**Giant Kingbird**—Habitat loss, especially loss of tall trees used for nesting (endemic)

**Bahama Swallow**—Logging, planned housing developments (endemic)

**Zapata Wren**—Dry-season burning, wetland drainage, agricultural expansion, predation by introduced mongooses and rats, introduced plants (endemic)

**White-breasted Thrasher / St Lucia Thrasher**—Habitat clearance for agriculture, housing and tourism infrastructure (endemic)

**Java Sparrow**—Cagebird trade (introduced)

**Hispaniolan Crossbill**—Habitat loss due to logging, small-scale agriculture and uncontrolled fires (endemic)  
**Red Siskin**—Cagebird trade (introduced)  
**Jamaican Blackbird**—Habitat loss and fragmentation due to bauxite mining, agricultural expansion and the charcoal industry (endemic)  
**Yellow-shouldered Blackbird**—Habitat loss due to residential and tourist development and agriculture, cowbird parasitism (endemic)  
**Whistling Warbler**—Habitat loss and fragmentation (endemic)  
**Elfin Woods Warbler**—Habitat loss and degradation (endemic)  
**Golden-cheeked Warbler**—Habitat loss in both breeding and wintering grounds (vagrant)  
**St Lucia Black Finch**—Agricultural clearance, introduced predators (endemic)

### Vulnerable

**West Indian Whistling-duck**—Hunting, habitat loss and degradation (endemic)  
**Long-tailed Duck**—Oil spills, gillnet fishery bycatch, hunting, avian cholera and influenza (vagrant)  
**Common Pochard**—Loss of breeding habitat, hyper-eutrophication, hunting, human recreation activities, urban development, habitat destruction (vagrant)  
**Ring-tailed Pigeon**—Illegal hunting, logging, clearance for plantation agriculture (endemic)  
**Grey-headed Quail-dove**—Habitat loss, hunting pressure (endemic)  
**Black Swift**—Climate change and pesticide use?  
**Chimney Swift**—Loss of nesting habitat (migrant)  
**Leach's Storm-petrel**—Cause(s) of declines unknown, but probably multi-faceted (migrant)  
**Trindade Petrel**—Very small breeding range and population susceptible to human impacts and stochastic events (vagrant)  
**Atlantic Kittiwake**—Oil pollution, climate change, longline fishery bycatch (vagrant)  
**Channel-billed Toucan**—Deforestation, hunting (introduced)  
**Fernandina's Flicker**—Logging and clearance for agriculture, hurricanes, loss of nest trees, competition with West Indian Woodpecker (endemic)  
**Black-billed Amazon**—Habitat loss, fragmentation and degradation, trapping and predation (endemic)  
**Yellow-billed Amazon**—Habitat loss, fragmentation and degradation, trapping (endemic)  
**Hispaniolan Amazon**—Agricultural conversion, charcoal production, persecution, hunting, at least formerly international cagebird trade (endemic)  
**Red-necked Amazon**—Habitat loss (including hurricane-related damage), hunting, illegal trade (endemic)  
**St Lucia Amazon**—Small population and tiny range susceptible to stochastic events (endemic)  
**St Vincent Amazon**—Small population and tiny range susceptible to stochastic events (endemic)  
**Cuban Parakeet**—Habitat loss, trapping for cagebird trade (endemic)  
**Hispaniolan Parakeet**—Habitat loss, persecution (endemic)  
**San Andres Vireo**—Tiny range susceptible to stochastic events (endemic)  
**White-necked Crow**—Habitat loss for timber and agricultural conversion, hunting for food, direct persecution (endemic)  
**Golden Swallow**—Forest loss and fragmentation, predation by introduced mammalian predators, competition for nest sites (endemic)

**Bicknell's Thrush**—Habitat loss and degradation in both breeding and wintering ranges (winter visitor)  
**Forest Thrush**—Human-induced deforestation, introduced predators, severe habitat loss due to volcanic eruptions (endemic)  
**La Selle Thrush**—Habitat loss due to agriculture and timber extraction (endemic)  
**Sprague's Pipit**—Conversion of prairie to seeded pasture, hayfields and cropland, inappropriate grazing causes habitat loss, degradation and increased juvenile mortality (hypothetical vagrant)  
**Zapata Sparrow**—Habitat loss and degradation (endemic)  
**Martinique Oriole**—Brood-parasitism by Shiny Cowbird, whose spread has been facilitated by deforestation (endemic)  
**Montserrat Oriole**—Volcanic eruptions, hurricane-related habitat loss and degradation (endemic)  
**Rusty Blackbird**—Destruction and conversion of boreal wetlands, mining, climate change, disease (hypothetical vagrant)  
**Cerulean Warbler**—Habitat loss and fragmentation on both breeding and wintering grounds (migrant)  
**White-winged Warbler**—Habitat loss, fragmentation and degradation (endemic)  
**Western Chat-tanager**—Habitat loss, fragmentation and degradation due to logging and conversion to agriculture (endemic)

## BIRDING IN THE WEST INDIES

The primary reason for most birders to visit any island in the Greater Antilles and many of those in the Lesser Antilles will be to find the endemic landbird species, and this is generally feasible at virtually any time of the year. However, most of the specialties are more easily found during the breeding season (generally March–July in the Bahamas and Greater Antilles, but nesting activity may well start considerably earlier and can be more prolonged on at least some of the Lesser Antilles).

For those birders interested in migration, and perhaps the chance of a vagrant, the best months are August–November, and March or April, but any time between August and May can be productive. Arguably the best areas to search for rarities are the Colombian-administered islands of San Andrés and Providencia (several boreal migrants are potential accidental visitors, and austral migrants from South America are also possible, as they are in the Lesser Antilles), and the southernmost Lesser Antilles, which are most influenced by the trade winds (for the chance of transatlantic vagrants, principally but not exclusively waterfowl and shorebirds). Most of these islands are severely under-watched. One of the most extraordinary products of the trade winds was the arrival in October 1988 of an estimated 100 million African desert locusts *Schistocerca gregaria* between Martinique and northern South America. Returning to migrant birds, do not ignore the Bahamas (particularly the larger, northernmost islands, mainly for unusual North American visitors, some from as far afield as the western USA) and westernmost Cuba (the Guanahacabibes Peninsula, where a previously unsuspected raptor passage, presumably taking the most direct route between Florida and the Yucatán Peninsula, has been detected in recent years).

For seawatching, Guadeloupe is the premier location, with most variety in the boreal spring. Dedicated pelagic trips are not yet available, but would surely yield additions to the regional list, and help revise the status of some of those species already known to occur. In addition to Guadeloupe, the waters around Barbados might prove to be particularly productive in this respect.

The best time to see a good selection of winter visitors is between October and March, when the overall numbers of species present on the islands, especially those in the north of the region,

are greatest. The small number of summer residents generally start to arrive in March and April, e.g. Antillean Nighthawk, but note that Cuban Martin arrives on Cuba from the end of January, although it is not generally very widespread until March, and Caribbean Martin is mainly present in the region between February and October. The wintering grounds of all three of the just-mentioned species are fundamentally unknown, although usually speculated to be in South America.

Given the hot, often humid (and sometimes very wet) conditions that prevail in summer, most birders will find that a visit anytime between late November and late April is liable to be most productive. If observing a wide range and the largest numbers of North American migrants, especially wood-warblers, is a priority then it is best to visit the islands before the end of February, otherwise seeing large numbers of individuals will be to some extent dependent on experiencing a 'fall-out'.

As in many areas, the Caribbean is a popular part of the world to visit at either Christmas or Easter, thus airfares and hotel prices are frequently inflated at these times. If possible, they are best avoided or, if you must visit during one of these periods, then be sure to book both your flights and accommodation as far in advance as possible. Hurricanes pass through the Caribbean region almost annually in July–October, and this season of the year is generally best avoided. Tropical storms can also be bad news for birds and other wildlife, especially when they strike forested areas, leaving large areas of trees dead and dying. Their effects have been most closely monitored in our region on Puerto Rico, especially on the endemic and globally threatened parrot, but may have a visible impact on other species too. Populations of at least some species may be significantly depleted and be unusually difficult to find for months or even a year or two after a hurricane has hit an island. This can make local knowledge very useful when planning your trip. Nevertheless, should work or other circumstances leave you few options for visiting except during the tropical cyclone season, it should be noted that Cuba has a better than average weather report system in advance of such events, and has good experience in organising evacuations, so that casualties are minimal or non-existent.

### Sound recording and playback

Like many countries in the tropics, birding in the region's forests is often heavily dependent on hearing birds first, with many of the most sought-after species being shy and skulking. Until the advent of the free-to-use xeno-canto and Internet Bird Collection (IBC) websites, as well as the Macaulay Library, birders were reliant for knowledge of avian vocalizations on audio compilations such as Reynard & Garrido's *Cantos de las Aves de Cuba*, Reynard's *Cantos de las Aves de la República Dominicana* (both of which were originally issued on vinyl LPs), Roché *et al.*'s *Oiseaux des Antilles*, Reynard & Sutton's *Bird Songs in Jamaica* and Oberle's *Cantos de Aves del Caribe* (which covers Puerto Rico and the Lesser Antilles, as well as the Bahamas, the Cayman Is and San Andrés); the latter three were published on CDs. Despite the availability of all of the free resources just mentioned, these commercial publications are

still valuable, especially in recognition of the pioneering work of the late George Reynard in recording the region's bird sounds. Caution should, however, be observed with respect to using playback in the field and it should be kept to the absolute minimum. Prolonged use of playback and playing of calls at unnaturally high volume can cause distress to birds and should be avoided at all costs.

### Health

No specific vaccinations are required for entry to any of the Antilles, although those arriving from or continuing to South America may be asked to present a yellow fever vaccination certificate. Proof of a cholera vaccination may also be demanded if travelling from an area that has recently suffered an outbreak. It is advisable to ensure that your vaccinations against typhoid, tetanus, hepatitis C and polio are up to date. Malaria has been eradicated across most of the region, but Hispaniola is one notable exception. However, dengue and the Zika virus infection is still a risk throughout. Furthermore, remember that some medicines can be difficult to obtain locally, especially in countries like Cuba, where apparently mundane items as painkillers for headaches and the like could be problematic to obtain locally, so prepare in advance.

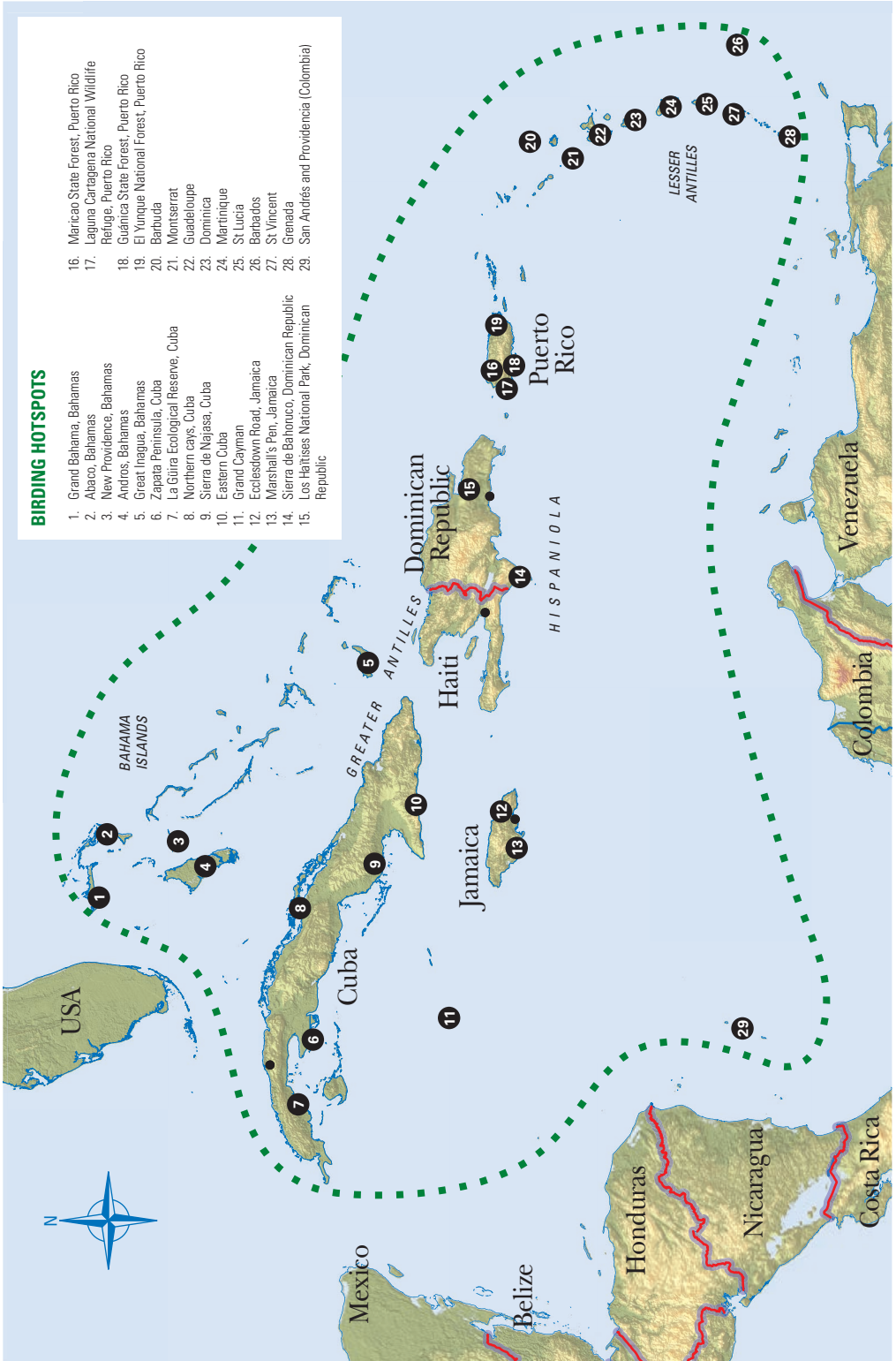
Medical facilities on most islands in the region are generally good, in some cases excellent, but particularly expensive in the Bahamas, Puerto Rico and the Caymans, so ensure that your travel insurance is up to date. Most people are unlikely to suffer anything more severe than an upset stomach anywhere in the Antilles, and the risk of this will be minimized by drinking bottled water. Sunstroke is the other principal risk; drink plenty of water and wear a hat, especially during the middle of the day, as well as applying sufficient sunscreen.

There are several mildly poisonous plants in the Antilles, but you are unlikely to have any problems, especially if you keep to trails. The commonest belongs to the genus *Comocladia*. The plant is easily recognisable by its compound, bright green, saw-like leaves. No dangerous, poisonous animals inhabit most of the West Indies—the black widow spider and several scorpions are rather rare and spend daylight hours out of sight—but on Martinique and St Lucia be aware of the presence of *Bothrops lanceolatus* and *B. caribbaeus*, respectively, both which are extremely venomous snakes, although the latter is quite rare and of restricted range on the island. Sleeping outdoors anywhere should be generally avoided. Try to avoid direct contact with centipedes and wasps, all of which can have a painful sting.

Anywhere in the region during the summer and part of the rainy season (May–September), mosquitoes and sand flies can be very unpleasant, for example in Cuba's Zapata Swamp and on the country's cays. In November–April, their numbers are tolerable, and in some places they are absent. A good repellent is virtually essential, and wearing long-sleeved clothing is advisable at any season. It might be advisable to spray your clothing with a repellent before entering the bush, as seed ticks can be numerous and relentless. The bites are reminiscent of chiggers and will irritate for many days.

## BIRDING HOTSPOTS

1. Grand Bahama, Bahamas
2. Abaco, Bahamas
3. New Providence, Bahamas
4. Andros, Bahamas
5. Great Inagua, Bahamas
6. Zapata Peninsula, Cuba
7. La Ciguira Ecological Reserve, Cuba
8. Northern cays, Cuba
9. Sierra de Najasa, Cuba
10. Eastern Cuba
11. Grand Cayman
12. Ecclesdown Road, Jamaica
13. Marshall's Pen, Jamaica
14. Sierra de Bahonuco, Dominican Republic
15. Los Haitises National Park, Dominican Republic
16. Maricao State Forest, Puerto Rico
17. Laguna Cartagena National Wildlife Refuge, Puerto Rico
18. Guánica State Forest, Puerto Rico
19. El Yunque National Forest, Puerto Rico
20. Barbuda
21. Montserrat
22. Guadeloupe
23. Dominica
24. Martinique
25. St Lucia
26. Barbados
27. St Vincent
28. Grenada
29. San Andrés and Providencia (Colombia)



## BIRDING HOTSPOTS

- 1. Grand Bahama, Bahamas:** the closest large island of the Bahamas archipelago to Florida plays home to Bahama Hummingbird, Bahama Swallow, Bahama Yellowthroat and Olive-capped Warbler, as well as a range of more widespread regional endemics. Considered a separate species herein, Bahama Nuthatch is entirely restricted to this island, but is now extremely rare and quite possibly on the verge of extinction. The other specialties can mostly be found in Lucayan National Park, and the long beach area west of the protected area is important for wintering Piping Plovers. The Garden of the Groves is a good site for the hummingbird, while Cuban Emerald is also present there. The west end of Grand Bahama is a regular haunt of vagrants, and the northern Bahamas in general are, with the exception of the southern Lesser Antilles, perhaps the most likely part of the West Indies to produce new birds for the region. Like all of the islands in the Bahamas, accommodation is relatively expensive.
- 2. Abaco, Bahamas:** two islands in one, Great Abaco (180 km long) and Little Abaco (32 km) support a wide range of habitats and an excellent range of northern West Indian specialties, including all those present on Grand Bahama, with the exception (of course) of the nuthatch. In addition, one can find the recently split Bahama Warbler and an endemic race of Cuban Amazon. Little Abaco supports what is believed to be the oldest, and perhaps only remnant virgin, stand of pines in the Bahamas. One of the traditional localities to search for wintering Kirtland's Warblers is the quirkily named Hole-in-the-Wall, at the far southern tip of Great Abaco. Adjacent Abaco National Park offers an important stronghold for many of the endemics and near-endemics. Offshore Elbow Cay, which is well served by ferries, is one of the best sites in the northern Bahamas to find Key West Quail-dove.
- 3. New Providence, Bahamas:** two-thirds of the human population of the Commonwealth of The Bahamas lives on this island at the hub of the archipelago, most of them in the capital, Nassau. Although there are no native species unique to the island (in the region the introduced Pied Imperial-pigeon is, however, only found here), its geographical position with ferry and airplane links to all of the other major islands, and its being a regular port of call for cruise ships, means that it receives regular coverage by visiting birders. Bahama Hummingbird is present as is Bahama Swallow, the latter albeit mainly in the non-breeding season, as well as Bahama Lizard-cuckoo, which is now rather rare here (but otherwise occurs only on neighbouring Andros and Eleuthera). New Providence is also the stronghold of the invading Boat-tailed Grackle. Harrod & Wilson Ponds National Park is one worthwhile birding area close to Nassau, and the island's south-east coastline hosts Piping Plovers in winter. Some of the surrounding small cays provide breeding sites for a variety of seabirds, mainly terns and gulls, in summer.
- 4. Andros, Bahamas:** comprising several main islands and a maze of bays and creeks, Andros is the largest 'single' landmass in the Bahamas and supports remnant secondary and planted pine woodland, as well as mangroves and dense scrub. Andros is the last bastion of the globally threatened Bahama Oriole, which is regularly found around Andros Town, for example around Small Hope Lodge. Also present in the same general area are Bahama Hummingbird, Bahama Lizard-cuckoo, Bahamas Hairy Woodpecker, Bahama Swallow, Thick-billed Vireo, Bahama Mockingbird and Bahama Yellowthroat. Several of these, and West Indian Whistling-duck, can be found in the vicinity of San Andros Pond. It is possible to see all the key birds in a 24-hour trip from New Providence.
- 5. Great Inagua, Bahamas:** the largest colony of American Flamingos outside of Cuba breeds here, on Lake Rosa, and this area also supports West Indian Whistling-duck and Cuban Amazon, but the principal target and reason for visiting the island is the recently split Lyre-tailed Hummingbird. Fortunately, it is common there and even visits feeders in the capital, Matthew Town, at least during certain months of the year. There are regular (but not daily) flights from New Providence to the island.
- 6. Zapata Peninsula, Cuba:** located in southern Matanzas, just over 150 km from La Habana, the peninsula occupies an area of 4700 km<sup>2</sup> and supports a variety of habitats including semi-deciduous forest, swamp forest, mangrove, coastal thickets, mudflats, and extensive wetlands, including salt pans and fresh and brackish marshes. It is also the site of one of the greatest debacles in US foreign policy, the ill-fated 'Bay of Pigs' invasion. For birders, Zapata is arguably the keynote site in the entire region, but at least in the Greater Antilles. Almost 260 species have been reported in the area, among them all but four of Cuba's avian endemics, including the near-mythical Zapata Rail, but also Zapata Wren and Zapata Sparrow, as well as Red-shouldered Blackbird, Blue-headed and Grey-headed Quail-doves, Gundlach's Hawk, Fernandina's Flicker and Bee Hummingbird. In addition, more widespread but still much-desired species, such as West Indian Whistling-duck and Stygian Owl, will be targeted by many visiting birders. Furthermore, the forested areas afford prime wintering grounds for a wide variety of North American-breeding wood-warblers. There are a number of accommodation of options in the region, but a car is necessary to get around, and a local guide is a requirement for visiting areas inside the national park.
- 7. La Güira Ecological Reserve, Cuba:** in the Sierra de los Órganos, 150 km west of La Habana, the area is easily visited as a day trip from the capital. However, the closest town, San Diego de los Baños, has several accommodations. Main habitats are semi-deciduous woodland, gallery forest, tropical karstic forest and pine forest, and the principal species of interest for visiting birdwatchers are Cuban Solitaire and Olive-capped Warbler. However, other targets include Cuban Grassquit (at one of its few strongholds in western Cuba) and Giant Kingbird, as well as a wide range of common endemics such as Cuban Trogon and Yellow-headed Warbler. For those with a little more sense of adventure, a visit to the Guanahacabibes Peninsula, at the westernmost extremity of Cuba, could be worthwhile, especially during migration seasons, particularly in autumn. Recent studies have detected a considerable raptor passage, presumably between Florida and the Yucatán Peninsula, and reported several new records of passerines for Cuba, and even the West Indies as a whole.
- 8. Northern cays, Cuba:** most birders visit Cayo Coco, the second-largest cay in Cuba, which is connected to the mainland by a causeway and is served by many hotels. The island is mostly covered by woodland, including mangrove, as well as coastal scrub and lagoons. More than 200 species have been registered, including many rarities (e.g. the only Black-throated Grey Warbler to have been spotted in the Antilles), although the most interesting species are Ruddy and Key West Quail-Doves, a local race of Cuban Lizard-cuckoo, Cuban Tody, West Indian and Cuban Green Woodpeckers, Cuban Flicker, Cuban Gnatcatcher, a race of Zapata Sparrow, Western Spindalis and Cuban Bullfinch. Many waders can be seen in winter and during passage periods, and a regular feature is the largest aggregation of American Flamingos in the West Indies.

- 9. Sierra de Najasa, Cuba:** located c. 70 km south-east of Camagüey (an old city with numerous hotel and other accommodation options), this is a protected area of open country with many palm groves, semi-deciduous woodland, and tropical karstic forest in the hills. Among the 120 species reported are now relatively rare and local birds such as Plain Pigeon, Cuban Parakeet, Cuban Amazon, Fernandina's Flicker, Giant Kingbird and, especially, Cuban Palm Crow.
- 10. Eastern Cuba:** comparatively few of the now many birders that visit Cuba venture east of Camagüey, yet the region around the country's second city, Santiago de Cuba, and the almost equally famous Guantánamo offers some potentially exciting birdwatching in relatively untouched habitats. Most visitors will choose to base themselves in one of the principal conurbations. Two easily visited areas are the Pico Turquino, Cuba's highest mountain at fractionally below 2000 m, whose highest slopes (a five-hour walk) support cloud forest and wintering Bicknell's Thrushes. Both Blue-headed Quail-dove and Cuban Solitaire can be seen along the trail to the peak. Black-capped Petrel perhaps breeds in these mountains and is sometimes seen from shore in the evenings. Further east, in the vicinity of Baitiquiri, the xerophytic scrub supports a third race of the endemic Zapata Sparrow, as well as abundant Cuban Gnatcatcher, Oriente Warbler and Cuban Grassquit, while after-dark possibilities include Cuban Nightjar and Northern Potoo. There is also a small colony of White-tailed Tropicbirds in this region.
- 11. Grand Cayman:** this low-lying island, the largest of the Cayman group, boasts several good birding sites, most notably the Mastic Reserve, Botanic Park and Governor Gore's Pond. The near-endemic Vitelline Warbler (shared only with the Swan Is) is common at the first two, and the recently split Grand Cayman (Cuban) Bullfinch reasonably so. Other species that can be expected include Cuban Amazon, La Sagra's Flycatcher, Loggerhead Kingbird (summer), Chinchorro Elaenia, Zenaida Dove, Greater Antillean Grackle (an endemic subspecies), Yucatan and Thick-billed Vireos (both of them represented by endemic races), Western Spindalis and Cayman Woodpecker (another endemic subspecies, of West Indian Woodpecker). West Indian Whistling-duck can be found at several sites across the island. Most visitors probably arrive by cruise ship, but it is possible to fly from Cuba, Jamaica or Miami. Accommodation options are reasonably numerous, but most are expensive.
- 12. Ecclesdown Road, Jamaica:** this site at the base of the John Crow Mts is less than an hour from the town of Port Antonio. Along the road is productive habitat for a rich variety of endemics, including the globally threatened Ring-tailed Pigeon, as well as Crested Quail-Dove (which is most easily found soon after dawn), both parrots (Black-billed seems particularly common, but both are numerous), both endemic cuckoos, Jamaican Mango, Black-billed Streamertail, Vervain Hummingbird, Small Jamaican Elaenia, Rufous-tailed Flycatcher, Jamaican Becard, Blue Mountain, Black-whiskered and Jamaican Vireos, Jamaican Crow, Rufous-throated Solitaire, both endemic thrushes, Arrowhead Warbler, Yellow-shouldered Grassquit, Orangequit and Jamaican Blackbird, which seems unusually easy to find in this area.
- 13. Marshall's Pen, Jamaica:** a 300 ha-property on the outskirts of Mandeville is the home of Ann Sutton, whose husband Robert, the island's pre-eminent ornithologist, was tragically murdered in July 2002. Ann, an ornithologist in her own right, has carried on the tradition of providing a fine base for birders visiting Jamaica. This is arguably the best site for Jamaican Owl and White-eyed Thrush. Other single-island endemics include: Crested Quail-Dove, Chestnut-bellied Cuckoo, Jamaican Lizard-cuckoo, Jamaican Mango, Red-billed Streamertail, Jamaican Tody, Jamaican Woodpecker, Jamaican Pewee, Jamaican Becard, Jamaican Crow, Jamaican Euphonia, Jamaican Spindalis, Jamaican Oriole, and Yellow-shouldered Grassquit. Other species of interest, some of them multi-island endemics, include: Caribbean Dove, Vervain Hummingbird, Black Swift, Northern Potoo, Antillean Nighthawk (summer), Rufous-throated Solitaire, Cave Swallow and Greater Antillean Bullfinch.
- 14. Sierra de Bahoruco, Dominican Republic:** for devotees of Caribbean birding, this region, in the south-west of the country on the border with Haiti, is surely one of those must-visit areas, despite ongoing and disheartening levels of deforestation. There are two main routes into the sierra, one from the east, via Duvergé and Puerto Escondido, and the other from the south, via Pedernales. The first-named, especially, permits the observer to drive a transect from lowland xerophytic scrub through drier to more humid forest and finally pines with the concomitant changes in avifauna. The following are all possible, although some species are distinctly difficult: Black-capped Petrel (winter breeder; it would probably be necessary to camp in the mountains to hear birds visiting the colony, and in any case most breed in adjacent Haiti), Key West Quail-dove (uncommon; best looked for in drier areas), White-fronted Quail-dove, Hispaniolan Parakeet, Hispaniolan Parrot, Hispaniolan Lizard and Bay-breasted Cuckoo (the latter is one of the most difficult endemics), Ashy-faced Owl (rare), Least Poorwill (uncommon), Hispaniolan Nightjar (common), Hispaniolan Trogon, Broad-billed and Narrow-billed Todies, Hispaniolan Woodpecker, Hispaniolan Pewee, Golden Swallow (rare but regularly seen), White-necked Crow, Hispaniolan Palm Crow (both crows rather uncommon, but can also be found around the nearby Lago Enriquillo), La Selle Thrush and (in winter) Bicknell's Thrush, Rufous-throated Solitaire, Flat-billed Vireo, Pine Warbler, Antillean Siskin, Hispaniolan Crossbill, Black-crowned Palm-tanager, Green-tailed Warbler, White-winged Warbler (usually rather uncommon), Western Chat-tanager, Hispaniolan Spindalis and Hispaniolan Oriole.
- 15. Los Haitises National Park, Dominican Republic:** currently, this is the only regular site for Ridgway's Hawk. The 200 km<sup>2</sup> protected area is one of the wettest parts of Hispaniola and comprises dense lowland broadleaf forest growing on karstic limestone, as well as mangrove. Forested hills of limestone, called mogotes, dot the landscape. Accessing the park is comparatively difficult, which is three hours from Santo Domingo on the south side of Samaná Bay. The best place to stay is probably Caño Hondo. Besides Ridgway's Hawk, other species include the globally threatened Plain Pigeon, Hispaniolan Parrot, Mangrove Cuckoo, Least Poorwill, Antillean Piculet, White-necked Crow (the park is one of the species' strongholds and it is easily seen around Caño Hondo) and a variety of common endemics.
- 16. Maricao State Forest, Puerto Rico:** accessed via the PR 120 / Monte del Estado, the best birding is at higher elevations, where Puerto Rican Woodpecker and Puerto Rican Vireo can be found. Ruddy Quail-dove may fly across the road and can be heard early morning. Trails from the picnic area at km 16.2 are reliable for Elfin-woods Warbler. Listen for its rattling trill of a song, or its odd, buzzy call. Also here are hummingbirds, Puerto Rican Pewee (a race of Lesser Antillean Pewee), Puerto Rican Bullfinch, Puerto Rican Spindalis, Puerto Rican Tody, Puerto Rican Tanager and migrant warblers. The concrete observation tower at km 14 offers views of the canopy and an open area to look for swifts, swallows and soaring hawks.

**17. Laguna Cartagena National Wildlife Refuge, Puerto Rico:**

lowland marsh, fields and ponds. Follow PR 101, and at km 12.2 turn south onto PR 306 to Laguna Cartagena ([www.fws.gov/refuge/laguna\\_cartagena](http://www.fws.gov/refuge/laguna_cartagena)). US Fish & Wildlife Service is restoring the wetlands, which is a regular site for ducks and rails. At the lake edge look for Northern Red Bishop, Venezuelan Troupial, Loggerhead Kingbird and Puerto Rican Vireo. An observation platform offers views of American Coot, gallinules, migrant ducks and West Indian Whistling-duck. An hour's drive towards Cabo Rojo ([www.fws.gov/refuge/cabo\\_rojo](http://www.fws.gov/refuge/cabo_rojo)), PR 301 leads to the south-west tip of Puerto Rico and passes salt flats with Snowy Plover, Stilt Sandpiper and other migrant shorebirds, plus views of seabirds from the cliffs at the lighthouse.

**18. Guánica State Forest, Puerto Rico:**

dry forest accessed from the PR 116. Turn south-west onto the PR 333 one block east of the Guánica Burger King. After c. 3 km, walk the dirt road to Playa Jaboncillo (marked by a gate and sign). This area is productive for Adelaide's Warbler, Puerto Rican Vireo, Puerto Rican Flycatcher, Puerto Rican Tody, Key-West Quail-dove, Puerto Rican Lizard-cuckoo and Mangrove Cuckoo. At night, the endemic Puerto Rican Nightjar can be heard along PR 333. At the end of the pavement on PR 333 is a large sandy parking lot. Walk north on the trail that heads inland through a wire gate. Puerto Rican Bullfinch, Puerto Rican Flycatcher, Puerto Rican Nightjar, Venezuelan Troupial, Caribbean Elaenia and other dry-forest species are regular here. An elaborate trail system in the forest can be accessed by returning to the PR 116: just north of the intersection with PR 333 turn east onto PR 334, then bear left at two forks in a residential area, to the entrance gate. Puerto Rican Screech-owl and Puerto Rican Nightjar have been regular along the entrance road. The road continues to the headquarters, where a map of the trail system can be acquired. In the nearby tourist town of La Parguera—famous for its Phosphorescent Bay—Yellow-shouldered Blackbirds feed on table scraps at Villa Parguera hotel. The blackbirds can be seen in the non-breeding season flying at dawn and dusk to and from their roosts on nearby mangrove islands.

**19. El Yunque National Forest, Puerto Rico:** the best-known montane forest area on the island, being close to, and visible from, San Juan, but can be crowded with tourists. PR 191 from the north or an unconnected, separate segment of PR 191 from the south are the major access points. Trails provide access to forest where hummingbirds, Puerto Rican Tody, Puerto Rican Screech-owl and Puerto Rican Lizard-cuckoo occur (the last was regular at the El Portal Visitor Center parking lot). The Puerto Rican Parrot population in this forest was wiped out by the 2017 hurricanes, but the species will be reintroduced from government aviaries. Visitor infrastructure was badly damaged by the storms. Many roads, trails and the main visitor centre were severely damaged. Check conditions and opening hours at [www.fs.usda.gov/elyunque](http://www.fs.usda.gov/elyunque). Also plan ahead for the famous traffic jams leaving San Juan.

**20. Barbuda:** this tiny, low-lying, limestone island (161 km<sup>2</sup>) supports a single endemic species, Barbuda Warbler, and forms a nation state together with the neighbouring islands of Antigua and Redonda. The warbler can be found in the dry scrub around the only Important Bird Area on Barbuda, Codrington Lagoon, an almost fully enclosed body of salt water bordered by mangroves and sand ridges. Other avian attractions at the site include one of the Caribbean's largest breeding colonies of Magnificent Frigatebirds and important numbers of West Indian Whistling-duck.

**21. Montserrat:** this UK Overseas Territory is most likely to impinge on the public's consciousness for the devastating volcanic

eruption of Chances Peak, in June 1997, which destroyed the capital, Plymouth, and forced a large part of the island's human population to evacuate. However, the event also impacted Montserrat's only endemic bird, Montserrat Oriole, which lost approximately 60% of its habitat in the Soufriere Hills as a result. Two trails in the Centre Hills, the eponymous Oriole Trail and the Blackwood Allen Nature Trail, give visitors the chance to still find Montserrat Oriole, as well as other regional endemics including Bridled Quail-dove, Forest Thrush, Pearly-eyed Thrasher, Brown Trembler and Lesser Antillean Bullfinch.

**22. Guadeloupe:** the Route des Mamelles (D23) crosses the Basse-Terre Mts from west to east, between Mahaut and Vernou, along which a number of picnic areas (e.g. Cascade aux Ecrevisses, Petit Bras David, Maison de la Forêt, Corossol) provide easy opportunities to find many regional endemics, such as Guadeloupe Woodpecker, Forest Thrush, Bridled Quail-dove, Plumbeous Warbler, hummingbirds and the less numerous Lesser Antillean Pewee and Lesser Antillean Flycatcher. Also check the sky for Lesser Antillean and Black Swifts. The Pointe des Châteaux, a peninsula at the extreme east end of Grande-Terre, is the premier tourist destination in Guadeloupe, and where the D118 road ends. It is often crowded with people between December and April, but they tend to stay on the beach or climb to the cross for great views of the nearby islands. This is the best spot for shorebirds in autumn, and the best seawatching spot anywhere in the Caribbean basin. Shearwaters, storm-petrels, jaegers and terns are all possible during peak migration (March–June). Don't forget your telescope and sunscreen.

**23. Dominica:** one of the best places on this relatively small and comparatively mountainous island is the Syndicate Nature Trail within the Northern Forest Reserve. To access the area, after 'Dublanc' (in the municipality of St-Peter) head north and then turn right in the direction of Morne Diablotin, the island's highest peak at just below 1450 m and named after the Black-capped Petrel. At the end is the nature trail with suitable lookouts over the forested Picard Valley. Here it is possible to find both the Endangered Imperial Amazon and the Vulnerable Red-necked Amazon. Furthermore, this is also home for all four hummingbird species that occur on the island, Plumbeous Warbler, Forest Thrush, Lesser Antillean Saltator, Lesser Antillean Pewee, Lesser Antillean Flycatcher, Antillean House Wren, Scaly-breasted Thrasher and others. Dominica is one of the poorest and least touristic islands in the Caribbean, although it is served by direct international flights. It was hard hit by Hurricane Maria in autumn 2017. Most accommodation is on the coast.

**24. Martinique:** Plateau Boucher lies c. 1 km south of the crossroads where the N3 and D1 meet in the montane forest in the north of the island. From the parking area, there is a trail to Piton Boucher where you can find most of the interesting species on the island, especially Blue-headed Hummingbird, Grey Trembler and Martinique Oriole, but also Rufous-throated Solitaire, Purple-throated Carib and Lesser Antillean Saltator. Chestnut-bellied Seed-finch is also found here, an introduced species from South America that in our region occurs only on Martinique. To visit La Caravelle, a peninsula on the north-east side of the island, leave road N1 at La Trinité, and take the D2 to 'Presqu'île de la Caravelle'. This area supports dry-forest habitat and is the place to find the Endangered White-breasted Thrasher, which is otherwise found only on St Lucia (where represented by a different subspecies group). On Martinique the thrasher occurs only here. Other species in the same area include Martinique Oriole, Lesser Antillean Saltator and Scaly-breasted Thrasher, and this is the best place to see

White-tailed Nightjar, which in the Caribbean is found only on Martinique.

**25. St Lucia:** a major tourist destination, with plentiful albeit somewhat expensive accommodation, St Lucia is one of the most popular islands in the Lesser Antilles with birders. A 4WD-vehicle is virtually essential to reach some of the best birding sites, but not to access the Millet Bird Sanctuary Reserve more or less in the centre of the island. South of Castries airport along the main road following the west coast, pass Marigot Bay and then over the Roseau River, after which turn left to Morne d'Or (with the Millet Reserve also signed). The reserve (small entrance fee) is reached after c. 5 km. Possible birds include St Lucia Parrot, St Lucia Warbler, St Lucia Black Finch, St Lucia Oriole, St Lucia Pewee (a race of Lesser Antillean Pewee), Grey Trembler and Rufous-throated Solitaire. In contrast, getting to Gran Anse and Ravine La Chaloupe, on the east coast near Desbarra, where possibilities include St Lucia (Rufous) Nightjar, St Lucia Thrasher (currently regarded as a race of White-breasted Thrasher, although a recent genetic analysis has advocated their separation at species level) and Antillean House Wren, will necessitate a 4WD and quite probably also a local guide.

**26. Barbados:** the easternmost of the Antilles, 165 km beyond St Vincent, isolated Barbados (432 km<sup>2</sup>) is the best-placed of the West Indian islands to receive vagrants from the Old World, and thanks to a very small but dedicated team of resident observers it has a long track record in producing rarities, among them many regional 'firsts'. Fewer than 30 species breed, but these include the highly ubiquitous Barbados Bullfinch, the country's sole endemic. Most birders will want to focus on the island's wetlands, among them the various shooting swamps, which are all privately owned and strictly managed for sport hunting. Two protected areas, Graeme Hall Swamp and Chancery Lane Swamp, situated relatively close to one another in the south of Barbados, offer safer refuge for migrant birds, and the former is also the site of the New World's first breeding colony of Little Egrets. In addition to migrants and the chance of a rarity in season, Green-throated Carib and Antillean Crested Hummingbird can regularly be found around the Chancery Lane site.

**27. St Vincent:** situated almost at the southern tip of the Lesser Antillean chain, St Vincent is another rather small and mountainous island that reaches almost 1300 m above sea level. Tourism tends to be focused on the more exclusive end of the market. Unsurprisingly, given the island's topography, most accommodation options are sited around St Vincent's coastline. The Vermont Forest Reserve (St Andrew) in the centre-south of the island supports an extensive area of montane forest and is

accessed via a side road heading inland from the road between Kingston and Layou. Follow the Loop Trail for chances to find St Vincent Parrot, Whistling Warbler, Grenada Flycatcher and St Vincent (Lesser Antillean) Tanager, as well as a cross-section of other Lesser Antillean regional endemics.

**28. Grenada:** most parts of this, yet another rugged, island are accessible using taxis or minibuses, although most visitors will probably nevertheless prefer to hire their own vehicle. Most accommodation and infrastructure for tourists is concentrated in the south-west of Grenada. Here too is the Mount Hartman Estate (Saint George), part of which is now a national park supporting an area of dry forest and almost 40% of the total population of what was until recently Grenada's sole endemic, the Critically Endangered Grenada Dove. Also possible here are Grenada Flycatcher and the newly split Grenada (Lesser Antillean) Tanager, as well as Hook-billed Kite (a rare endemic subspecies), Scaly-naped Pigeon, Brown Trembler, Antillean House Wren and Lesser Antillean Bullfinch.

**29. San Andrés and Providencia (Colombia):** despite lying closer to Nicaragua in a relatively remote corner of our region, these islands are easily accessible only via flights from Panama, and Colombia, which owns both. However, the culture is definitely Caribbean in flavour and the main language is Creole, rather than Spanish. San Andrés (St Andrew), especially, is a very popular tourist destination, with plenty of accommodation options. Two interesting sites to visit within walking distance of some hotels are the Big Pond (La Laguna) and the Botanic Garden. The endemic San Andres Vireo is easily found at both, with a supporting cast potentially including White-crowned Pigeon, Caribbean Dove, Green-breasted Mango, Chinchorro Elaenia, Tropical Mockingbird, etc. It is possible to take a boat between San Andrés and Providencia (Old Providence), although most people fly to the latter from Bogotá, Colombia's capital. Arguably the best site on the island is the trail between Casa Baja and El Pico, the highest peak on Providencia (at 350 m). Here the main prize will be Providence Vireo, treated here as a subspecies group in the Mangrove Vireo complex, but potentially a species in its own right, although it has also been considered a race of Thick-billed Vireo. Whatever the most appropriate classification, it represents a very interesting taxonomic case and one that certainly merits additional study. Freshwater Dam and McBean Lagoon are both worth checking for waterbirds, potentially including rarities (at least for Colombia!), and the vireo is also common at the latter. Although there is relatively little public transport on Providencia (compared to its neighbour), it is quite possible to hitch rides (although be prepared to pay).

### SYSTEMATIC AND TAXONOMIC TREATMENT

The systematics and taxonomy used in this field guide follow the two volumes of the HBW and BirdLife International *Illustrated Checklist of the Birds of the World* (del Hoyo & Collar 2014, 2016) with some updates based on subsequent research that have already been adopted by BirdLife International and HBW Alive. This Checklist is the product of a truly integrative system of taxonomic evaluation. To start, the results and insights of recent molecular studies have been constantly accounted for and incorporated, as well as additional data from the rest of the literature. For differences in plumage pattern and structure, bare-part colours and formations, morphometrics, vocalizations, ecological factors and behavioural traits, the scoring system based on the Tobias criteria (del Hoyo & Collar 2014: 30–41) also has been proactively used to increase the consistency of the taxonomic decisions and, particularly, to evaluate the many hundreds of taxa for which no recent studies have been published.

### EXPLANATION OF SPECIES ACCOUNTS

Each family section starts with the name and a breakdown of the number of species in each that are recognized worldwide (according to current HBW/BirdLife taxonomy), and those that have occurred in the region, with the number considered to be vagrants, introduced or extinct listed separately.

**Subspecies groups:** This field guide is novel, compared to most others that readers will have used, in providing separate accounts and illustrations for each subspecies group recognized under current HBW/BirdLife taxonomy. Subspecies groups are informal taxonomic units used in several recent world checklists to highlight seemingly monophyletic groups of taxa (sometimes single subspecies) that at present appear to sit between the species and subspecies levels (although in some cases it is plausible that fuller scrutiny and better evidence will result in their being awarded species rank). Such groups are identified by their possession of one or several reasonably distinct characters and which therefore seem worthy of attention. In some cases they may already have been recognized as species in other lists or accorded a taxonomic status such as ‘megasubspecies’ or ‘allospecies’.

Accordingly, where two or more such subspecies groups belonging to a single species occur in the region, this necessitates inclusion of more than one account. However, the focus is always on that subspecies group most widespread or likely to be encountered by birdwatchers in the region, with more comparative details alone being provided for other subspecies groups of the same species.

Because many subspecies groups comprise multiple races and the name of the group is always determined by the first of the relevant subspecies to have been named, readers should be aware that the subspecies group name and the race/s belonging to that group recorded in the West Indies are often different. For example, a subspecies present in West Indies may form part of a subspecies group bearing the name of a subspecies that is not present in the region but whose name is older, which follows the principle of priority of the International Code of Zoological Nomenclature (ICZN) for naming the group.

This may initially prove confusing to some users, but we decided that the benefits of giving separate coverage to reasonably well-defined groups of taxa, currently treated below species level, outweighed the disadvantages.

**QR codes:** each species has a QR code that links to a relevant website page with complementary audiovisual material, so that you can view photos and videos, and listen to sounds of the species in question. Often there are hundreds of audiovisual records for a single species and in many cases they illustrate behaviours and aspects of biology. To access this information directly from the book you must first download any one of the free smartphone apps that scans QR codes. Then open the QR code reader, and hold your device over the QR code that you wish to scan so that it is clearly visible within the phone’s screen; depending on the type of phone, it will either automatically scan the code, or you may need to click a button, in a manner not unlike taking a photo using your phone. Within a few seconds your phone should have navigated to the relevant page when you have an internet connection.

Each species account is given in the following format:

**Name, conservation status and presence:** common English names are followed by the scientific name in italics. Unlike other guides in this series, we do not include any vernacular names in exclusively local use because of their great abundance (e.g. Spanish names in Cuba, the Dominican Republic and Puerto Rico, French names in Guadeloupe and Martinique, etc.), fully reflecting that the Caribbean is a multi-lingual and multi-cultural conglomerate. Capitalization and hyphenation of species names used here sometimes differ from other widely used taxonomies, e.g. by North American authorities. The most striking differences are noted, but simple issues of variance between UK and US English names are not noted, e.g. ‘Grey’ instead of ‘Gray’, as in the catbird, or ‘Tricoloured’ vs. ‘Tricolored’ as in the munia. The global conservation status is denoted by the standard two-letter codes summarizing the IUCN Red List category of extinction risk, as follows: **LC** (Least Concern), **NT** (Near Threatened), **VU** (Vulnerable), **EN** (Endangered), **CR** (Critically Endangered), **CR(PE)** (Critically Endangered [Possibly Extinct]) and **DD** (Data Deficient). Immediately below this the reader will find a general statement of relative abundance and temporal status (whether migrant or resident) in the West Indies. In this section alone, for sake of brevity we use the following abbreviations: **GA** (= Greater Antilles), **LA** (= Lesser Antilles) and **O** (= Other, in reference to more than one of the following, the Bahamas, Cayman Is, Swan Is and the Colombian archipelago of San Andrés and Providencia). It also bears mention that it is usually the case, again due to limitations of space, that we use the term ‘Bahamas’ to also include the Turks & Caicos Is.

**Size:** ‘L’ denotes length in centimetres. Where available, ‘WS’ denotes wingspan in centimetres. WS measurements should however be treated with caution, as this is not a measurement that is typically recorded by field researchers, and cannot accurately be measured from museum specimens. As a consequence, the sizes given may in some cases be based on small sample or unrepresentative or inaccurate data. On the plates, note that most figures of birds in flight are not to the same scale as those at rest.

**Subspecies:** each account commences with a list of recognized subspecies that occur in the region and their general ranges in the country; use of superscript letters is keyed to the relevant map, wherein the approximate boundaries between different races of resident or breeding species with contiguous or largely continuous ranges are delimited, as best as possible. If a species is monotypic, this is clearly stated.

**Habitat and habits:** a brief description is provided of the species in the region, its preferred habitat and elevational range. Where relevant, notes are also provided on general habits, especially where these can assist identification. For vagrants, or for some especially rare and localized taxa, specific details are often provided concerning occurrence. Any species or subspecies group that is Endemic (E) or almost so (Near-endemic; NE) to the region is clearly indicated, and the appropriate codes are also used next to the maps.

**Identification (ID):** unless otherwise stated, the initial description involves the nominate race. Adult plumages are generally listed before immature or juvenile plumages. Additional notes are provided on seasonal differences as appropriate.

**Geographical variation (GV):** differences from the main description are given for all other races known to have occurred in the region and, where deemed relevant, for races thought likely to occur.

**Voice:** vocalizations are typically based on a description of the song, followed by any regularly heard calls. For some non-breeding migrants that are very unlikely to be heard singing, only call is given. For some species, such as seabirds, vocalizations are not transcribed as they are unlikely to aid field identification.

**Similar species (SS):** additional notes are given in cases where another species in the region (or occasionally potential vagrants) may cause confusion in identification.

**Taxonomic notes (TN):** these are focused on recent, species-level changes in taxonomy, with special reference to those arrangements introduced in either volume of the HBW and BirdLife International *Illustrated Checklist of the Birds of the World* on which sequence this book is based. Notable deviations from the latter, especially in relation to the list maintained by the American Ornithological Society (formerly American Ornithologists' Union), are explained. In addition, notable differences in coverage of subspecies compared to other recent works to the same region are explained. In contrast, genera-level differences are rarely covered.

**Alternative names (AN):** where other common English names are, or occasionally have been, in use, especially in other works likely to be consulted by visiting or resident birdwatchers, such alternative names are stated. However, we generally do not provide spelling variants or alternative names that differ only slightly from the name employed.

## ABBREVIATIONS USED IN THE FIELD GUIDE

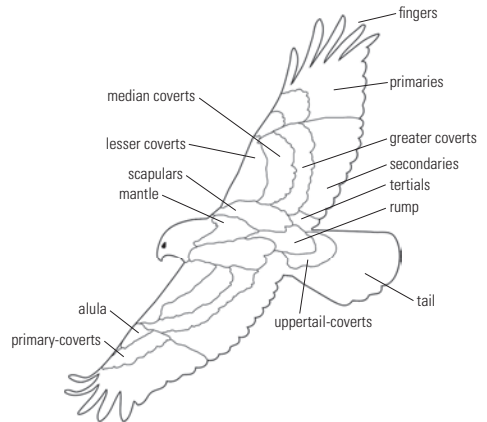
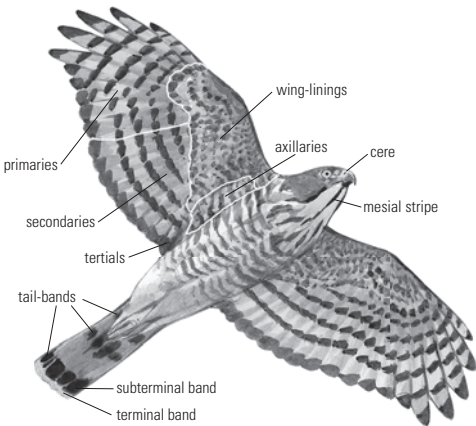
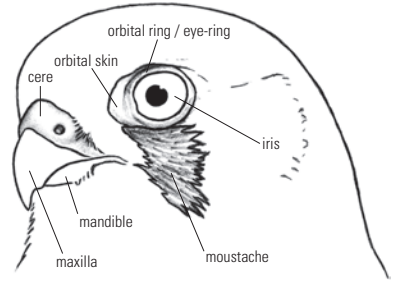
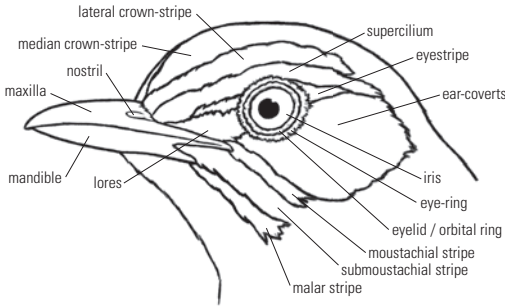
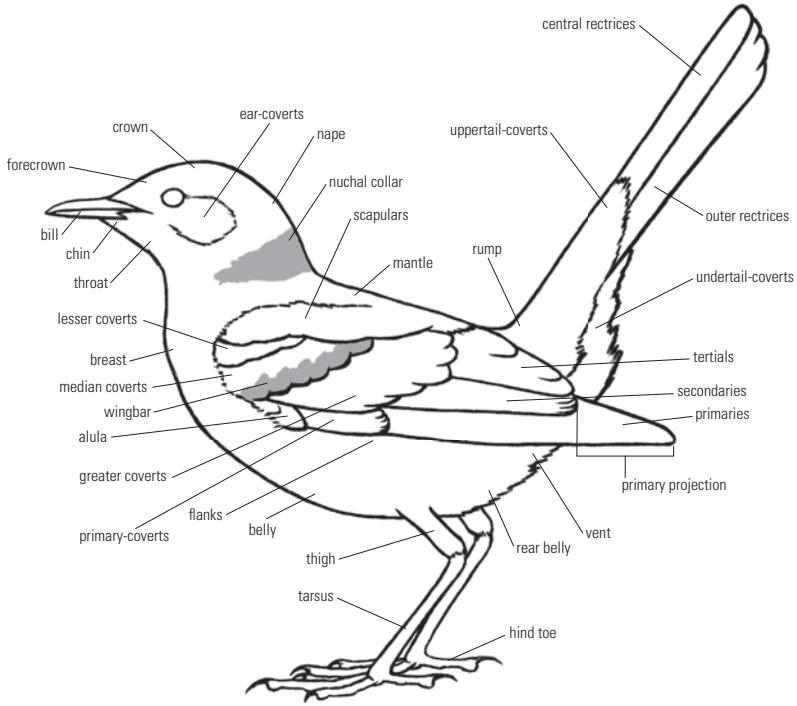
N	north
S	south
E	east
W	west
C	central
NE	north-east
NW	north-west
SE	south-east
SW	south-west
NC	north-central
SC	south-central
EC	east-central
WC	west-central
Ad/ad	adult
br	breeding plumage
non-br	non-breeding plumage
Juv/juv	juvenile
Imm/imm	immature
1st-w/2nd-y	first-winter/second-year (plumages), etc.
km	kilometres
m	metres
cm	centimetres
I	Island
Is	Islands
L	Lake
R	River
Mt	Mount
Mts	Mountains
GA	Greater Antilles
LA	Lesser Antilles
O	Other (refers to some or all of the Bahamas, Cayman Is, Swan Is, and San Andrés and Providencia)
AMNH	American Museum of Natural History (New York)
ANSP	Academy of Natural Sciences (Philadelphia)
COP	Colección Ornitológica Phelps / Phelps Ornithological Collection (Caracas)
FMNH	Field Museum of Natural History (Chicago)
LSUMZ	Louisiana State University, Museum of Zoology (Baton Rouge, LA)
MCZ	Museum of Comparative Zoology (Cambridge, MA)
NHMK	Natural History Museum (Tring)
USNM	US National Museum of Natural History (Washington DC)
AB	<i>American Birds</i>
FN	<i>National Audubon Society Field Notes</i>
NAB	<i>North American Birds</i>

**MAP KEY**



- Resident/present all-year round.
- Breeding visitor.
- Winter/Non-breeding visitor: indicates zones occupied by the species outside of the breeding season. This covers the ranges of a wide variety of species present at different times of year, including a variety of seabirds that breed in the Southern Ocean but visit the Caribbean mainly during the boreal summer, and many shorebirds and passerines that breed in North America and spend the boreal winter in the West Indies.
- Passage migrant: indicates areas used by a species only when moving between breeding and non-breeding ranges; but only when such regions are particularly well known are these mapped. Large areas where the species might be seen or occasionally appears on migration are not mapped, but may be highlighted in the text. Note that (usually) very small numbers of a handful of species (e.g. some hirundines) that migrate across our region between their breeding and wintering grounds in North and South America, respectively, winter locally on some islands. However, because the species concerned are principally passage migrants, such instances of wintering are only mentioned in the text.
- Introduced: populations either wholly or partially the result of actions by humans, both deliberately introduced or the product of escapes from captivity. We have attempted to conservatively map only those populations that are, or appear to be, self-sustaining, although the situation is often rather fluid.
- Best-guess ranges of recently extinct (or probably extinct) species in the region; usually the last known areas, rather than the entire historical distribution.
- A B Resident or breeding subspecies; letters correspond to those in superscript in the relevant text.
- ~ Approximate boundaries between different resident or breeding subspecies.
- ↖ Highlighting presence (resident or breeding populations) within certain small, well-circumscribed areas (usually small islands). Keep in mind that very small pockets of distribution are often deliberately amplified on the maps, to enable readers to see them more easily.
- ? Highlighting historical collection but current status unknown, or species whose current status is uncertain.
- E Endemic.
- NE Near-endemic.

**BIRD TOPOGRAPHY**



## ABOUT THE AUTHORS

### Guy Kirwan



Guy is a freelance editor and ornithologist currently based in the UK but working for Lynx Edicions, following a lengthy sojourn in Brazil. A regular visitor to the West Indies since the early 1990s, he is currently finalizing a detailed checklist to the birds of Cuba. Author of more than 150 communications in the technical literature, and several previous books, Guy is a Research Associate of the Field Museum of Natural History, Chicago, and the Museu Nacional, Rio de Janeiro. His main avian interests are in taxonomy and the breeding biology of passerines in the New World tropics.

### Anthony Levesque



Anthony arrived in Guadeloupe from France in 1998 after studying Wildlife Management and Nature Protection. Following work at a nature reserve and as a wildlife consultant for the National Hunting and Wildlife Agency, he now owns his own environmental consultancy. An active birdwatcher, he has found more than 50 species new to Guadeloupe, the Lesser Antilles and, in some cases, the Caribbean as a whole, and is an eBird reviewer for the Lesser Antilles. Anthony is the founder of AMAZONA—the bird conservation NGO in Guadeloupe.

### Mark Oberle



Professor Emeritus at the University of Washington, Mark trained in biology and medicine at Harvard and Johns Hopkins Universities. He has worked in biology and ornithology in the American tropics for four decades and is a founding member of the Washington Ornithological Society. Mark has published several books, audio CDs, and a smartphone app for birds of Puerto Rico and the Virgin Islands.

### Chris Sharpe



Chris is a biologist who has worked on the conservation of Neotropical birds for more than 30 years, having been based for most of that time in Venezuela, where he is a Research Associate of the Phelps Ornithological Collection (COP) and the NGO Provita, and a Founder Member of the Venezuelan Ornithologists' Union. Chris is an editor of *HBW Alive* and of the *Lynx Edicions and BirdLife International Field Guides* series.

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## BIRDLIFE INTERNATIONAL



BirdLife International is a global partnership of conservation organizations (NGOs) that strives to conserve birds, their habitats and global biodiversity, working with people towards sustainability in the use of natural resources.

Together we are over 100 BirdLife Partners worldwide—one per country or territory—and growing.

We are driven by our belief that local people, working for nature in their own places but connected nationally and internationally via our global Partnership, are the key to sustaining all life on this planet. This unique local-to-global approach delivers high-impact and long-term conservation for the benefit of nature and people.

BirdLife is widely recognized as the world leader in bird conservation. Rigorous science informed by practical feedback from projects on the ground in important sites and habitats enables us to implement successful conservation programmes for birds and all nature. Our actions are providing both practical and sustainable solutions significantly benefiting nature and people.

The Lynx and BirdLife International Field Guides project came to life after years of conversations motivated by a shared idea be-

tween Lynx and BirdLife that the existence of country field guides is a basic element for the 'emergence' and education of birdwatchers, ornithologists, bird guides and naturalists in any country, which, in turn, has important repercussions for the conservation of nature and biodiversity, both locally and globally.

In addition to the principal goal of the collection to produce modern, standardized field guides, especially for countries without any recent or country-level guide, we have a secondary goal of publishing a number of the titles in their local languages, to enhance the impacts of the work.

Apart from sharing and promoting the important vision of the collection, BirdLife also collaborates on the field guides via application of the systematics and taxonomy of the HBW and BirdLife International *Illustrated Checklist of the Birds of the World*, as well as with the distribution maps, which are based on distribution data compiled by BirdLife International and the *Handbook of the Birds of the World* for all of the world's birds. These are then modified and improved by the authors of the field guides. Of course, the global conservation status for each species in the collection reflects the current version of the IUCN Red List, for which BirdLife International acts as the authority for birds.

## **SPECIES ACCOUNTS**



## CRACIDAE

### Chachalacas

56 extant species, 1 introduced in region

#### Rufous-vented Chachalaca *Ortalis ruficauda* LC

Introduced; uncommon to rare resident (**Grenadines**).


 **L** 53–61 cm. Two subspecies, of which nominate occurs in region. Tall scrub and disturbed woodland on Union I and Bequia; probably introduced from Tobago.  Forages in small groups. **ID** Large, long-tailed, primarily terrestrial gamebird. **Ad** has slate-grey head, bare red throat, brown upperparts, and buffish underparts becoming rich rufous on undertail-coverts. Tail black with chestnut tip. **Juv** is indistinguishable from ad. **Voice** Loud, noisy calls, mainly heard early morning, apparently given in duets within groups: one bird giving low-pitched grating “OTRA MAS”, answered by much higher-pitched “WATCH-a-lak”. **SS** None. **AN** Rufous-tipped Chachalaca.

## NUMIDIDAE

### Guineafowl

8 extant species, 1 introduced in region

#### Helmeted Guineafowl *Numida meleagris* LC

 Nine subspecies divided into four subspecies groups, of which one occurs in region.

#### West African Guineafowl *Numida (meleagris) galeatus*

Introduced, locally fairly common to rare resident (**GA, LA**).

**L** 53–63 cm. Two subspecies in group, of which both (*sabyi*, *galeatus*) occur in region. Long-established and locally common in Cuba (including I of Pines and some cays) and on Hispaniola (but declining), rare Puerto Rico, Virgin Is, St Martin and Barbuda (latter attributed to *sabyi*). Dry scrub and nearby farmland. Status confused by domestic birds in farmyards. Usually in groups. **ID** Large, rotund gamebird with horn-coloured bony casque. **Ad** (*galeatus*) is mainly blackish grey with conspicuous white spots and vermiculations, very pale bluish face skin, red facial appendages and black filoplumes on hindneck. **Juv** is dull brown with feathers tipped reddish cream. Casque, wattles, etc. smaller; retains natal down on head almost until ad plumage. **GV** Race *sabyi* larger and slightly blacker, with taller casque and longer filoplumes. **Voice** Raucous cackling that varies in intensity and length, e.g. nasal, staccato “kek-kek-kek-kek-kek-kek-kek...”. Flocks maintain contact with metallic “chenk”, and more plaintive, far-carrying “CHER-cheeng, CHER-cheeng...”. **SS** None.

## ODONTOPHORIDAE

### New World Quails

35 extant species, 2 introduced in region

#### Northern Bobwhite *Colinus virginianus* NT

 Twenty-two subspecies divided into four subspecies groups, of which two occur in region.

#### Eastern Bobwhite *Colinus (virginianus) virginianus*

Introduced, common to rare resident (**Bahamas, Haiti**).

**L** 20–28 cm. Eight subspecies in group, of which two (nominate<sup>a</sup> S Haiti, *floridanus*<sup>b</sup> N Bahamas, on New Providence, Abaco and Andros) occur in region. Increasingly local in Haiti, where recorded

to 1640 m. Prefers similar habitats to, and behaviour much as, Black-breasted Bobwhite, e.g. pine barrens, wasteland, rough pasture and arable land in Bahamas. Reportedly introduced to latter in 19th century, and Haiti probably in 18th century (Lever 2005).

**ID** Structure as Black-breasted Bobwhite. **Ad** ♂ has much less deeply rufous-saturated plumage than same sex of Black-breasted Bobwhite, with much more heavily white-spotted underparts. Lacks black on breast. **Ad** ♀ lacks black barring on underparts. **Juv** is similar to ♀. **GV** Race *floridanus* has narrower white supercilium and fewer white markings on underparts. **Voice** As Black-breasted Bobwhite. **SS** See remarks under Black-breasted Bobwhite.



#### Black-breasted Bobwhite *Colinus (virginianus) pectoralis*

Introduced, common to rare resident (**GA, O**).

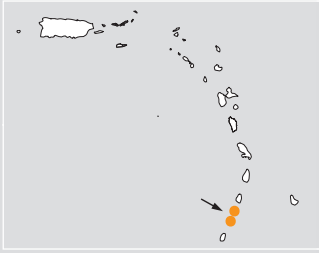
**L** 24–28 cm. Six subspecies in group, of which one (*cubanensis*) definitely occurs in region. Common Cuba (including I of Pines), scarce and declining Dominican Republic and rare Puerto Rico. Formerly St Croix. Unsuccessful introductions St Kitts, Guadeloupe, Martinique and Barbados. Favours scrub and pasture; to c. 1500 m on Hispaniola, once 1930 m. Usually well hidden in or close to grassy cover; when flushed, coveys fly low and scatter widely. Flocks of up to 30. **ID** Plump, short-tailed, sexually dimorphic quail. **Ad** ♂ has blackish-chestnut head with bold white supercilium and throat. Upperparts and underparts reddish brown with white-spotted flanks. **Ad** ♀ has warm buff supercilium and throat, and less blackish crown and head-sides. Often more white on underparts. **Juv** is like ad ♀, but primary-coverts tipped buff and often has indistinct brown throat. **Voice** Loud whistled upslurred “bob-wheet!” given by both sexes. Coveys keep contact with sharp whistles and soft calls. **SS** Contrasting supercilium and throat should make species readily identifiable. No overlap with Crested Bobwhite. **TN** Race *cubanensis* (described for Cuban populations) unstable, and may be based on introductions. Considerable debate exists, but no evidence, e.g. from fossil record, that *Colinus* is native to West Indies. Furthermore, strong possibility that birds similar to races *floridanus* and *texasus* (of Eastern Bobwhite) occur in mainland Cuba, and that those on I of Pines recall one or more of Mexican races. Those in Dominican Republic and Puerto Rico emanate from translocations from Cuba. Consequently, we treat this species as a long-established non-native.

#### Crested Bobwhite *Colinus cristatus* LC

Introduced resident (**Grenadines**).

 **L** 18–23 cm. Thirteen subspecies, of which one (*sonnini*) occurs in region. Current status largely unknown, though only on Mustique, where introduced  1885 but no recent records (Paice & Speirs 2010). Introduced in mid 1800s to Virgin Is (St Thomas), ultimately unsuccessfully. One reported on Andros (Bahamas) Jul 2006 (*NAB* 60: 589). Scrub, pasture and cultivation. Shy and typically keeps to cover, but can be confiding. Usually in pairs or small coveys.

**ID** Prominent crest distinctive. **Ad** ♂ has buffish head and crest, black-and-white ring around neck, and relatively uniform reddish-brown underparts with black-and-white scaling on flanks. Upperparts dull brown with fine grey, black and white vermiculations. **Ad** ♀ has shorter crest, and is duller and less strongly marked, with buffier head and underparts. **Juv** is like ♀ but has buff-tipped primary-coverts and less distinct markings on underparts. **Voice** Call, given year-round, a loud whistled upslurred “bob-wheet!”, less rich and mellow than Northern Bobwhite and sequence faster. Coveys maintain contact with chirps and cheeps. **SS** None in range.

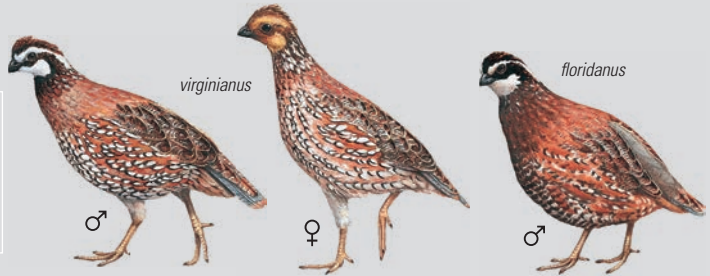
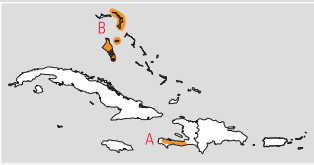


**Rufous-vented Chachalaca**  
*ruficauda*



**West African Guineafowl**  
(Helmeted Guineafowl)  
*galeatus*

**Eastern Bobwhite**  
(Northern Bobwhite)



**Black-breasted Bobwhite**  
(Northern Bobwhite)  
*cubanensis*




**Crested Bobwhite**  
*sonnini*

## Arctic Jaeger / Parasitic Jaeger

LC

### *Stercorarius parasiticus*


Uncommon passage migrant and rare winter visitor (**throughout**).

 **L** 41–46 cm; **WS** 110–125 cm. Monotypic. Open seas. Aggressive, often chases other seabirds in dashing, acrobatic flight. In contrast to rest of region, considered common off Guadeloupe. Most records Mar–Jun and Sept–Nov, but sometimes earlier in autumn and in winter. Study by Rypdal (2018) suggested N European breeders occur throughout region, despite fact species has not been recorded in many territories. **ID** Medium-sized with pointed central tail projection. **Ad non-br** has two colour morphs. **Pale morph** has brown cap, pale yellowish face often spotted or streaked darker, whitish underparts with pale grey-brown breast-band, pale brown scallops or bars on flanks and brown upperparts. In flight, dark underwing is darkest on lesser coverts and axillaries, with white shafts to primary bases, brown-banded whitish undertail-coverts and often has similarly patterned upertail-coverts. Central rectrices short and pointed. **Dark morph** is largely dark, sometimes with paler or rusty fringes, often with darker barring on flanks and variable paler barring on tail-coverts. **Ad br** has three colour morphs. **Pale morph** has long, pointed central tail, dark cap, brown upperparts, and whitish underparts with yellowish-buff face and variable grey-brown breast-band. In flight primary pattern as ad non-br. **Dark morph** is uniformly dark, sometimes with dark yellow shaft-streaks on neck-sides. **Intermediate morph** varies; paler individuals resemble pale-morph ad but have dark spots or bars on underparts. Dark individuals recall dark-morph ad but are paler, grey-brown, below and have paler face contrasting with dark cap. **Juv** has three colour morphs. **Pale morph** varies; head and body pale, belly sometimes almost whitish and upperparts have pale fringes. In flight buffish or whitish underwing-coverts, axillaries and tail-coverts with variable brown bars. **Dark morph** also varies; dark body fades rearwards on some. In flight largely dark underwing and tail-coverts, some with slightly paler bars. **Intermediate morph** is often rather uniform with rusty-brown underparts and rusty collar. In flight, brown base colour to dark-banded underwing-coverts, axillaries and tail-coverts reduces contrast. **3rd-y** recalls ad but can retain signs of immaturity, generally little barring on wing- and tail-coverts, or dusky body. **2nd-y** resembles ad but has variable bars on underwing- and tail-coverts. **1st-y** resembles juv but gradually loses rusty tinge, replaced feathers lack pale fringes, and central tail projection can be longer and more pointed. **Voice** Unlikely to be heard. A yelping “kyeeew!..kyeeew!..”, sometimes longer and bisyllabic, a short “kiuk!” and a fast series of “kek-kek-kek-kek-kek” notes. **SS** See Long-tailed Jaeger. Pomarine Jaeger typically larger and always more heavily built with deep chest and slower, steadier flight on relaxed, measured wingbeats and fewer jerky, erratic movements. Ad br has central rectrices ‘spoon-shaped’ at tips with twisted shafts, whilst in juv they are very short and blunt. Juv almost never shows strongly contrasting pale head or belly, has bicoloured bill longer than congeners, and pale morph has white bases to underside of primaries and median coverts creating ‘double patch’. **AN** Arctic Skua.

## Pomarine Jaeger *Stercorarius pomarinus*

LC

Uncommon passage migrant and winter visitor (**throughout**).


 **L** 46–51 cm (including central tail-streamers of up to 11 cm); **WS** 125–138 cm. Monotypic. Open seas. Most records Oct–Jun, mainly off Bahamas, Cuba, Hispaniola and Lesser Antilles (where locally common

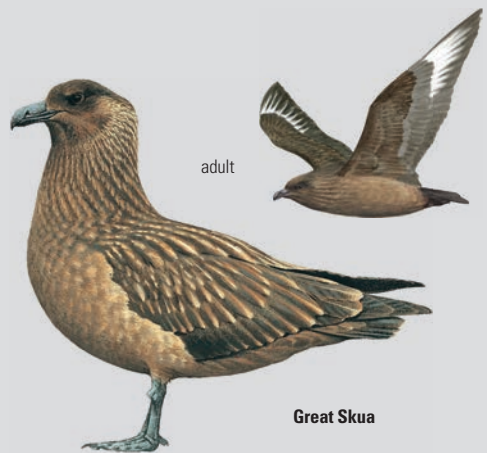
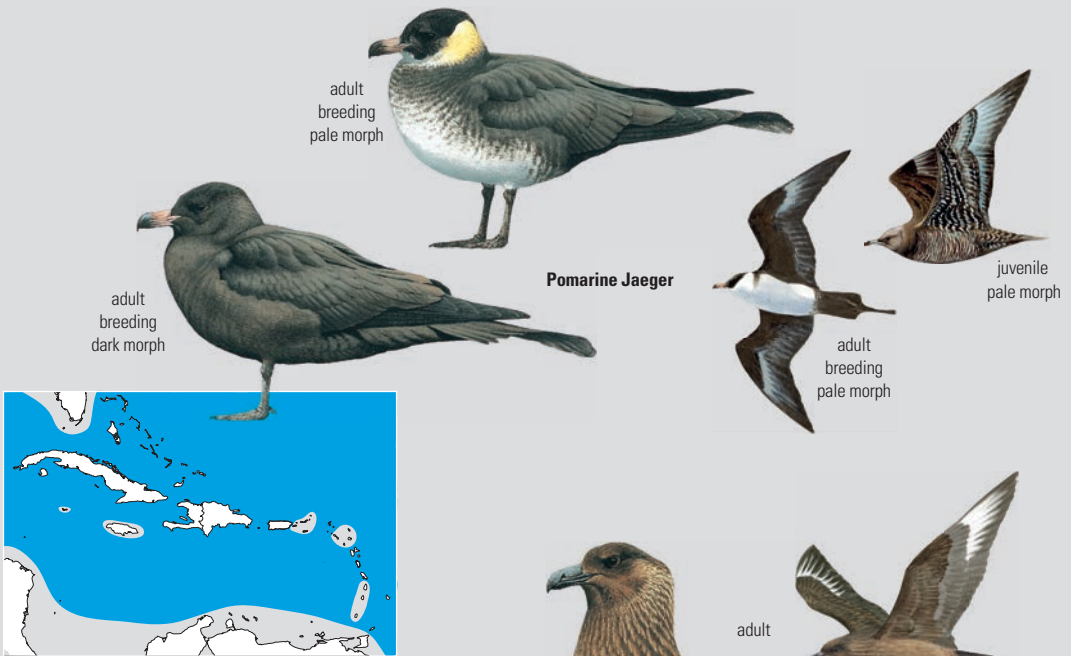
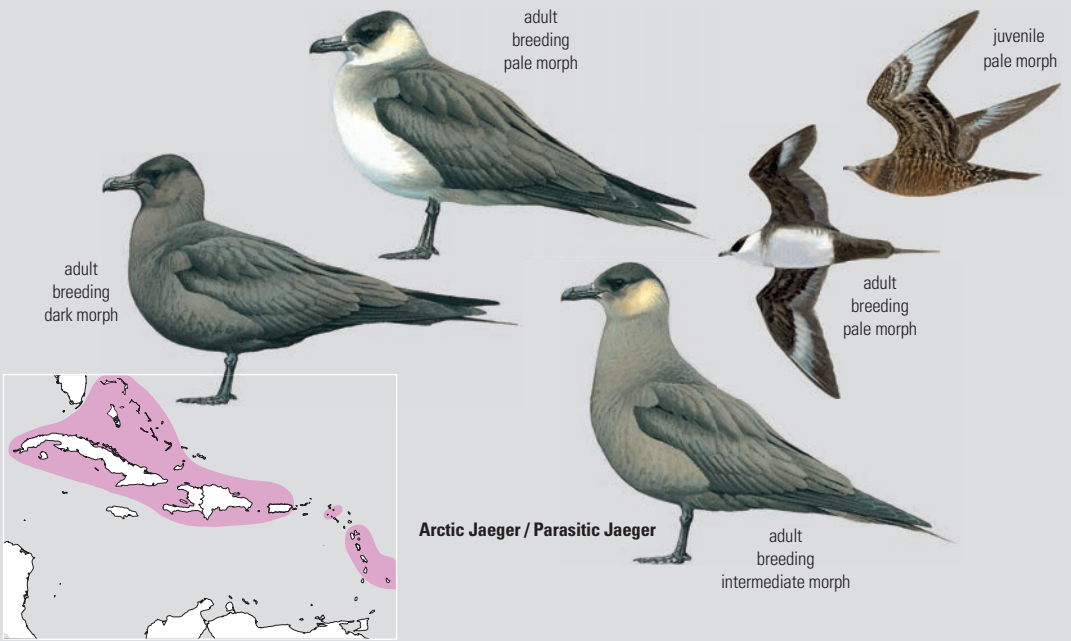
in winter and spring, e.g. off Dominica and Guadeloupe). **ID** Fairly large with broad-based wings and central tail ‘spoon-shaped’ at tips, with twisted shafts in ad br. **Ad non-br** has two colour morphs. **Pale morph** has dark brown cap, whitish underparts with pale yellowish face, pale brown breast-band, and often extensive pale brown scalloping or barring on flanks. Dark underwing, darkest on lesser coverts and axillaries, with white shafts to primary bases and strong brown barring on white tail-coverts. Central rectrices short and blunt, often not projecting much. **Dark morph** has variable paler barring on tail-coverts and flanks, and pale fringes. **Ad br** has two colour morphs. **Pale morph** has twisted central rectrices with blunt ‘spoon-shaped’ tips, dark cap, brown upperparts and whitish underparts with yellowish-buff face, variable grey-brown breast-band. Pale orange-pink bill with dark tip. In flight primaries as ad non-br. **Dark morph** is uniformly dark, sometimes with dark yellow shaft-streaks on neck-sides. **Intermediate morph** varies; resembles dark-morph ad but usually paler, and dark cap contrasts with paler neck-sides. **Juv** has three colour morphs. **Pale morph** has head pale buff or greyish brown, underparts pale brownish white or sandy brown, and pale or rusty fringes above. Buffish or whitish underwing-coverts, axillaries and tail-coverts with variable brown barring. **Intermediate morph** has head and neck greyish brown without paler collar, sometimes darker contrasting with greyish-brown underparts. In flight pale ground colour to darker-banded underwing-coverts, axillaries and tail-coverts creates strong contrast. **Dark morph** has dark body, underwing-coverts variably barred and undertail-coverts usually distinctly, albeit perhaps narrowly, barred. **3rd-y** resembles ad but can retain some barring on wing-coverts, tail-coverts or dusky body. **2nd-y** has variable barring on underwing-coverts and tail-coverts. **1st-y** resembles juv but has paler neck and new feathers lack pale fringes. **Voice** Somewhat modulated nasal “nyAheheh” and short barks, but probably unlikely to be heard. **SS** See Arctic and Long-tailed Jaegers. **AN** Pomarine Skua.

## Great Skua *Catharacta skua*

LC

Vagrant (**Guadeloupe, Martinique**).

 **L** 50–58 cm; **WS** 125–140 cm. Monotypic. Open seas. Perhaps regular albeit rare visitor, but just one documented record, NW of Guadeloupe, Mar 2016 (eBird). Most likely in boreal winter, but recent sight records mainly Apr–Nov (e.g. *AB 37*: 917, *NAB 61*: 526), plus others in Feb and Oct. Off Barbados an unidentified *Catharacta* Nov 1960 might have been Great Skua based on date (however, both Great and South Polar Skuas could occur in any month). **ID** Large, bulky skua with heavy bill and powerful, gull-like flight; soars more than jaegers. **Ad** is largely brown with coarse yellow-brown flecking. In flight, large white primary patches above and below. **Juv** has plainer reddish-brown plumage, less obvious white wing patches, and head often distinctly darker than body. **Voice** Generally silent at sea. **SS** Pale to intermediate morphs of South Polar Skua (most likely to be seen in austral winter, rather than boreal winter as in present species) display strong contrast between underwing and flanks. Dark morph has less distinct golden streaks and proportionately thinner bill, but perhaps best separated using moult pattern. In South Polar Skua, primary moult rapid (completed in c. 2 months), often showing several renewing primaries simultaneously.



### Short-eared Owl *Asio flammeus*

LC



Eleven subspecies divided into two subspecies groups, of which one occurs in region.

### Common Short-eared Owl *Asio (flammeus) flammeus*

Locally common (**Cuba, Hispaniola**) to uncommon (**Puerto Rico**) or rare and irregular resident (**Cayman Is**), vagrant (**LA**).

**L** 34–42 cm; **WS** 95–110 cm. Ten subspecies in group, of which four or five (nominate vagrant Grand Turk and St Barthélemy, *cubensis*<sup>A</sup> Cuba including several offshore cays, *domingensis*<sup>B</sup> Hispaniola, *portoricensis*<sup>C</sup> Puerto Rico, perhaps *pallidicaudus* vagrant Barbados) occur in region. Vagrants: specimen (of nominate race) and sight record, Grand Turk, Jan 1961 (Schwartz & Klinikowski 1963), St John, St Thomas, Tortola and St Croix, in Virgin Is (presumably *portoricensis*), St Barthélemy (assigned to nominate) and Barbados, Mar 2006 (either *portoricensis* or NE South American *pallidicaudus*; Buckley *et al.* 2009). Another c. 6 records from Bahamas, in at least Feb to Jun, on the Biminis, Exumas and Long I (e.g. *NAB* 61: 654, 64: 339, 67: 533), unassigned to race but perhaps *cubensis*. Revision required of claimed records of nominate, as both pre-date description of *cubensis* and knowledge that Cuban birds have invaded N to S Florida (Hoffman *et al.* 1999). Open areas in lowlands, especially rice fields and citrus plantations in Cuba, but also short-grass pastures and savannas elsewhere. Largely diurnal, most active at dawn and dusk. Stiff ‘bouncing’ wingbeats, quarters ground with frequent hovers and stalls; recalls a harrier. **ID** Mid-sized owl with large, round facial disc and very small (often-concealed) ear-tufts. **Ad** (*cubensis*) has bright yellow eyes, grey-white facial disc with black smudges around eyes, brown-and-buff upperparts, and pale buff underparts with dense breast streaking. In flight, long, broad wings buffish white on underside with broad blackish bands on primaries and carpal crescent. ♀ is browner above, buffier below and more heavily streaked. **Juv** has crown and rump dark brown, facial disc brown-black with feathers tipped buff, mantle incompletely barred, and underparts warm buff. **GV** Complex and potentially unresolved. Race *domingensis* overall paler both above and below, with less saturated underparts and possibly fewer streaks; *portoricensis* possibly indistinguishable from latter (Hoffman *et al.* 1999, König *et al.* 2008), but perhaps warmer brown, especially above (Garrido 2007). Race *pallidicaudus* (not always recognized) is plainly very similar to both *domingensis* and *portoricensis*, but is apparently longer-winged and perhaps shorter-tailed, arguably with rustier underparts. Vs. Greater Antillean birds, nominate race longer-winged and shorter-legged, upper back mostly tawny with dark brown central stripe, upper-tail-coverts tawny yellow, and underparts less buffy with streaking extending to tibial feathering. **Voice** Generally silent, ♂ gives 13–16 “hoo-hoo-hoo...” notes. Occasionally a barking call when flushed. **SS** Northern Long-eared Owl has longer, more conspicuous ear-tufts, warmer, rufous facial disc and belly streaking with transverse bars; in flight, richer, more orange-buff primary bases on upperwing, more evenly barred primaries on underside, with less solid dark bands, a less strongly barred tail and more extensively streaked underparts. **TN** Race *domingensis* formerly considered a separate species, including *portoricensis* (subsequently also *cubensis*). Cayman population (seems very rare and possibly erratic) never assigned to race and no specimens known (Bradley 2000); perhaps sustained, or periodically recolonized, from Cuba? Floridan population established via immigration from Cuba (Hoffman *et al.* 1999) and Cuban birds might also reach Hispaniola (Latta *et al.* 2006).

### Jamaican Owl *Pseudoscops grammicus*

LC



Fairly common resident (**Jamaica**).

**L** 27–33 cm. Monotypic. Endemic. Open woodland, forest edge, occasionally parks, plantations and large gardens. Commonest in lowlands, but to at least 600 m. Strictly nocturnal, repeatedly uses same day-roost for months. **ID** Mid-sized, warm-coloured owl with conspicuous ear-tufts and very dark hazel-brown eyes. **Ad** has rather well-marked rufous facial disc edged black and white, finely vermiculated upperparts, and dark brown shaft-streaks on underparts. Tail short, irregularly barred dark brown. **Juv** is paler above, with back pale greyish brown, rest of plumage light dull cinnamon-buff. **Voice** High, quavering hoot and guttural growl, “whow” or “tu-whoo”, repeated every few seconds. Upslurred, wailing “kwe-eeh” given by fledged young. **SS** Risk of confusion with American Barn-owl, the only other owl in Jamaica, negligible.

### Puerto Rican Screech-owl *Megascops nudipes*

LC

Common resident (**Puerto Rico**), very rare or perhaps extinct (**Virgin Is**).



**L** 20–23 cm. Two subspecies, both of which (nominate<sup>A</sup> Puerto Rico, *newtoni*<sup>B</sup> Virgin Is, considered possibly extinct) occur in region. Endemic. Dense woodland, shade-coffee plantations and caves, to 900 m. Nocturnal; most vocal early morning and evening. Sometimes mentioned for Vieques, off SE Puerto Rico, but evidence for former presence very weak (Gemmill 2015). Most recently reported from Virgin Is, on St John, Jan 2015 (*NAB* 69: 307). **ID** Dimorphic screech-owl with mostly bare tarsi, rounded head without ear-tufts and reddish-brown eyes. **Ad brown morph** has dark facial disc, white eyebrows and chin. **Dark brown** upperparts with pale spots and irregular dark bars, scapulars with indistinct white spots. Underparts paler with dark vermiculations and shaft-streaks. **Ad rufous morph** (scarce) is reddish brown with plainer upperparts. **Juv** is nearly uniform olive-brown above, head and neck paler brown, underparts distinctly barred dusky brown and pale fulvous. **GV** Race *newtoni* has brown plumage rufous-tinged, and slightly less patterned underparts. **Voice** Primary song a deep, guttural, toad-like trill c. 3–5 seconds long. Other song a shorter trill (c. 2 seconds) with slight rise in middle, then drops and fades. Also cackling and cooing calls. **SS** Only small owl in Puerto Rico.

### Bare-legged Screech-owl *Margarobyas lawrencii*

LC

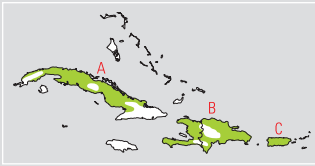
Fairly common resident (**Cuba**).



**L** 20–23 cm. Monotypic. Endemic. Deciduous and open woodland with small-stature palms (*Thrinax*) and in caves and on cliffs in or adjacent to woodland, throughout mainland Cuba and I of Pines, also some cays off N coast; to at least 1250 m. Nocturnal. Strongly declining at least locally. **ID** Small owl with proportionately large head (no ear-tufts) and long, bare tarsi. **Ad** has creamy-white facial disc with broad dark rim and long white eyebrows. Upperparts brown with white spots, wings barred; relatively long tail, outer rectrices with thin whitish bars. Underparts whitish with dark shaft-streaks. **Juv** is less spotted above and tail feathers usually plain brown (can occur in ad). **Voice** ♂ song a low, accelerating “cu-cu-cu-cucuk” with bouncing-ball rhythm, rising slightly at end, also repeated “cu co, cu co, cu co...”. ♀ utters harsh shriek, “hui hui hui hui...”. **SS** Burrowing Owl (sympatric but never syntopic) larger with feathered tarsi, yellow eyes, and barred (not streaked) underparts. See Cuban Pygmy-owl. **AN** Cuban Screech-owl, Bare-legged Owl.



**Common Short-eared Owl**  
(Short-eared Owl)  
*domingensis*



**Jamaican Owl**



brown morph

rufous morph

*nudipes*



*newtoni*



**Puerto Rican Screech-owl**



**Bare-legged Screech-owl**



### Scaly-breasted Thrasher *Allenia fusca*

LC

Fairly common to rare resident (most of **LA**).

 **L** 23 cm. Five subspecies, all of which (*hypenema*<sup>A</sup> from St Martin, Saba and St Barthélemy S to Guadeloupe, nominate<sup>B</sup> Dominica, Martinique, Grenada, *schwartzii*<sup>C</sup> St Lucia, *vincenti*<sup>D</sup> St Vincent, *atlantica*<sup>E</sup> possibly extinct Barbados) occur in region. Endemic. Moist to semi-arid habitats, from forest to semi-open woodland, mostly in lowlands. Also around settlements, but more dependent on wetter forest than Pearly-eyed Thrasher. Fairly common from Saba and St Barthélemy S to St Lucia, but rare and local on Grenada, vagrant on Grenadines, and very rare Barbuda and possibly extinct Barbados (where *atlantica* known from just two specimens and seven sight records, the last in 1994). Largely arboreal, forages in canopy on Dominica and Guadeloupe, but much lower on Montserrat and St Kitts. **ID** Large brownish mimid with pale yellow eyes and slightly decurved, rather short black bill, recalling a thrush. **Ad** has dark grey-brown upperparts with darker-centred feathers and a whitish wingbar. Underparts whitish heavily scaled greyish brown. Tail has large white tips. **Juv** has darker eyes. **GV** Race *hypenema* largest, paler than nominate; *schwartzii* intermediate in size with more white in tail; *vincenti* smallest, darker overall with narrow white margins to flank feathers; *atlantica* more reddish brown above, with less white in tail. **Voice** Series of varied notes and phrases, somewhat similar to Tropical Mockingbird, but softer, slower and less forceful. **SS** Compare larger, paler-billed Pearly-eyed Thrasher and paler, more uniform Tropical Mockingbird. **TN** Further study of racial variation required.

### Pearly-eyed Thrasher *Margarops fuscatus*

LC


Generally common resident (**Bahamas, Hispaniola, Puerto Rico**, most of **LA**).

 **L** 28–30 cm. Four subspecies, three of which (nominate<sup>A</sup> Bahamas S from Abaco and New Providence, E Dominican Republic, Beata I, Puerto Rico and Mona I, Virgin Is E to Antigua, *densirostris*<sup>B</sup> Montserrat and Guadeloupe S to Martinique, *klinikowskii*<sup>C</sup> St Lucia) occur in region. Near-endemic; otherwise only on Bonaire (with single record on Curaçao), in Leeward Antilles. Dense scrub, thickets, forest and farmland at all elevations, from mangroves and palm groves to mountains; also urban and suburban areas. In process of colonizing Dominican Republic (first reported on mainland in 1984), with one report in N Haiti. On Dominica, commoner above 250 m in wetter forest; common on Guadeloupe. Vagrant Jamaica and Barbados. Largely arboreal, mainly at mid levels to canopy. Aggressive, competing with other birds for cavity nest-sites. **ID** Large mimid with conspicuous white eyes and large yellowish bill. **Ad** has upperparts brown with darker feather centres, giving faintly scaled appearance. Underparts dull white streaked brown, less marked on belly. Tail feathers have large white tips. **Juv** resembles ad. **GV** Race *densirostris* larger than nominate, darker above and more broadly streaked below; *klinikowskii* even larger, with breast markings more contrastingly dark brown and white, and more extensive white tips to tail. **Voice** Song a series of 1–3-syllable phrases, e.g. “pio-tareeu-tsee” with lengthy pauses between them. Often sings well into day and at night. Also raucous calls, including a harsh “chook-chook” and guttural “craw-craw”. **SS** In Lesser Antilles, Scaly-breasted Thrasher is smaller and slightly darker, with shorter black bill, and single whitish wingbar. Compare slightly smaller mockingbirds (typically in more open habitats).

### Brown Trembler *Cinlocerthia ruficauda*

LC

Fairly common to rare resident (**LA**).

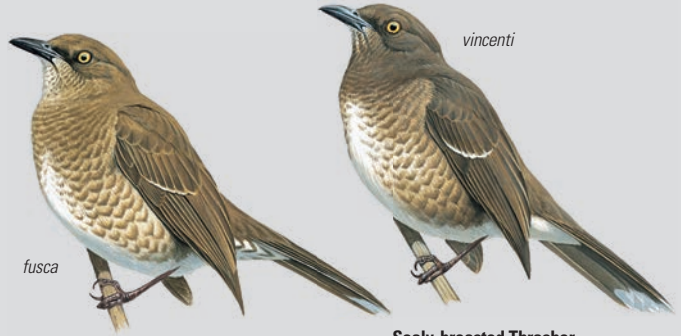
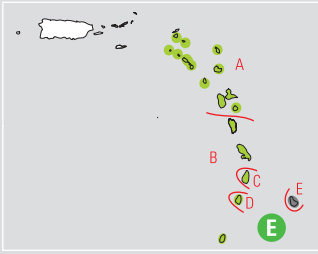
 **L** 23–26 cm. Three subspecies, all of which (nominate<sup>A</sup> Dominica and Martinique, *tremula*<sup>B</sup> Saba, Barbuda, St Kitts, Nevis, Montserrat and Guadeloupe, *tenebrosa*<sup>C</sup> St Vincent and Grenada) occur in region. Endemic. Humid and wet forest, to c. 900 m. Also swamp forest, secondary and drier woodlands, occasionally plantations. On St Lucia reported only in dry forest and scrub, but presence (and whether mere visitor or resident) requires proof. Fairly common Saba, Guadeloupe and Dominica, uncommon St Kitts, Nevis, Montserrat and St Vincent, rare (perhaps erratic) Martinique (no recent records) and Grenada, and vagrant Antigua, Barbuda, St Eustatius and Virgin Is (St Thomas). Searches tangles, epiphytes, ferns, hollows and crotches on trunks and branches, also on ground. Often droops wings and cocks tail over back. **ID** Forest mimid with very long, slightly decurved black bill, conspicuous yellow eyes, and relatively short tail usually held cocked. **Ad** has rufous-brown upperparts with greyer head, and more reddish-brown rump, tail and wings. Throat pale greyish buff, greyish brown on breast, rest of underparts buffy brown. ♀ is slightly smaller than ♂, but has notably longer bill. **Juv** has faint dusky-grey spots on breast. **GV** Race *tremula* larger and longer-billed, with sexual dimorphism more marked (♂ obviously heavier but shorter-billed); *tenebrosa* intermediate in size, darker above, breast more strongly and extensively suffused greyish, and shows less sexual dimorphism in bill length. **Voice** Main song a series of loud and varied notes and phrases, harsh to melodious, at intervals of c. 2 seconds. Also harsh alarm call, “yeeak”. **SS** Grey Trembler has greyer upperparts and whiter underparts. **TN** Formerly considered conspecific with Grey Trembler. Race *tremula* has occasionally been considered a separate species, and a recent genetic study recovered substantial phylogeographic structure within Brown Tremblers (DaCosta *et al.* 2019).

### Grey Trembler *Cinlocerthia gutturalis*

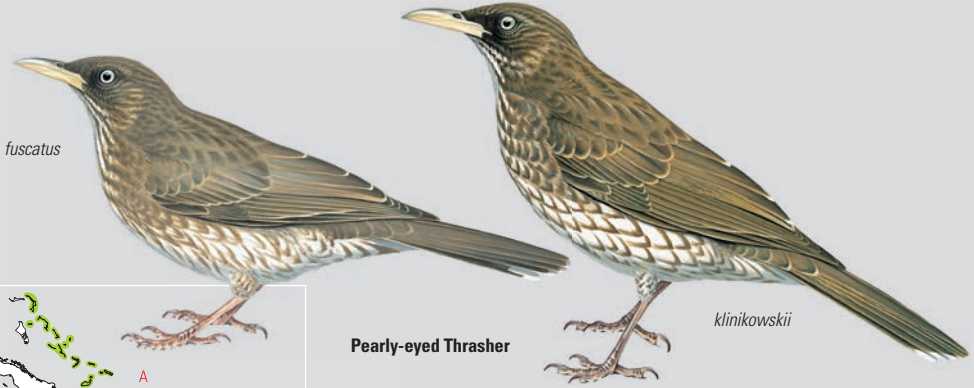
LC

Fairly common resident (**Martinique, St Lucia**).

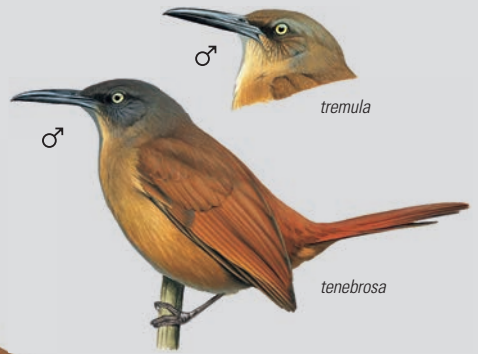
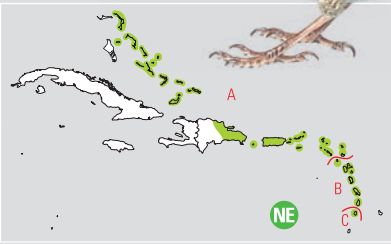
 **L** 23–26 cm. Two subspecies, both of which (nominate<sup>A</sup> Martinique, *macrorhyncha*<sup>B</sup> St Lucia) occur in region. Endemic. Mature moist and wet forest, usually at higher elevations; less common in second growth, drier scrub and open woodland in lowlands. Mainly arboreal, but feeds at all heights in vegetation, and also on ground. Often droops wings and cocks tail over back. **ID** Medium-large, greyish forest mimid with very long, slightly downcurved black bill, conspicuous pale yellow eyes and relatively short tail. **Ad** has warm grey-brown upperparts, with darker lores and ear-coverts, and dusker wings. Below mostly brownish grey, with flanks browner or more olivaceous. ♀ is slightly smaller, but has longer bill. **Juv** is browner, with mottled chest. **GV** Race *macrorhyncha* has paler, whitish to pale grey underparts, with vent and flanks pale cinnamon to brown, and sides tinged olive greyish. **Voice** Repeated notes and phrases, both harsh and melodic, and includes quavering whistles, absent from Brown Trembler's song. **SS** Brown Trembler has browner upperparts and darker, buffier or browner underparts; on St Lucia, it has been reported solely from xeric habitats, although confirmation of its presence there is required. **TN** See Brown Trembler.



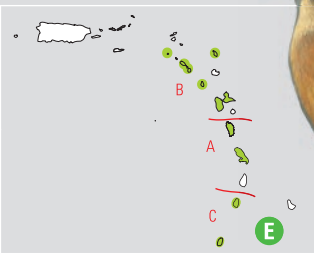
**Scaly-breasted Thrasher**



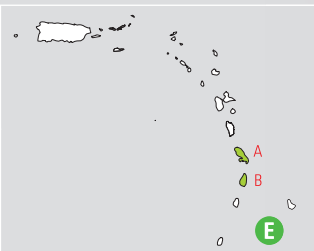
**Pearly-eyed Thrasher**



**Brown Trembler**



**Grey Trembler**



### Yellow-throated Warbler *Setophaga dominica* **LC**

Fairly common passage migrant and winter visitor (**GA, O**), vagrant (**LA**).



**L** 13–14 cm. Monotypic. Frequent visitor to most islands in N & W of region, including Bahamas, Greater Antilles, Cayman Is and San Andrés; vagrant in Lesser Antilles. Present mid Jul–late Apr. Uses wide variety of habitats, including open woodland, second growth and gardens with tall trees, also mangroves. Forages mainly in canopy and regularly visits flowering trees. **ID** Boldly patterned warbler with notably long bill. **Ad** has black face and forehead, white supercilium, lower eye-crescent and neck-sides, yellow supraloral and throat to breast. Rear crown and upperparts grey, streaked black on former. Two white wingbars, extensive white on outer tail; underparts streaked black on flanks. **Ad** ♀ is slightly duller, forehead usually grey, streaked black, with less white in tail. **1st-y** is slightly duller than ad, ♀ can have brownish upperparts and pale yellow throat. **Voice** Call a loud, sweet “chip”; flight call a loud, clear, high-pitched “see”. **SS** Bahama Warbler has longer bill, narrower white supercilium behind eye and smaller white area behind black cheeks, far more extensive yellow underparts blending into whitish vent and streaks on breast-sides. Olive-capped Warbler lacks white supercilium and white neck-sides; bulkier Kirtland's Warbler bobs its tail and lacks white neck-sides.

### Bahama Warbler *Setophaga flavescens* **NT**

Fairly common resident (**Bahamas**).



**L** 13–14 cm. Monotypic. Endemic. Confined to Grand Bahama and Abaco, in Caribbean pine (*Pinus caribaea*) woodland. Yellow-throated Warblers wintering (Jul–Apr) on same islands also use pines but routinely occur in other habitats. Often forages by climbing up and down trunks like nuthatch (Yellow-throated, Olive-capped and Pine Warblers also feed on trunks, but never as consistently). **ID** The longest-billed parulid. **Ad** has white supercilium, yellow supraloral and grey cheeks. Bright yellow throat and underparts with black-streaked flanks and white vent. Dull brown upperparts. **Juv** has greyish olive-brown head and upperparts, darker-streaked mantle, buffy-white wingbars and underparts, olive-brown mottling on throat/upper breast. **1st-y** is slightly duller than ad, ♀ can have brownish upperparts and pale yellow throat. **Voice** Song a series of loud, clear whistles that descend in pitch and end with flourish. Call a loud, sweet “chip”; flight call a loud, clear, high-pitched “see”. **SS** See Yellow-throated Warbler, including separation from Olive-capped and Kirtland's Warblers.

### Vitelline Warbler *Setophaga vitellina* **NT**

Common resident (**Cayman Is, Swan Is**).



**L** 13 cm. Three subspecies, all of which (*nelsoni*<sup>A</sup> Swan Is, nominate<sup>B</sup> Grand Cayman, *crawfordi*<sup>C</sup> Little Cayman and Cayman Brac) occur in region. Endemic. Arid scrub-woodland, coastal scrub, clearings and logged areas of dry forest, sometimes in urban areas on Cayman Is. Almost nothing known, even current status, for race *nelsoni*. Relatively tame, forages at low to mid levels. **ID** Mostly yellow warbler with distinctive face pattern. **Ad** has olive-green crown, yellow supercilium and large yellow patch below eye, olive-green eyestripe and lower border to ear-coverts. Upperparts bright olive-green, white-tipped tail, bright yellow below, olive on flanks forming indistinct, blurred streaks. ♀ is slightly duller, with more uniformly yellow ear-coverts. **Juv** has pale greyish or greyish-brown head and upperparts, slightly darker mantle, obscure pale buff wingbars,

whitish throat, yellowish-tinged belly, greyish-brown wash on flanks. **GV** Race *crawfordi* slightly paler and yellower above with less obvious head pattern, lacks faint olive flank streaking; *nelsoni* intermediate between other races in head pattern and upperparts colour. **Voice** Series of 4–5 wheezy, slightly grating notes rising in pitch, like Prairie Warbler but delivery slower. Call also similar to Prairie Warbler. **SS** Prairie Warbler slightly smaller with more conspicuously streaked flanks, streaked mantle, and bolder face pattern.

### Prairie Warbler *Setophaga discolor* **LC**

Common winter visitor and passage migrant (**GA, O**), generally rare (**LA**).



**L** 11–12 cm. Two subspecies, of which both (nominate, *paludicola*) occur in region. Almost entire population winters in Caribbean. Widespread across Bahamas, Greater Antilles, Cayman and Virgin Is, but mainly rare or vagrant in Lesser Antilles (uncommon Guadeloupe); late Jul–mid May. All manner of dry scrub, edges and clearings, open second-growth forest with well-developed understorey, gardens and mangroves; to 1140 m, but mainly at low elevations. Forages mainly at low to middle levels in scrub, by gleaning or flycatching. **ID** Small parulid with tail-bobbing habit. **Ad br** ♂ has olive-green crown and nape, yellow supercilium and large yellow patch below eye, black eyestripe and lower border to ear-coverts, olive-green upperparts, mantle streaked chestnut, two narrow yellowish wingbars, white outer tail, and black streaks on flanks. **Ad br** ♀ is duller with less striking head pattern and less distinct streaks on mantle and flanks, less white in tail. **Ad non-br** is similar to ♀. **1st-y** is duller than ad; ♀ often with greyish-olive head and upperparts, lacking chestnut streaks, more whitish face, and indistinct olive flank streaks. **GV** Race *paludicola* (apparently rare winter visitor to Cuba) slightly duller than nominate, ad ♂ olive-grey above with less distinct chestnut streaking, paler yellow below with less distinct flanks streaking. **Voice** Call a low, smacking “tcheck”; flight call a thin “seep”. **SS** Facial pattern distinctive in all plumages, although more subtle in 1st-y. Brighter Palm Warblers (share tail-bobbing habit) have yellow vent, yellow-green rump, long supercilium and less white in tail. Compare Vitelline Warbler within its restricted range.

### Adelaide's Warbler *Setophaga adelaidae* **LC**

Common (**Puerto Rico**) to rare resident (**Virgin Is**).



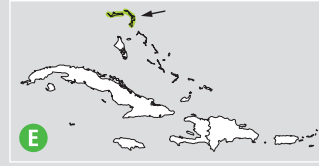
**L** 12–13.5 cm. Monotypic. Endemic. Lowland dry scrub-forest and forest edge in Puerto Rico including Culebra and Vieques I, and has recently (since Mar 2012) colonized St Thomas and St John (Virgin Is). Replaced, albeit with some overlap, in humid montane forest by Elfyn Woods Warbler. Forages in canopy. **ID** Striking parulid. **Ad** has short yellow supercilium edged black above, becoming white behind eye, black lores, broken yellow eye-ring, grey crown and upperparts, two white wingbars, extensive white in outer tail, yellow throat, and white lower belly and vent. ♂ averages brighter than ♀. **Juv** has brownish-grey head, browner mantle, buffy-white wingbars, yellow areas pale yellowish white, whiter rear underparts, with dusky spotting on breast-sides. **1st-y** ♀ is duller, often lacking black on head, and upperparts washed olive. **Voice** Two song types: a variable trill, often ascending or descending in pitch, and a slightly more complex and lower-pitched version. Usual call “chick”. **SS** ♀ Northern Parula has yellowish green on upperparts and lacks yellow supercilium. Compare Canada Warbler. **TN** Formerly considered conspecific with Barbuda and St Lucia Warblers.



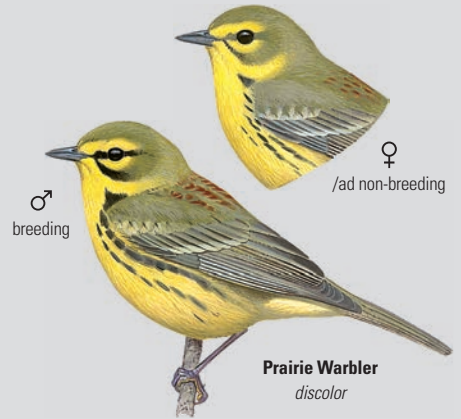
Yellow-throated Warbler



Bahama Warbler



Vitelline Warbler  
*vitellina*



Prairie Warbler  
*discolor*




Adelaide's Warbler



smaller) white throat. Not all juv Black-crowned have black crown, but always much more diffuse white throat.

### White-winged Warbler *Xenoligea montana* **VU**

Fairly common to uncommon and local resident (**Hispaniola**).

 **L** 13–14.5 cm. Monotypic. Endemic. Undisturbed humid, montane broadleaf forest with dense understorey, sometimes in pine forests provided there is significant lower growth, at 875–2000 m, but mostly above 1300 m. Typically alone or in pairs, often within mixed-species flocks, usually also containing Green-tailed Warbler. Forages at all levels. Undoubtedly has declined significantly and now rare in many areas. **ID** Jizz almost like a cross between a tanager and warbler.

**Ad** has head and upper mantle grey, with blackish lores, narrow white eye-crescents and whitish supraloral stripe. Rest of upperparts mainly bright green, with long white stripe on closed wing; tail grey, white spots at tips of outer feathers. Below whitish, with pale grey wash on sides. Bill quite stout, bluish grey with blackish culmen. **Juv** has brownish-grey head, greyish above tinged olive-brown, below off-white with some brown tones, and paler bare parts. **Voice** Song a short series of high-pitched squeaky notes, sometimes accelerating at end. Calls include low chatters and thin “tseep”. **SS** Most likely to be confused with Green-tailed Warbler, which lacks any white in wing, tail and on foreface, and has red eye, while present species is less likely to feed close to or on ground. **AN** White-winged Warbler-tanager, Hispaniolan Highland Tanager.

### Green-tailed Warbler *Microligea palustris* **LC**

Fairly common but local resident (**Hispaniola**).


 **L** 12–14.5 cm. Two subspecies, of which both (nominate<sup>A</sup> highlands of Hispaniola, *vasta*<sup>B</sup> xeric lowlands of SW Dominican Republic) occur in region. **ID** Endemic. Montane broadleaf and pine forests with dense, undisturbed understorey, to 2925 m; race *vasta* in semi-arid xeric scrub in lowlands. Also on I Beata and I Saona. Notably rare and local in Haiti, but generally more numerous than White-winged Warbler in rest of range. Forages mainly alone or in pairs, but routinely joins mixed-species flocks, in dense undergrowth and thickets. **Ad** A long-tailed warbler-like bird with slender body and fairly robust-looking bill. **Ad** has grey head and upper mantle, contrasting olive-green upperparts, white crescents above and below eye, and underparts pale greyish, whiter on belly. Iris ruby-red; bill and legs blackish to grey. **Juv** is undescribed. **1st-y** is similar to ad, but slightly duller with brown iris. **GV** Race *vasta* paler overall and more extensively whitish below. **Voice** Short rasping and squeaking notes frequently accelerated to form what may be song. Latter described also as a high-pitched “sip sip sip”. Readily responds to ‘pishing’ like true warblers. **SS** Only really likely to be confused with White-winged Warbler (which see). **TN** Population recently found in xeric lowlands of NW Haiti may represent an additional, undescribed, race; birds in lowlands of SE Dominican Republic also unascribed racially. **AN** Green-tailed Ground-tanager.

## SPINDALIDAE

### Spindalises

4 extant species, 4 in region

### Western Spindalis *Spindalis zena* **LC**

 Five subspecies divided into five subspecies groups, of which four occur in region.

### Bahamas Green-backed Spindalis

#### *Spindalis (zena) townsendi*

Fairly common resident (**Bahamas**).

**L** 15 cm. One subspecies in group. Endemic (a few records in SE Florida). Occurs in a variety of wooded habitats, especially pine forests (both native and introduced) on Grand Bahama, Little Abaco, Abaco and offshore cays. **ID** Smallest spindalis, bill short and conical.

**Ad** ♂ differs from Bahamas Black-backed Spindalis in having nuchal collar tawny-rufous (not tawny), larger yellow throat, back dark olive-green variably mixed dusky brown (darkest on Abaco), lower back darker tawny-orange, and scapulars more dusky. **Ad** ♀ is very similar to Bahamas Black-backed but always lacks blackish spots on crown, and blackish shaft-streaks on mantle are rarely visible.

**Voice** Vocalizations poorly known, and probably similar to those of Bahamas Black-backed Spindalis. **SS** Wholly distinctive within limited range. **AN** Western Stripe-headed Tanager (also applicable to all Western Spindalis races).

### Bahamas Black-backed Spindalis *Spindalis (zena) zena*

Fairly common to common resident (**Bahamas**).

**L** 15 cm. One subspecies in group. Endemic (wanders to S Florida). Occurs on Berry Is, Andros, Green Cay, New Providence, Eleuthera, Cat I, Exuma, Long I, Acklin, Mayaguana, and Turks & Caicos Is. In similar habitats to Bahamas Green-backed Spindalis. **ID** Typical spindalis. **Ad** ♂ has long white supercilium, broad white submoustachial and white chin, and bright yellow central throat. Collar and highly variable breast-band chestnut and rich yellow. Mantle black, lower back tawny-yellow, rump darker golden-rufous. Wing-coverts look mostly white and tertials broadly edged white. Mid-breast yellow, becoming white below. **Ad** ♀ is greyish olive above, with obscure whitish submoustachial. Rump paler than back, greater coverts dusky, broadly edged whitish, tertials dusky black, broadly edged whitish olive, and underparts unstreaked dirty greyish to buffy whitish. **Juv** is similar to ♀ but much duller, with minimal pattern on foreparts. **Voice** Song high, thin, sibilant and rather variable, e.g. “see-tee” doublets mixed with high “seet” and reedy “deet”, sometimes with twittering notes and usually delivered from atop tall tree. Flight song a high, sibilant “seet sit-t-t-t”. High, thin quality of vocalizations often makes bird difficult to locate. Calls include high thin “seeip” and soft “tsit-tsit-tsit”. **SS** Nothing similar occurs in C & S Bahamas. **TN** With Bahamas Green-backed Spindalis, sometimes considered to represent a species apart from other members of Western Spindalis complex. All of latter previously considered conspecific with Hispaniolan, Puerto Rican and Jamaican Spindalis, under name Stripe-headed Tanager (Garrido *et al.* 1997b).

### Cuban Spindalis *Spindalis (zena) pretreii*

Common to fairly common resident (**Cuba**).

**L** 15 cm. One subspecies in group. Endemic. Semi-deciduous and evergreen woodland, coastal thickets, mangroves, riparian and mixed woodland, to 1974 m on mainland Cuba, I of Pines and many cays (where often very numerous). Regularly observed in small, single-species flocks. **ID** Basic structure like other spindalis. **Ad** ♂ differs from other members of Western Spindalis complex in its bright olive-green back, brighter rump, paler tawny-yellow nuchal collar, paler tawny breast, chestnut lesser coverts and median coverts broadly tipped olive-green. **Ad** ♀ differs in having long dull whitish supercilium, some yellow on underparts and often a weak greyish malar stripe. **Juv** is much like ♀, but even duller.

**Voice** Songs comprise very thin high-pitched notes (similar to Cuban Bullfinch) with variable phrases and patterns of delivery. In other contexts gives weak “tsee” (sometimes doubled), an intensive “chip” while foraging and prolonged “seeee” prior to song bouts.

**SS** Like other members of Western Spindalis complex, even ♀/juv



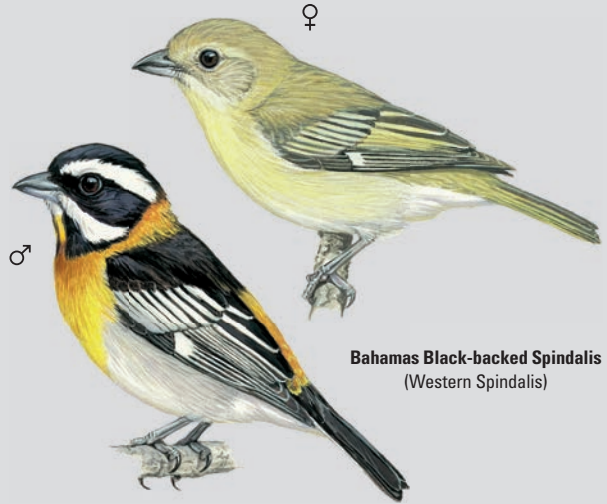
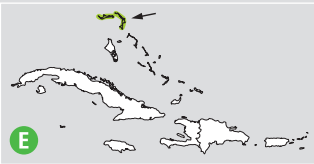
**White-winged Warbler**



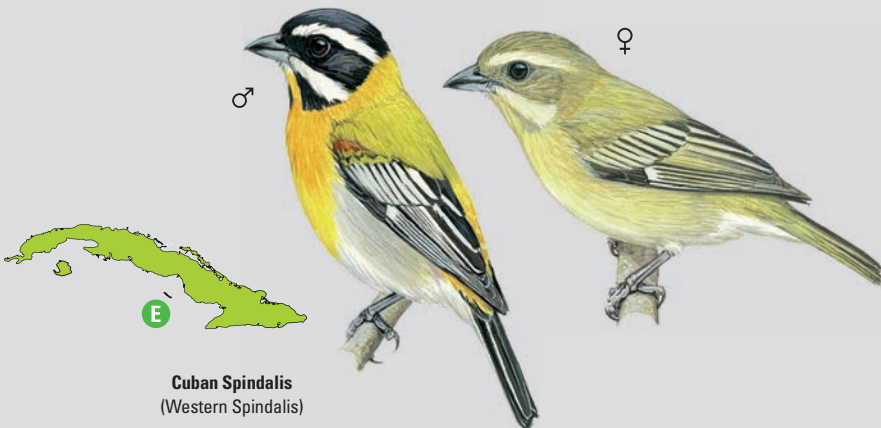
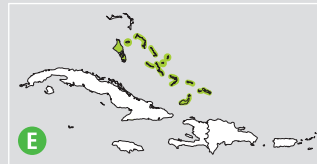
**Green-tailed Warbler**  
*palustris*



**Bahamas Green-backed Spindalis**  
(Western Spindalis)



**Bahamas Black-backed Spindalis**  
(Western Spindalis)



**Cuban Spindalis**  
(Western Spindalis)

