

SOCIEDAD CARIBEÑA DE ORNITOLOGÍA

# EL PITIRRE

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# EL PITIRRE

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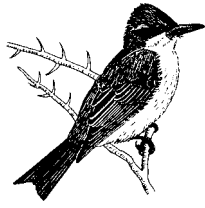
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SOCIEDAD CARIBEÑA DE ORNITOLOGÍA

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## A NEW FAMILY AND GENUS OF BIRD (AVES: CAPRIMULGIFORMES: NYCTIBIIDAE) FOR CUBA

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*Abstract.*—The Northern Potoo (*Nyctibius jamaicensis*) is reported for the first time from Cuba, based on vocalizations, sightings, and feathers from the Ciénaga de Zapata (Matanzas province) and Sierra de Anafe (La Habana province). In the West Indies, *N. jamaicensis* has been reported only from Hispaniola (including Île de la Gonâve) and Jamaica.

*Resumen.*—UNA NUEVA FAMILIA Y GÉNERO DE AVE (AVES: CAPRIMULGIFORMES: NYCTIBIIDAE) PARA CUBA. El Potú (*Nyctibius jamaicensis*) se reporta por primera vez para Cuba de dos localidades, Ciénaga de Zapata (provincia de Matanzas) y Sierra de Anafe (provincia de la Habana). Su presencia ha sido detectada en base a vocalizaciones grabadas y a la identificación de plumas halladas en los alrededores de su percha.

*Key words:* Cuba, distribution, Northern Potoo, *Nyctibius jamaicensis*, record, status, vocalization

PERHAPS THE MOST SENSATIONAL DISCOVERIES of birds in the West Indies within the last 100 years have been Fermin Z. Cervera's finding of three new species (*Ferminia cerverai*, *Torreornis inexpectata*, and *Cyanolimnas cerverai*) in the Ciénaga de Zapata of Cuba (Barbour 1926, Barbour and Peters 1927) and Angela Kay and Cameron B. Kepler's discovery of a new species of warbler (*Dendroica angelae*) in Puerto Rico (Kepler and Parkes 1972). Here, we report on an exciting discovery of a bird species new to Cuba: the Northern Potoo (*Nyctibius jamaicensis*), found in the same area of Cervera's discoveries in the 1920s.

The potoo was first reported from Cuba in the 19<sup>th</sup> century, when Hartlaub (1852:54) listed it among material obtained by the Duque Paul Wilhelm von Württemberg: "32. *Nyctibius jamaicensis* in Cuba. Fehlt bei de la Sagra und Gundlach." Previously, von

Württemberg (1835) published a list of 89 species of birds collected by him in Cuba in 1835, as reported by Gundlach (1876:3,9). Gundlach (1876) did not recognize the potoo as a Cuban bird, however, as he wrote "El Dr. Hartlaub menciona además *Mergus cucullatus*, lo que está bien, y *Nyctibius jamaicensis*, que no se encuentra en la Isla de Cuba, donde hay cuatro especies de Caprimulgidae."

In his *Check-list of birds of the West Indies*, Bond (1956) does not include *N. jamaicensis* for Cuba, but in a footnote in his *Birds of the West Indies* (1936:192), Bond, probably based on Gundlach (1876), stated "there is an old, apparently erroneous record of this species from Cuba." Recently, Ba-callao Mesa *et al.* (1999) included *Nyctibius jamaicensis* in their list of birds of the Ciénaga de Zapata.

At the beginning of the 1980s, Reynard and Gar-

rido were recording nocturnal birds for their album of Cuban bird vocalizations (1988). Reynard detected a low, faint sound of a potoo in the distance while recording in the outskirts of Motel Los Caneyes, near Santa Clara, but Garrido was unable to discern anything.

In 1997, Martínez informed Garrido that local boys spotted an unfamiliar bird near Santo Tomás, Ciénaga de Zapata. Martínez was shown the bird, but did not pay much attention to it. But when, months later, he saw it again in the same spot, he decided to inform Garrido. When Garrido heard of the “bird that looks like a Guabairo [nightjar], but larger, that was sitting upright on a fence post,” he concluded it was a potoo and encouraged Martínez to search for the bird.

A year elapsed without luck, but one evening at sunset, in a different locality near Santo Tomás, Martínez not only was fortunate enough to spot the bird again, but also recorded its voice. Martínez then contacted Garrido and played his recording through the telephone. Garrido immediately recognized the voice of a potoo and urged Martínez to obtain a specimen. The bird, however, has not been observed again. Unfortunately, while Martínez was copying the recording, the tape recorder malfunctioned, and most of the recording was erased, leaving only a faint fragment of it. Reynard listened to the remaining fragment of the recording, but was unable to distinguish anything. Later, Reynard received a fresh recording, in better condition, and this time he recognized the voice of a potoo.

In the meantime, Garrido suggested to Nelson García, the son of a former Zapata bird guide, Rogelio García, that he search for the potoo by imitating its voice. In one of his trips to Ciénaga de Zapata, Arturo Kirkconnell was informed by Nelson García that one night he heard a sound similar to Garrido’s potoo imitation in the vicinity of Molina, but no further information has been obtained by García since then.

Garrido also urged paleontologist William Suárez to search for the potoo near Caimito, near the Sierra de Anafe, a poorly known region about 25 km southwest of La Habana and 140 km west of the Ciénaga de Zapata site. In one of the searches, Suárez, in the company of three local residents, saw a potoo perched on a dead stump within the woods. The bird allowed them to approach to within 10 m before it flew. Months later, Suárez saw the bird again in the same spot, but in subsequent visits, he failed to find it. His last sighting was in 1999.

At the beginning of 2000, Martínez sent Garrido

some feathers that he had gathered at the Santo Tomás site where the bird had been seen earlier. Garrido examined all of the available skins of the genus *Nyctibius* deposited at the Academy of Natural Sciences of Philadelphia and the American Museum of Natural History (New York). He identified the feathers as possibly from a *Nyctibius* species. Subsequently, Suárez, Kirkconnell, Storrs Olson, and Carla Dove compared the feathers with those of *Nyctibius* skins in the collection of the Smithsonian Institution. They reached the conclusion that the feathers belonged to *Nyctibius jamaicensis*. The only step remaining to taxonomically verify the Cuban population is to secure a specimen.

In August 2000, Martínez observed a perched potoo near Palpite, Ciénaga de Zapata. Two months later, Martínez and D. Mirecki briefly saw a potoo in a separate locality in the Ciénaga de Zapata. Most recently, Guy Kirwan heard and saw a potoo near Baconao, in eastern Cuba.

The genus *Nyctibius* is distributed from Mexico to southern South America (Cory 1918, Peters 1940, Bond 1956, Clements 1978). Seven species of the genus have been described: *Nyctibius grandis* (Gmelin) 1789; *N. aethereus* (Wied), 1820; *N. griseus* (Gmelin), 1789; *N. leucopterus* (Wied), 1821; *N. bracteatus* Gould, 1846; *N. maculosus* Ridgway, 1912 (placed by some within *N. leucopterus*); and *N. jamaicensis* (Gmelin), 1789 (Monroe and Sibley 1963). Of these, *grandis* and *bracteatus* are the only monotypic taxa. *Nyctibius jamaicensis* occurs from Mexico to Costa Rica, and in the Greater Antilles, where two races are represented: *N. j. abbotti* in Hispaniola (including Île de la Gonâve) and *N. j. jamaicensis* in Jamaica.

We thank Storrs L. Olson and Carla Dove for their collaboration in the identification of the feathers.

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## MEETING ANNOUNCEMENT

## 2001 MEETING OF THE SOCIETY OF CARIBBEAN ORNITHOLOGY

The next meeting of the Society for Caribbean Ornithology (SCO) will be held in Topes de Collante, Cuba from July 15 to July 22, 2001. Topes de Collante is a national park in the Sierra del Escambray, Sancti Spiritus Province, about 340 km east of Havana and about 21 km northwest of the nearest town, which is Trinidad.

A formal announcement, call for papers, and registration materials will be mailed by SCO by mid-January. Information will also be posted on the SCO website (<http://www.nmnh.si.edu/BIRDNET/SCO/index.html>), Ornith-L and NEOORN. For instructions on subscribing to Ornith-L and NEOORN (and other ornithology listservers, see <http://www.nmnh.si.edu/BIRDNET/mainindex.html#ProfInfo>). The same information will also be posted on the Caribbean Biodiversity Conservation listserv on <http://www.egroups.com/group/caribbean-biodiversity>. Information may also be obtained from Dr. Hiram Gonzalez, Cuba Local Committee, at [ecologia@unepnet.inf.cu](mailto:ecologia@unepnet.inf.cu) and [ecologia@ceniai.inf.cu](mailto:ecologia@ceniai.inf.cu), as well as on the web page of the Instituto de Ecología y Sistemática: <http://www.cuba.cu/ciencia/CITMA/AMA/ecologia>. It is critical that conference attendees arrive no later than July 15, because the only way to get to this location is by private bus arranged by the tour operator. The tour operator has arranged for everyone to stay at the Novohotel in Miramar (a suburb of Havana) on the first night. The bus to the meeting site will leave from that hotel the next day. There may be public bus service to Trinidad, but there is probably no public transportation from Trinidad to the park or the hotel. Those who do not arrive on time (e.g., the day before) may not be able to get to the meeting. Renting a car in Cuba is not really any more expensive than elsewhere, but renters must pay an enormous cash deposit as well as the entire fee up front, so for a week's rental, in excess of \$900 in cash is needed for the least expensive car.

The registration fee will be \$75 per person prior to May 15; \$100 thereafter. The banquet fee is \$25. At this time, the anticipated cost is U.S.\$550 per person inclusive of all travel (including airport transfers), lodging, and meals (with the exception of the banquet). U.S. citizens planning to attend this meeting should note that information pertaining to U.S. Treasury Dept. requirements for legal travel to Cuba will be included in the announcements.

# AVIFAUNA ASSOCIATED WITH THE AQUATIC AND COASTAL ECOSYSTEMS OF CAYO COCO, CUBA

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**Abstract.**—We present the distribution and abundance of waterbirds, along with an assessment of the four habitats (beach, coastal and interior lagoons, and temporarily flooded areas) of Cayo Coco, Archipiélago de Sabana-Camagüey, Cuba. A total of 73 bird species is present at Cayo Coco, including seven new records for the cay (*Botaurus lentiginosus*, *Anas americana*, *Aythya affinis*, *Mergus serrator*, *Calidris fuscicollis*, *Calidris mauri* and *Sterna dougallii*). The temporarily flooded areas were the most important habitat for waterbirds in Cayo Coco. The Greater Flamingo (*Phoenicopterus ruber*) was the most abundant and attractive bird in the cay during our observations.

**Resumen.**—AVIFAUNA ASOCIADA A LOS ECOSISTEMAS ACUÁTICOS Y COSTEROS DE CAYO COCO, CUBA. Se dan a conocer la distribución de los hábitats disponibles para las aves acuáticas y la abundancia de estas aves en cuatro hábitats diferentes de Cayo Coco, Archipiélago de Sabana-Camagüey, Cuba (playas, lagunas costeras, lagunas interiores y zonas temporalmente inundadas). Un total de 73 especies de aves están presentes en Cayo Coco, incluyendo 7 nuevos reportes para esta localidad (*Botaurus lentiginosus*, *Anas americana*, *Aythya affinis*, *Mergus serrator*, *Calidris fuscicollis*, *Calidris mauri* y *Sterna dougallii*). Las áreas temporalmente inundadas fue el hábitat más diverso, destacándose entre las especies más abundantes y de mayor atracción turística al Flamenco (*Phoenicopterus ruber*).

**Key words.**—aquatic ecosystems, Archipiélago de Sabana-Camagüey, biodiversity, bird abundance, Cayo Coco, coastal ecosystems, Cuba, waterbirds, wetlands

IN THE CUBAN SATELLITE, CAYO COCO, beaches, coastal and interior lagoons, temporarily flooded areas, and mangrove vegetation contribute to the presence of a high diversity and abundance of waterbirds, which find adequate resources for their feeding, shelter, and reproduction in these habitats. Previous observations of the avifauna in Cayo Coco have been reported by Garrido (1976), Regalado (1981), Acosta and Berovides (1984), Rodríguez *et al.* (1990), Sánchez *et al.* (1994), Wallace *et al.* (1994), and Rodríguez and Sánchez (1995), among others. Nevertheless, the abundance and distribution of waterbirds in Cayo Coco are poorly known. Consequently, the goal of our investigations was to establish the geographic location of the available habitats suitable for aquatic and coastal birds, as well to determine the composition and abundance of the species in those habitats.

## STUDY AREA AND METHODS

Cayo Coco (N22°30', W78°27') is part of the Sabana-Camagüey Archipelago off the northern coast of Cuba (Fig. 1). With an area of 370 km<sup>2</sup>, Cayo Coco is the fourth largest island in the Cuban archipelago, after Cuba proper, the Isla de la Juventud (formerly Isla de Pinos), and Cayo Romano.

Cartographic charts 4483 I, II and 4583 III, IV of the series of Cuba's 1:50 000 maps were used to lo-

cate the potential habitats available for waterbirds, including beach, coastal lagoon, interior lagoon, and wetland habitats. Beaches are on the northern coast of Cayo Coco and extend along an area over 20 km (Fig. 2). The width of the beach sand strip ranges from 5 to 30 m. The sand is fine and it is of a cream-yellow color (I. C. G. C. and A. C. C. 1990). These beaches are characterized by being shallow, with the exception of La Concha beach. In many beaches, sargassum (*Sargassum* sp.) is plentiful.

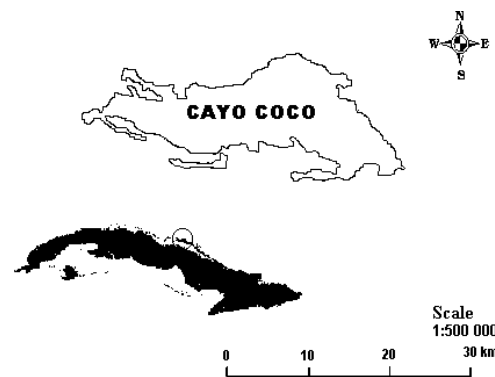


Fig. 1. Cuba, in silhouette, showing the Cayo Coco study area (within circle) within Archipiélago de Sabana-Camagüey and an enlargement of Cayo Coco.

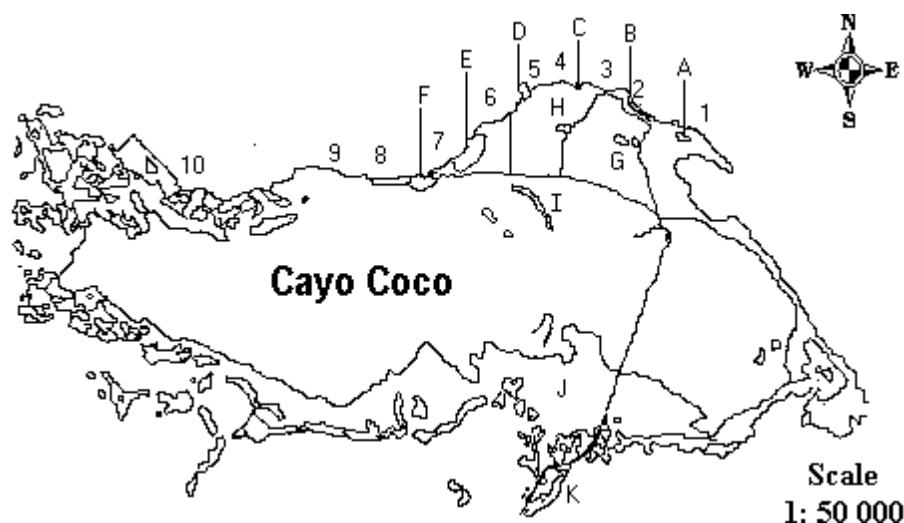


Fig. 2. Distribution of the habitats available for the aquatic birds of Cayo Coco. Beaches: Las Coloradas (1), Larga (2), La Concha (3), Prohibida (4), Loma del Puerto (5), Flamenco (6), La Jaula (7), Uva Caleta (8), La Petrolera (9), and Los Perros (10). Coastal lagoons: Las Coloradas (A), Larga (B), Farallón del Negro (C), Flamenco (D), Tiburón (E), and La Jaula (F). Interior lagoons: El Hoyo (G), Vereda de Los Marquez (H) and Potrero del Cinco (I). Temporarily flooded areas (J) and Bahía de los Perros (K).

A system of six coastal lagoons extends parallel to the beaches (Fig. 2). The coastal lagoons are elongated, surrounded by mangrove vegetation, are generally shallow (1-2 m), and their water is brackish.

The interior lagoons, are distributed inside the cay. They are generally small (Fig. 2), and somewhat deeper than the coastal lagoons. Interior lagoons are circular or oval in shape and are also surrounded by mangrove forests.

Lastly, the temporarily flooded zone (low zone), in the southern part of the islet (Fig. 2), belongs to a low plain, practically at sea level, and thus remains flooded most of the year. This zone is characterized by its mangrove vegetation and halophyte communities. Accessibility is limited and difficult. Other areas that are devoid of vegetation make up the salt flat and marshes or playas that are temporarily drained in the dry season (November to April). The marshes become veritable lagoons during the rainy season (May to October). The low zones in the innermost part of Cayo Coco are characterized by vegetation mainly composed of *Conocarpus erecta* trees.

To determine the area of each lagoon, we transferred the map image to a blueprint and using lined graph paper we counted all the totally occupied squares. Partially occupied squares were additionally grouped until a square was completed. The number of the totally occupied squares was added to that of

the squares resulting from summation of the partially occupied ones and, thus, the area of the lagoon water surface was calculated. This procedure was repeated three times for each lagoon and the total number of calculated squares was averaged for the estimate of mean lagoon size. We visited each lagoon to determine its visibility and to select our observation points. If any part of the lagoon was found to be hidden from our view, that portion was subtracted from the total area of the lagoon.

We used observation points in the coastal and interior lagoons to determine the composition and abundance of birds there. We used one observation point at lagoons having an area of less than 10 ha, such as Farallones del Negro, El Hoyo, Vereda de Los Marquez, and Potrero del Cinco. At lagoons having an area of 19-20 ha, such as La Jaula and Flamenco, two observation points were used. We used three observation points at Tiburón lagoon (70 ha). At these observation points, all birds seen or heard were recorded.

In the beach and temporarily flooded zones, we used the itinerary transect method (Blondel 1969), which consisted of recording all birds either seen or heard on both sides of the transect. The width of beach transects was limited by the coastal strip (5-30 m), whereas width of transects in temporarily flooded zones ranged from 100 m to 500 m, depend-

Table 1. Bird species using the wetlands of Cayo Coco, Archipiélago de Sabana-Camagüey, Cuba, February 1993 to March 1994. PR= Permanent Resident, WR= Winter Resident, SR= Summer Resident, TR= Transient, A= Accidental.

Family	Species	Status in Cuba	
Podicipedidae	Least Grebe <i>Tachybaptus dominicus</i>	PR	
	Pied-billed Grebe <i>Podilymbus podiceps</i>	PR	
Pelecanidae	Brown Pelican <i>Pelecanus occidentalis</i>	PR	
Phalacrocoracidae	Double-crested Cormorant <i>Phalacrocorax auritus</i>	PR	
Anhingidae	Anhinga <i>Anhinga anhinga</i>	PR	
Fregatidae	Magnificent Frigatebird <i>Fregata magnificens</i>	PR	
Ardeidae	Great Blue Heron <i>Ardea herodias</i>	PR	
	Great Egret <i>Ardea alba</i>	PR	
	Snowy Egret <i>Egretta thula</i>	PR	
	Little Blue Heron <i>Egretta caerulea</i>	PR	
	Reddish Egret <i>Egretta rufescens</i>	PR	
	Tricolored Heron <i>Egretta tricolor</i>	PR	
	Green Heron <i>Butorides striatus</i>	PR	
	Black-crowned Night-Heron <i>Nycticorax nycticorax</i>	PR	
	Yellow-crowned Night-Heron <i>Nyctanassa violacea</i>	PR	
	American Bittern <i>Botaurus lentiginosus</i> *	WR	
	Wood Stork <i>Mycteria americana</i>	PR	
	Threskiornithidae	Glossy Ibis <i>Plegadis falcinellus</i>	PR
		White Ibis <i>Eudocimus albus</i>	PR
		Scarlet Ibis <i>Eudocimus ruber</i>	A
Phoenicopteridae	Roseate Spoonbill <i>Ajaia ajaja</i>	PR	
	Greater Flamingo <i>Phoenicopterus ruber</i>	PR	
Anatidae	West Indian Whistling-Duck <i>Dendrocygna arborea</i>	PR	
	Blue-winged Teal <i>Anas discors</i>	WR	
	Northern Pintail <i>Anas acuta</i>	WR	
	White-cheeked Pintail <i>Anas bahamensis</i>	PR	
	Gadwall <i>Anas strepera</i>	A	
	American Wigeon <i>Anas americana</i> *	WR	
	Northern Shoveler <i>Anas clypeata</i>	WR	
	Lesser Scaup <i>Aythya affinis</i> *	WR	
	Red-breasted Merganser <i>Mergus serrator</i> *	A	
	Accipitridae	Common Black-Hawk <i>Buteogallus anthracinus</i>	PR
Northern Harrier <i>Circus cyaneus</i>		WR	
Osprey <i>Pandion haliaetus</i>		PR	
Falconidae	Crested Caracara <i>Caracara plancus</i>	PR	
Aramidae	Limpkin <i>Aramus guarauna</i>	PR	
Rallidae	Clapper Rail <i>Rallus longirostris</i>	PR	
	Purple Gallinule <i>Porphyryla martinica</i>	PR	
	Common Moorhen <i>Gallinula chloropus</i>	PR	
	American Coot <i>Fulica americana</i>	PR	
	Northern Jacana <i>Jacana spinosa</i>	PR	
Jacaniidae	American Oystercatcher <i>Haematopus palliatus</i>	A	
Haematopodidae	Semipalmated Plover <i>Charadrius semipalmatus</i>	WR	
	Piping Plover <i>Charadrius melodus</i>	WR	
	Wilson's Plover <i>Charadrius wilsonia</i>	PR	
	Killdeer <i>Charadrius vociferus</i>	PR	
	Black-bellied Plover <i>Pluvialis squatarola</i>	WR	
Recurvirostridae	Black-necked Stilt <i>Himantopus mexicanus</i>	PR	
	Whimbrel <i>Numenius phaeopus</i>	TR	
Scolopacidae	Greater Yellowlegs <i>Tringa melanoleuca</i>	WR	
	Lesser Yellowlegs <i>Tringa flavipes</i>	WR	
	Solitary Sandpiper <i>Tringa solitaria</i>	WR	
	Spotted Sandpiper <i>Actitis macularia</i>	WR	
	Willet <i>Catoptrophorus semipalmatus</i>	PR	
	Short-billed Dowitcher <i>Limnodromus griseus</i>	WR	
	Ruddy Turnstone <i>Arenaria interpres</i>	WR	
	Sanderling <i>Calidris alba</i>	WR	
	Semipalmated Sandpiper <i>Calidris pusilla</i>	WR	
	Western Sandpiper <i>Calidris mauri</i> *	TR	
	White-rumped Sandpiper <i>Calidris fuscicollis</i> *	TR	
Least Sandpiper <i>Calidris minutilla</i>	WR		



Table 1. Bird species using the wetlands of Cayo Coco (continued).

Laridae	Herring Gull <i>Larus argentatus</i>	WR	
	Laughing Gull <i>Larus atricilla</i>	PR	
	Common Tern <i>Sterna hirundo</i>	SR	
	Roseate Tern <i>Sterna dougallii</i> *	SR	
	Bridled Tern <i>Sterna anaethetus</i>	SR	
	Sooty Tern <i>Sterna fuscata</i>	PR	
	Least Tern <i>Sterna antillarum</i>	SR	
	Royal Tern <i>Sterna maxima</i>	PR	
	Sandwich Tern <i>Sterna sandvicensis</i>	PR	
	Caspian Tern <i>Sterna caspia</i>	WR	
	Brown Noddy <i>Anous stolidus</i>	PR	
	Alcedinidae	Belted Kingfisher <i>Ceryle alcyon</i>	WR

\*= New report from Cayo Coco.

ing on habitat complexity.

Observations of bird abundance were conducted in November 1993 and March 1994 in beach, coastal lagoon, interior lagoon, and temporarily flooded zone habitats. Interior lagoons were additionally sampled in February and June 1993. Counts were made from dawn through ca. 11:00 hr. Some additional observations were made at dusk to determine use of resting or roosting habitat. The Sorensen index was used to determine similarities among habitats (Sorensen 1948).

#### RESULTS AND DISCUSSION

The avifauna of Cayo Coco wetlands is composed of 73 species belonging to 8 orders and 21 families, which account for 50% of the aquatic birds reported in Cuba (Table 1). Of these species, 40 are permanent residents, 22 winter residents, 4 summer residents, 3 transients and 4 accidentals or vagrants. Seven of these species are reported for the first time at Cayo Coco: American Bittern (*Botaurus lentiginosus*), American Wigeon (*Anas americana*), Lesser Scaup (*Aythya affinis*), Red-breasted Merganser (*Mergus serrator*), White-rumped Sandpiper (*Calidris fuscicollis*), Western Sandpiper (*Calidris mauri*), and Roseate Tern (*Sterna dougallii*) (Table 1).

Most of the families are represented by all or nearly all the species reported in Cuba. Nonetheless, the families Anatidae, Rallidae, Scolopacidae, and Laridae were scarcely represented at Cayo Coco, since many of the species are considered rare or vagrant in Cuba (Raffaele *et al.* 1998).

We detected 50 bird species during our abundance samplings conducted in the four wetland habitats. We recorded the fewest species ( $N = 12$ ) in beach habitat (Table 2). Las Coloradas and Larga beaches

had the largest diversity and abundance of birds among beach habitat sites. These beaches, unlike the others, were characterized by the presence of sargassum, where small invertebrates serving as food for the birds seek shelter. The most abundant species in beach habitat were Ruddy Turnstone (*Arenaria interpres*), Sanderling (*Calidris alba*), Royal Tern (*Sterna maxima*), and Semipalmated Plover (*Charadrius semipalmatus*).

The coastal lagoons (Table 3) and the interior lagoons (Table 4) were characterized by being rich in species (34 and 25, respectively). The Black-necked Stilt (*Himantopus mexicanus*) is abundant in this habitat, mainly in Flamenco Lagoon (Table 3). The variety of species and numbers of individuals present in coastal and interior lagoons depends on the degree of flooding of the lagoons and the season of the year. For example, late in the dry season the Killdeer (*Charadrius vociferus*) was the most abundant species in the La Jaula lagoon, where it associated with a dry area of the lagoon (sandy soil area) (Table 3).

Ducks occurred in the coastal (Table 3) and the interior lagoons (Table 4). The area of the surface water and the depth of the lagoons favor the presence of ducks, including West Indian Whistling-Duck (*Dendrocygna arborea*) in the Potrero del Cinco interior lagoon. Northern Shoveler (*Anas clypeata*) and Blue-winged Teal (*A. discors*) were the most abundant birds in the Farallones del Negro lagoon, which is one of the deepest of the lagoons.

Temporarily flooded areas showed the greatest diversity of bird species, with 41 species (Table 5). This diversity was to be expected if we bear in mind that in this zone there are different microhabitats, from areas with low levels of water, and even nearly dry, to veritable lagoons. This variability in microhabitats contributes, to a large extent, to increase the structural complexity of these habitats and, at the

Table 2. Relative abundance (birds/km) of waterbirds at beaches sampled using transects in Cayo Coco, Archipiélago de Sabana-Camagüey, Cuba, November 1993 and March 1994.

Species <sup>1</sup>	Beach							
	Coloradas		Larga		Flamenco		La Jaula	Prohibida
	Nov 1993	Mar 1994	Nov 1993	Mar 1994	Nov 1993	Mar 1994	Nov 1993	Mar 1994
<i>Pelecanus occidentalis</i>	1		2	1				2
<i>Fregata magnificens</i>			1			1	1	
<i>Pandion haliaetus</i>	1			1		1		
<i>Pluvialis squatarola</i>	4	4	1					
<i>Charadrius wilsonia</i>		3	3					
<i>Charadrius semipalmatus</i>	10	7	10					
<i>Arenaria interpres</i>	21	52	8					
<i>Calidris alba</i>	41	30	5					
<i>Calidris fuscicollis</i> *								1
<i>Calidris pusilla</i>		1						
<i>Sterna maxima</i>	9	19	2	1	1			1
<i>Sterna caspia</i>							1	

<sup>1</sup>See Table 1 for common names.

\*= New report from Cayo Coco.

same time, facilitates the presence of a variety of avian species having different capabilities to exploit the available resources. About 4500 Greater Flamingos (*Phoenicopterus ruber*) were observed in shallow water at an approximate distance of 10 m at each side of the rock-fill road. The flamingo's beauty, abundance, and easy observation make this bird the most important tourism attraction in the area.

Wilson's Plover (*Charadrius wilsonia*) was found in all the habitats, whereas most of the species (74%) were limited to two or three habitats. The combination of temporarily flooded areas, coastal lagoons, and interior lagoons had the largest number of species in common. The greatest similarity was found between the temporarily flooded areas and the interior lagoons, and between the latter and the coastal lagoons, both having an equal percentage of species (57.6%).

Twelve species were only observed in one habitat; i.e., American Bittern, Yellow-crowned Night-Heron (*Nyctanassa violacea*), and Gadwall (*Anas strepera*) in the coastal lagoon (Table 3); American Wigeon, Lesser Scaup, West Indian Whistling-Duck, Common Moorhen (*Gallinula chloropus*), and Least Tern (*Sterna antillarum*) in the interior lagoons (Table 4); and Red-breasted Merganser, Limpkin (*Aramus guarauna*), Northern Jacana (*Jacana spinosa*), Laughing Gull (*Larus atricilla*), and Roseate Tern in the temporarily flooded areas (Table 5). Notwithstanding, we cannot consider their distribution as being very specific, since most of them were de-

tected in one count in particular. Thus, a larger number of samples will allow us to determine a more exact distribution of these birds.

The findings of our study show that the high structural diversity of the vegetation and the maintenance of the temporarily flooded areas allow a notable diversity and abundance of water birds in Cayo Coco. Furthermore, these areas are sites of regional importance for the communities of resident and migratory birds that find adequate resources for feeding, shelter, and reproduction. These resources guarantee the protection of this group and, at the same time, they provide a high potential for the development of ecotourism, especially the observation of birds. The incorporation of ecotourism within the current tourist development in Cayo Coco is particularly timely in conservation of habitat and wildlife.

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Table 3. Density of waterbirds (birds/ha) of the coastal lagoons sampled using observation points in Cayo Coco, Archipiélago de Sabana-Camagüey, Cuba, November 1993 and March 1994.

Species <sup>1</sup>	Coastal lagoon							
	Tiburón		La Jaula		Flamenco		Farallón del Negro	
	Nov 1993	Nov 1993	Mar 1994	Nov 1993	Mar 1994	Nov 1993	Mar 1994	
<i>Pelecanus occidentalis</i>		1		10	24			
<i>Phalacrocorax auritus</i>					1			
<i>Fregata magnificens</i>							2	
<i>Ardea alba</i>	2	5	1	14	25		3	
<i>Ardea herodias</i>		3	1		1			
<i>Egretta thula</i>	1	3	10	2	13		1	
<i>Egretta caerulea</i>	1					1		
<i>Egretta rufescens</i>		2	1					
<i>Egretta tricolor</i>	2	8	3	2	5		1	
<i>Butorides striatus</i>					1			
<i>Botaurus lentiginosus*</i>				1				
<i>Nyctanassa violacea</i>		1						
<i>Eudocimus albus</i>							7	
<i>Ajaia ajaja</i>		2	2		5		1	
<i>Phoenicopterus ruber</i>	1							
<i>Anas strepera</i>				3				
<i>Anas chryseata</i>					22	33	50	
<i>Anas discors</i>						6	28	
<i>Pandion haliaetus</i>					1			
<i>Buteogallus anthracinus</i>				1				
<i>Phuvialis squatarola</i>	2							
<i>Charadrius wilsonia</i>	2	2					1	
<i>Charadrius vociferous</i>	1		120		3		1	
<i>Himantopus mexicanus</i>	12	15	27	7	295		2	
<i>Tringa melanoleuca</i>	7				26		9	
<i>Tringa flavipes</i>	38				1			
<i>Catoptrophorus semipalmatus</i>	7	1						
<i>Actitis macularia</i>	2						16	
<i>Arenaria interpres</i>	2							
<i>Calidris minutilla</i>					3		3	
<i>Calidris mauri*</i>	3							
<i>Sterna maxima</i>	6				3			
<i>Sterna caspia</i>		2				1		
<i>Ceryle alcyon</i>		1				1		

<sup>1</sup>See Table 1 for common names.

\* = New report from Cayo Coco.

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Table 4. Density of waterbirds (birds/ha) of the interior lagoons sampled using observation points in Cayo Coco, Archipiélago de Sabana-Camagüey, Cuba, February, June, and November 1993, and March 1994.

Species <sup>1</sup>	Interior lagoon						
	Vereda de Los Marquez			Potrero del Cinco		El Hoyo	
	Feb 1993	Nov 1993	Mar 1994	Jun 1993	Nov 1993	Jun 1993	Nov 1993
<i>Podilymbus podiceps</i>			1			1	
<i>Phalacrocorax auritus</i>						25	
<i>Ardea alba</i>	1	2	2		2	1	1
<i>Ardea herodias</i>	1		1				
<i>Egretta thula</i>	1	1	1				
<i>Egretta caerulea</i>	1		1			1	
<i>Egretta rufescens</i>			1				
<i>Egretta tricolor</i>	2	1	2		1	2	
<i>Butorides striatus</i>	2						
<i>Eudocimus albus</i>		1			18		
<i>Phoenicopterus ruber</i>				100		66	
<i>Anas clypeata</i>		10					
<i>Anas discors</i>	5	25	5				
<i>Anas americana</i> *	40						
<i>Aythya affinis</i> *							47
<i>Dendrocygna arborea</i>				13	200	17	
<i>Caracara plancus</i>				2			
<i>Gallinula chloropus</i>	1						
<i>Charadrius wilsonia</i>				2			
<i>Charadrius vociferous</i>	3				4		
<i>Himantopus mexicanus</i>			2	4		2	
<i>Tringa melanoleuca</i>		1	7	1			
<i>Catoptrophorus semipalmatus</i>				1			
<i>Sterna antillarum</i>						5	
<i>Ceryle alcyon</i>	1		1				

<sup>1</sup>See Table 1 for common names.

\*= New report from Cayo Coco.

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Table 5. Relative abundance (birds/km) of aquatic birds in the temporarily flooded zones sampled using transects in Cayo Coco, Archipiélago de Sabana-Camagüey, Cuba, November 1993 and March 1994. ( ) = Estimated data.

Species <sup>1</sup>	Temporarily flooded zones		Bahía de Los Perros	
	Nov 1993	Mar 1994	Nov 1993	Mar 1994
<i>Podilymbus podiceps</i>		3		
<i>Pelecanus occidentalis</i>	25	36	1	1
<i>Phalacrocorax auritus</i>	207	12	1020	147
<i>Fregata magnificens</i>	1			3
<i>Ardea alba</i>	15			
<i>Ardea herodias</i>	5			
<i>Egretta thula</i>	7	5		3
<i>Egretta caerulea</i>	6			
<i>Egretta rufescens</i>	10	12		
<i>Egretta tricolor</i>	27	4		6
<i>Butorides striatus</i>	2			
<i>Eudocimus albus</i>	4			
<i>Ajaia ajaja</i>	6	3		
<i>Phoenicopterus ruber</i>	(4000)	(4600)		385
<i>Mergus serrator</i> *				4
<i>Pandion haliaetus</i>	1			
<i>Buteogallus anthracinus</i>	3			
<i>Caracara plancus</i>	2	1		
<i>Aramus guarauna</i>	3			
<i>Pluvialis squatarola</i>		1		
<i>Charadrius wilsonia</i>	6			
<i>Charadrius vociferous</i>	5	1		1
<i>Charadrius semipalmatus</i>		1		
<i>Himantopus mexicanus</i>	13	15		
<i>Jacana spinosa</i>	3			
<i>Tringa melanoleuca</i>	32	9		
<i>Tringa flavipes</i>	14			
<i>Catoptrophorus semipalmatus</i>	1			
<i>Actitis macularia</i>		1		
<i>Arenaria interpres</i>				13
<i>Calidris alba</i>				1
<i>Calidris minutilla</i>	10			
<i>Calidris fuscicollis</i> *		1		
<i>Calidris pusilla</i>		1		
<i>Calidris mauri</i> *		134		34
<i>Larus atricilla</i>	6		57	11
<i>Sterna maxima</i>	51			
<i>Sterna caspia</i>				1
<i>Sterna dougallii</i> *				6
<i>Ceryle alcyon</i>	3	2		

<sup>1</sup>See Table 1 for common names

\*= New report from Cayo Coco..

#### REQUEST FOR ASSISTANCE

#### COLOR BANDED LITTLE EGRETS

During 2000, several Little Egrets (*Egretta garzetta*) were ringed with US Fish and Wildlife Service aluminum and color bands at Graeme Hall, Barbados, the only location in the Western Hemisphere where this species is known to breed. The objective of this study is to determine egret movements within, and away from, Barbados. If you have observed such color-banded birds, please contact Martin Frost with full information at Featherbed Lane, St. John, Barbados, or by e-mail at [mfrost@sunbeach.net](mailto:mfrost@sunbeach.net)

## OBSERVACIONES Y ADICIONES A LA ORNITOFAUNA DEL ARCHIPIÉLAGO SABANA-CAMAGÜEY, CUBA, 1998-2000

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**Resumen.**—Presentamos una lista comentada de las principales especies de aves que hemos observado en el curso de los inviernos de 1998 al 2000, en el Archipiélago Sabana-Camagüey. Además, para las islas de ese archipiélago sobre las que existía poca información relativa a la ornitofauna, presentamos la lista completa de las especies observadas. Se notaron algunas especies consideradas raras en el Archipiélago Sabana-Camagüey, a saber: *Aythya affinis*, *Oxyura jamaicensis*, *Calidris canutus*, *Tyto alba*, *Coereba flaveola* y *Guiraca caerulea*. Estas observaciones complementan los conocimientos sobre la ornitofauna de ese archipiélago.

**Résumé.**—OBSERVATIONS ET ADDITIONS À L'AVIFAUNA DE L'ARCHIPEL SABANA-CAMAGÜEY, CUBA, 1998-2000. Dans cette publication, nous présentons une liste commentée des principales espèces d'oiseaux que nous avons observées au cours des hivers 1998 à 2000, dans l'archipel Sabana-Camagüey. De plus, pour les îles de cet archipel pour lesquelles peu d'information sur l'avifaune existait, nous présentons la liste complète des espèces observées. Quelques espèces considérées rares dans l'archipel Sabana-Camagüey ont été notées: *Aythya affinis*, *Oxyura jamaicensis*, *Calidris canutus*, *Tyto alba*, *Coereba flaveola*, et *Guiraca caerulea*. Ces observations viennent compléter les connaissances sur l'avifaune de cet archipel.

**Abstract.**—OBSERVATIONS AND ADDITIONS TO THE AVIFAUNA OF THE ARCHIPELAGO SABANA-CAMAGÜEY, CUBA, 1998-2000. We present an annotated list of the major species of birds that we observed during surveys in the Archipelago Sabana-Camagüey from 1998 to 2000. For Cayo Cruz, Cayo Mégano Grande, and Cayo Antón, for which few data exist on the avifauna, we also present complete lists of the species observed. Several species considered rare were observed in the Archipelago, including *Aythya affinis*, *Oxyura jamaicensis*, *Calidris canutus*, *Tyto alba*, *Coereba flaveola*, and *Guiraca caerulea*.

**Key words:** Archipiélago Sabana-Camagüey, Cayo Antón, Cayo Coco, Cayo Cruz, Cayo Guillermo, Cayo Mégano Grande, Cayo Paredón Grande, Cayo Romano Cuba, habitat, status

### INTRODUCCIÓN

EL ARCHIPIÉLAGO SABANA-CAMAGÜEY, se encuentra situado al Norte de Cuba y se extiende a lo largo de 465 km aproximadamente. En los últimos años, el desarrollo de un notable número de investigaciones ornitológicas ha permitido elevar considerablemente el nivel de conocimientos acerca de la avifauna existente en esta región de Cuba en diferentes periodos (Garrido 1973, Garrido y García 1975, Garrido 1976, Acosta y Berovides 1984, Kirkconnell y Garrido 1991, González *et al.* 1992, Blanco *et al.* 1998, Kirkconnell 1998, González *et al.* 1999, Wallace *et al.* 1999, Sánchez y Rodríguez 2000). No obstante, se considera que la información obtenida hasta el momento es aun insuficiente, ya que quedan aun muchas islas de este territorio insular que no han sido estudiadas, por lo que cualquier esfuerzo de investigación sobre la avifauna de dicho territorio constituye una importante contribución al conocimiento y conservación de la ornitofauna cubana en un futuro.

En el presente trabajo se exponen algunas consideraciones y observaciones acerca de la ornitofauna de algunos cayos del Archipiélago Sabana-Cama-

güey tales como: Cayo Guillermo (22°36'N, 78°40'W), Cayo Coco (22°30'N, 78°30'W), Cayo Paredón Grande (22°28'N, 78°09'W), Cayo Romano (22°23'N, 78°09'W), Cayo Antón (22°25'N, 78°05'W), Cayo Mégano Grande (22°20'N, 77°55'W) y Cayo Cruz (22°15'N, 77°50'W) realizadas durante los meses de enero y febrero de los años 1998, 1999 y 2000.

Los resultados en este trabajo se presentan en dos partes: la primera trata de todas las observaciones de interés realizadas que podrían contribuir a la creación de nuevos criterios sobre el estatus o categorías de algunas especies de aves existentes en el Archipiélago de Sabana-Camagüey o en el territorio cubano en sentido general. En la segunda parte, se brinda un listado de las aves observadas en tres de los siete cayos visitados: Cayo Antón, Cayo Mégano Grande y Cayo Cruz por ser estos últimos, territorios insulares en donde se han desarrollado pocas investigaciones ornitológicas en comparación con el resto de los cayos estudiados. Para obtener observaciones precisas sobre este trabajo comuníquese con el primer autor.

## RESULTADOS

## Especies

***Tachybaptus dominicus***.— Cayo Coco: 3 individuos el 31 de enero de 1999, 1 individuo el 8 febrero 1999, 2 individuos el 29 de enero del 2000. Según Raffaele *et al.* (1998), esta especie es un residente permanente común en Cuba, aunque Kirkconnell (1998) la considera muy rara para Cayo Coco y señala además la observación de un solo individuo durante el periodo de cuatro años. Por nuestra parte la observación de esta especie en tres oportunidades durante tres años consecutivos, sugiere que al menos esta ave es más común que lo referido por Kirkconnell (1998). Los individuos registrados de esta especie, fueron observados en lagunas interiores de agua dulce del cayo.

***Podilymbus podiceps***.— Cayo Coco: 15 individuos el 31 de enero de 1999, 1 individuo el 8 de febrero de 1999, 1 individuo el 29 de enero del 2000, 3 individuos el 5 de febrero del 2000. Cayo Romano: 1 individuo el 26 enero del 2000. Estas observaciones muestran que esta especie no es tan rara como señala Kirkconnell (1998). Dicho autor le atribuye a esta especie la categoría de muy rara en Cayo Coco. Nuestras observaciones y la realización de futuros investigaciones dirigidas a esta especie pueden corroborar el estatus actual de esta ultima en el territorio.

***Sula leucogaster***.— Cayo Coco: 1 individuo el 25 de enero del 2000. Cayo Paredón Grande: 1 individuo el 7 de febrero del 2000. Considerada como poco común en Cuba por Raffaele *et al.* (1998), esta especie no aparece reportada para el territorio de los Cayos Coco y Paredón Grande, por lo que este constituye entonces el primer registro de la especie para ambos sitios. Durante los periodos de observación señalados para la especie, los vientos fueron notablemente fuertes.

***Ardea herodias***.— El 4 de febrero del 2000, fue observado en Cayo Guillermo un individuo de *Ardea herodias* de la forma Wurdemann. Dicha forma está asociada por lo general a los cayos de la Florida (Butler 1992). Ninguna de la bibliografía consultada hasta el momento señala la presencia de la forma Wurdemann en Cuba, por lo que este constituye el primer reporte en el territorio cubano. La subespecie *A. h. occidentalis*, se observó en varias oportunidades en la cayería Norte durante el periodo de 1998-2000, estas observaciones se citan a continuación. Cayo Coco: 2 individuos el 28 de enero de 1998, 1 individuo el 1 febrero de 1999, 2 individuos el 8 de

febrero de 1999, 1 individuo el 12 de febrero de 1999, 1 individuo el 24 de enero del 2000, 1 individuo el 27 de enero del 2000. Cayo Guillermo: 2 individuos el 11 de febrero del 2000. Cayo Mégano Grande: 1 individuo el 9 de febrero del 2000. Pedraplén que vá a Cayo Cruz: 1 individuo el 3 de febrero del 2000. Raffaele *et al.* (1998) menciona además que *A. h. occidentalis* es muy rara en las Antillas, pero no parece ser así en base a nuestros registros.

***Anas americana***.— Cayo Coco: 40 individuos el 31 de enero del 1999, 15 individuos el 5 de febrero del 2000. Cayo Paredón Grande: 200 individuos 6 de febrero de 1998. Kirkconnell (1998) menciona esta especie como rara para Cayo Coco, mientras que Raffaele *et al.* (1998) la citan como un ave común en Cuba. Tomando en consideración la frecuencia de observación y el numero de individuos registrados durante los periodos de observaciones (1998-2000), *A. americana* debe ser considerada como una especie relativamente común al menos en Cayo Coco.

***Aythya collaris***.— Cayo Coco: 7 individuos el 5 de febrero del 2000, 2 individuos el 11 de febrero del 2000. Esta especie no aparece registrada en la lista de Kirkconnell (1998). Estas son entonces las primeras observaciones de la especie en Cayo Coco. Sin embargo es necesario señalar que esta especie está considerada como invernante común en Cuba (Garrido y García 1975, Raffaele *et al.* 1998).

***Aythya affinis***.— Cayo Coco: 4 individuos el 2 de febrero de 1998. Kirkconnell (1998), no menciona esta especie en Cayo Coco. Se trata entonces de la primera observación de esta especie en Cayo Coco. En Cuba, esta ave está considerada como un residente invernal relativamente común (Garrido y García 1975).

***Mergus serrator***.— Cayo Coco: 16 individuos el 1 de febrero de 1999. Pedraplén de Cayo Coco: 18 individuos el 3 de febrero de 1999, 51 individuos el 5 de febrero de 1999, 43 individuos el 7 de febrero de 1999, 32 individuos el 11 de febrero de 1999, 40 individuos el 28 de enero del 2000, 320 individuos el 31 de enero del 2000, 874 individuos el 10 de febrero del 2000. Pedraplén de Cayo Romano: 26 individuos el 3 de febrero del 2000. Una labor de censo en optimas condiciones meteorológicas permitió contar con bastante exactitud el numero de aves registradas el 10 de febrero del 2000. Los 16 individuos observados en Cayo Coco, constituyen el primer registro de esta especie para dicho cayo. La observación de otros individuos a lo largo del pedraplén que parte desde Jigüey hasta Cayo Romano indica que esta ave

puede ser vista en otros cayos del Archipiélago Sabana-Camagüey. De forma general nuestras observaciones coinciden con los argumentos expuestos por Wallace *et al.* (1999), quien cita a *M. serrator* como una especie común localmente.

***Oxyura jamaicensis.***— Cayo Coco: 60 individuos el 2 de febrero de 1998, 4 individuos el 5 de febrero del 2000. De acuerdo con lo expuesto por Kirkconnell (1998), nuestra observación constituye el primer reporte de esta especie en Cayo Coco. En las Antillas Mayores esta ave ha sido considerada con la categoría de común (Raffaele *et al.* 1998).

***Charadrius wilsonia.***— Cayo Guillermo: 1 individuo el 29 de enero del 2000. Cayo Coco: 1 individuo el 27 de enero de 1998, 2 individuos el 7 de febrero de 1998, 2 individuos el 24 de enero del 2000, 2 individuos el 29 de enero del 2000, 1 individuo el 5 de febrero del 2000, 1 individuo el 6 de febrero del 2000. Cayo Paredón Grande: 1 individuo el 25 de enero de 1998, 3 individuos el 30 de enero de 1998, 14 individuos el 4 de febrero de 1998, 1 individuo el 8 de febrero de 1998, 2 individuos el 7 de febrero del 2000, 1 individuo el 10 de febrero del 2000. Cayo Anton: 17 individuos el 26 de enero del 2000, 57 individuos el 8 de febrero del 2000. Cayo Mégano Grande: 8 individuos el 9 de febrero del 2000. Cayo Cruz: 48 individuos el 1 de febrero del 2000, 12 individuos el 2 de febrero del 2000, 18 individuos el 3 de febrero del 2000. Wallace *et al.* (1999) sugieren considerar esta ave como un raro residente invernal muy local, sin embargo nuestras observaciones muestran que por el contrario, la especie puede ser observada con frecuencia y abundancia en algunos territorios insulares, por lo que esta última debe ser considerada más bien un residente bimodal común del Archipiélago Sabana-Camagüey.

***Calidris canutus.***— Cayo Coco: 4 individuos el 8 de febrero de 1999, 4 individuos el 9 de febrero de 1999, 10 individuos el 4 de febrero del 2000, 34 individuos el 5 de febrero del 2000, 45 individuos el 7 de febrero del 2000, 50 individuos el 9 de febrero del 2000. Aunque esta especie ha sido reportada para el Archipiélago Sabana-Camagüey por Wallace *et al.* (1999), los registros que brindamos en este trabajo, constituyen las aglomeraciones más notables de la especie en el territorio insular del Norte de Cuba.

***Calidris pusilla.***— Pedraplén de Cayo Coco: 6 individuos el 10 de febrero del 2000. Esta especie ha sido reportada en muy pocas oportunidades para Cayo Coco. Sin embargo Raffaele *et al.* (1998), la citan como una limícola común en Cuba durante el periodo de migración otoñal. El limitado número de registros de la especie en el cayo hasta el momento, puede

estar asociado a la ausencia de observaciones durante el invierno. Estos criterios están basados en el hecho de que *C. pusilla*, es mucho más común en Las Antillas durante el otoño que en invierno (Gratto-Trevor 1992).

***Calidris mauri.***— Cayo Paredón Grande: 40 individuos el 6 de febrero de 1998, 1 individuo el 8 de febrero de 1998. Cayo Cruz: 10 individuos el 1 de febrero del 2000, 3 individuos el 2 de febrero del 2000. Cayo Mégano Grande: 2 individuos el 9 de febrero del 2000. Esta especie fue observada en compañía de *C. minutilla*. Si bien los registros de observación de esta especie durante el mes de enero y febrero son poco comunes en Cuba, compartimos los criterios expuestos por Wallace *et al.* (1999), quien argumenta que esta especie puede ser observada con regularidad en pequeños bandos durante todo el invierno.

***Larus delawarensis.***— Cayo Guillermo: 1 individuo el 4 de febrero del 2000, 3 individuos el 11 de febrero del 2000. Estas observaciones complementan la información expuesta por Blanco *et al.* (1998) para Cayo Guillermo. Se trata entonces del tercer y cuarto registro en el Archipiélago Sabana-Camagüey de esta especie considerada como rara en Cuba (Raffaele *et al.* 1998). Los individuos observados fueron subadultos, lo que coincide también con Raffaele *et al.* (1998), quien expone que la mayoría de los individuos observados en las Antillas han sido subadultos.

***Sterna caspia.***— Cayo Guillermo: 2 individuos el 1 de febrero de 1998, 1 individuo el 29 de enero del 2000, 1 individuo el 4 de febrero del 2000, 1 individuo el 11 de febrero del 2000. Esta especie está considerada un residente invernal raro que no se reproduce en Cuba (Raffaele *et al.* 1998).

***Sterna sandvicensis.***— Pedraplén de Cayo Coco: 20 individuos el 11 de febrero de 1999, 10 individuos el 28 de enero del 2000, 5 individuos el 31 de enero del 2000, 3 individuos el 10 de febrero del 2000. Estas observaciones son adiciones a los registros de la especie con categoría de rara señalada por (Wallace *et al.* 1999). La regular observación de esta ave a lo largo del pedraplén de Cayo Coco, demuestra que esta especie es localmente común en dicho cayo.

***Coccyzus minor.***— Cayo Guillermo: 1 individuo el 29 de enero del 2000. Cayo Coco: 1 individuo el 11 de febrero del 2000 (hallado muerto). Esta especie está considerada como un residente permanente en las Antillas (Raffaele *et al.* 1998). En cambio Kirkconnell (1998), la cita como un residente estival en Cayo Coco. Nuestras observaciones sugieren que



sería más adecuado considerarla un residente permanentemente en Cuba, más aun si se toma en consideración la información expuesta por Wallace *et al.* (1996), quien reporta el registro de un individuo de esta especie en Cayo Coco durante el invierno. La dificultad de observación de esta ave dado sus hábitos y comportamiento, puede ser la causa principal de la escasez de registros de la especie durante el invierno.

***Tyto alba.***— Cayo Coco: 1 individuo el 11 de febrero de 1998, 1 individuo el 4 de febrero de 2000 y 1 individuo el 5 de febrero del 2000. Kirkconnell (1998), considera a esta especie como un ave muy rara para el territorio de Cayo Coco. Las nuevas observaciones aportadas en este trabajo podrían ayudar a puntualizar la categoría actual de esta especie en el área insular del cayo antes referido.

***Vireo crassirostris.***— Cayo Paredón Grande: 3 individuos el 27 de enero del 2000. La presencia de esta especie en los cayos Coco y Paredón es conocida (Kirkconnell y Garrido 1991, Wallace *et al.* 1999), no obstante nuestras observaciones corroboran nuevamente la presencia de la especie en estos cayos.

***Mimus gundlachii.***— Cayo Guillermo: 3 individuos el 29 de enero del 2000. Cayo Paredón Grande: 1 individuo el 30 de enero de 1998. Cayo Cruz: 2 individuos el 1 de febrero del 2000. Estas observaciones deben ser consideradas adiciones a los resultados obtenidos en años anteriores en el territorio insular de Sabana-Camagüey por Kirkconnell (1998) y Wallace *et al.* (1999).

***Dendroica petechia.***— Cayo Coco: 1 individuo el 12 de febrero de 1999. Esta especie es considerada común para Cayo Coco (Kirkconnell 1998). Sin embargo nos referimos a la forma de *D. petechia* de las Antillas Menores. Según Raffaele *et al.* (1998), la *Dendroica petechia* presente en Bahamas y en Cuba posee la corona de color amarillo, mientras que el individuo observado presentaba las características de la especie de las Antillas Menores, una corona de color marrón rojizo en la parte superior de la cabeza. Nuestras observaciones indican que la forma de *D. petechia* circunscrita para las Antillas Menores puede ser observada de forma ocasional en Cuba, particularmente en Cayo Coco.

***Coereba flaveola.***— Cayo Cruz: 1 individuo el 2 de febrero del 2000. Esta especie se registra raramente en Cuba y la información que brindamos es el primer reporte para Cayo Cruz. La mayoría de los reportes obtenidos en Cuba de esta especie corresponden a otros sitios del Archipiélago Sabana-Camagüey (Garrido 1973, Garrido y García 1975, Kirkconnell 1998, Wallace *et al.* 1999). El individuo

observado frecuentaba la vegetación arbustiva costera del cayo, lo que coincide con el hábitat de observación descrito por otros observadores de la especie en Cuba en años anteriores.

***Guiraca caerulea.***— Cayo Coco: 1 individuo el 3 de febrero de 1998. Esta especie está considerada como un ave muy rara para Cayo Coco (Kirkconnell 1998) y una invernante rara para Cuba en sentido general (Raffaele *et al.* 1998). El individuo observado fué registrado en un sitio con vegetación arbustiva escasa con ciertos grados de alteración o modificación antrópica.

#### Listas de Especies Observaron en Cayo Cruz, Cayo Mégano Grande y Cayo Antón

**Cayo Cruz.**— Durante el periodo de observación del 1 al 3 de febrero del 2000, se observaron en el territorio de Cayo Cruz 50 especies de aves de ellas 25 correspondieron a nuevos registros para este cayo de acuerdo con la información aportada para Cayo Cruz en 1987 y 1988 por González *et al.* (1992). Las especies marcadas con un asterisco (\*) son comentadas con mayores detalles en la primera parte de este trabajo. Las especies observadas fueron: *Pelecanus occidentalis*, *Fregata magnificens*, *Ardea herodias* (*herodias* y *occidentalis*\* grupos), *Ardea alba*, *Egretta caerulea*, *Egretta rufescens*, *Nyctanassa violacea*, *Eudocimus albus*, *Cathartes aura*, *Pandion haliaetus*, *Buteogallus anthracinus*, *Caracara plancus*, *Falco sparverius*, *Pluvialis squatarola*, *Charadrius wilsonia*\*, *Charadrius semipalmatus*, *Charadrius melodus*, *Charadrius vociferus*, *Tringa melanoleuca*, *Actitis macularia*, *Arenaria interpres*, *Calidris alba*, *Calidris mauri*\*, *Calidris minutilla*, *Sterna maxima*, *Columbina passerina*, *Chlorostilbon ricordi*, *Ceryle alcyon*, *Xiphidiopicus percussus*, *Contopus caribaeus*, *Myiarchus sagrae*, *Tyrannus caudifasciatus*, *Polioptila lembeyi*, *Turdus plumbeus*, *Mimus polyglottos*, *Mimus gundlachii*\*, *Dendroica petechia*, *Dendroica caerulescens*, *Dendroica discolor*, *Dendroica palmarum*, *Setophaga ruticilla*, *Seiurus aurocapillus*, *Seiurus noveboracensis*, *Geothlypis trichas*, *Teretistris fornsi*, *Coereba flaveola*\*, *Spindalis zena*, *Melopyrrha nigra*, *Quiscalus niger*, *Icterus dominicensis*.

**Cayo Mégano Grande.**— Durante una visita efectuada a Cayo Mégano Grande durante el mes de febrero del 2000 se lograron registrar 32 especies de aves. Las observaciones se realizaron durante un recorrido efectuado a todo lo largo de la línea costera Norte del cayo (10 km). La relación de aves observadas fué la siguiente: *Pelecanus occidentalis*, *Ardea herodias*

(*herodias* y *occidentalis*\* grupos), *Egretta tricolor*, *Egretta rufescens*, *Butorides virescens*, *Eudocimus albus*, *Cathartes aura*, *Buteogallus anthracinus*, *Falco columbarius*, *Rallus longirostris*, *Pluvialis squatarola*, *Charadrius wilsonia*, *Charadrius melodus*, *Actitis macularia*, *Arenaria interpres*, *Calidris alba*, *Calidris mauri*\*, *Calidris minutilla*, *Limnodromus griseus*, *Larus atricilla*, *Sterna maxima*, *Columbia passerina*, *Chlorostilbon ricordii*, *Ceryle alcyon*, *Contopus caribaeus*, *Myiarchus sagrae*, *Tyrannus caudifasciatus*, *Poliophtila lembeyi*, *Dendroica discolor*, *Dendroica palmarum*, *Seiurus noveboracensis*, *Quiscalus niger*.

No se hacen comentarios adicionales sobre las especies observadas en este cayo, puesto que estas últimas constituyen especies comunes para el territorio insular del Archipiélago Sabana-Camagüey.

**Cayo Antón.**— Las observaciones en este cayo se desarrollaron durante los días 26 de enero, 8 y 9 de febrero del 2000. Las aves observadas fueron las siguientes: *Ardea herodias*, *Ardea alba*, *Egretta rufescens*, *Butorides virescens*, *Cathartes aura*, *Buteogallus anthracinus*, *Caracara plancus*, *Falco sparverius*, *Falco columbarius*, *Pluvialis squatarola*, *Charadrius wilsonia*, *Charadrius semipalmatus*, *Actitis macularia*, *Arenaria interpres*, *Calidris alba*, *Calidris minutilla*, *Larus atricilla*, *Sterna maxima*, *Xiphidiopicus percussus*, *Contopus caribaeus*, *Tyrannus caudifasciatus*, *Mimus polyglottos*, *Dendroica petechia*, *Dendroica discolor*, *Dendroica palmarum*, *Mniotilta varia*, *Setophaga ruticilla*, *Seiurus noveboracensis*, *Geothlypis trichas*. En el caso particular de la observación del *Charadrius wilsonia*, se brindan detalles en la primera parte del presente trabajo.

#### DISCUSIÓN

Las observaciones presentadas en este trabajo aportan nuevos elementos y complementan el nivel de conocimientos alcanzado hasta la fecha acerca de la composición y distribución de la ornitofauna de Archipiélago Sabana-Camagüey. Estos resultados pueden servir de aporte en la proyección de estrategias futuras dirigidas a la conservación de la ornitofauna de los sistemas insulares del Norte de Cuba y sus hábitat naturales.

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## LISTA PRELIMINAR DE LA AVIFAUNA MARINO-INSULAR Y LITORAL DEL PARQUE NACIONAL MOCHIMA, VENEZUELA

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**Resumen.**—El Parque Nacional Mochima abarca parte del territorio marino-continental de los estados Sucre (NO) y Anzoátegui (NE), comprendiendo una gran diversidad de ecosistemas; e. g., islotes, playas, costas abruptas, caletas, manglares y bosques (xerófilo, tropófilo y ombrófilo). Con la finalidad de identificar las especies presentes en sus costas, cayos y bahías, se emprendieron inventarios que incluyeron observación con binoculares, capturas con redes de niebla y guías de aves de Venezuela. Se señalan un total de 15 órdenes, 30 familias y 91 especies. Los más representativos fueron: en el área insular, los Pelecaniformes; e.g., *Phalacrocorax olivaceus* (Phalacrocoracidae), *Sula leucogaster* (Sulidae), *Pelecanus occidentalis* (Pelecanidae); en el espinar xerófilo costero, los Falconiformes, e. g., *Buteo* spp., *Buteogallus* spp. (Accipitridae), *Coragyps atratus* (Cathartidae), *Caracara plancus* (Falconidae) y los Passeriformes; e. g., *Saltator* spp., *Volatinia jacarina*, *Tiaris bicolor*, *Tachyphonus rufus*, *Thraupis* spp. (Emberizidae), *Elaenia* spp., *Tyrannus melancholicus*, *Pitangus sulphuratus* (Tyrannidae), *Icterus nigrogularis*, *Gymnomystax mexicanus* (Icteridae); en el manglar, *Ceryle torquata*, *Chloroceryle amazona* (Alcedinidae), *Dendroica petechia*, *Conirostrum bicolor* (Parulidae) y *Actitis macularia* (Scolopaciidae). Cabe destacar la nidificación de *Phaethon aethereus* y la presencia de *Anhinga anhinga*, inusuales en ambientes marino-costeros continentales. La topografía abrupta y cercanía a la costa del piedemonte, en algunos sectores, parece influir en la ocurrencia de especies típicas del bosque tropófilo premontano en el matorral xerófilo costero. Por otro lado, se notaron diferencias en el número de especies observadas en los diferentes islotes; siendo éste mayor en los más cercanos a la costa, a pesar de su menor área.

**Abstract.**—PRELIMINARY LIST OF THE MARINE-INSULAR AND LITTORAL AVIFAUNAS OF THE MOCHIMA NATIONAL PARK, VENEZUELA. The Mochima National Park of Venezuela contains representatives of marine and terrestrial habitats in the states of northwestern Sucre and northeastern Anzoátegui, including widely diverse ecosystems; e. g., cays, beaches, steep coasts, rivers, mangroves, and various forests. With the objective of identifying species present in coastal, cay, and bay habitats, inventories were undertaken including observations using binoculars, captures with mist-nets, and Venezuelan bird guides. Totals of 15 orders, 30 families, and 91 species are reported. The most representative forms for the islands were Pelecaniformes (e.g., *Phalacrocorax olivaceus*, *Sula leucogaster*, *Pelecanus occidentalis*); in the dry coastal thorny scrub, Falconiformes (*Buteo* spp., *Buteogallus* spp., *Coragyps atratus*, *Caracara plancus*) and Passeriformes (e.g., *Saltator* spp., *Volatinia jacarina*, *Tiaris bicolor*, *Tachyphonus rufus*, *Thraupis* spp., *Elaenia* spp., *Tyrannus melancholicus*, *Pitangus sulphuratus*, *Icterus nigrogularis*, *Gymnomystax mexicanus*); in mangrove forest, *Ceryle torquata*, *Chloroceryle amazona*, *Dendroica petechia*, *Conirostrum bicolor*, and *Actitis macularia*. We report breeding by *Phaethon aethereus* and the presence of *Anhinga anhinga*, which are rare in the marine-coastal environment of the mainland. The abrupt topography and proximity to the piedemonte coast, in some sectors, seems to influence the occurrence of species typical of the submontane forest in the dry coastal scrub. Conversely, we noted differences in the number of species observed in the various islands, with more species in the islands nearest the mainland, even though those islands were smaller in size than more distant cays.

### INTRODUCCIÓN

EL PARQUE NACIONAL MOCHIMA abarca parte de la región marino-continental de los Estados Sucre (sector NO) y Anzoátegui (sector NE), Venezuela. Comprende una gran diversidad de ecosistemas; i.e., islotes, playas, costas abruptas, caletas, manglares y bosques xerófilo, tropófilo y húmedo premontano y montano. Siendo un parque marino y continental, el área marina ha sido relativamente más estudiada (Egáñez 1989); en cambio, en el área continental, los

escasos estudios son en su mayoría florísticos (Cumana 1997), y a excepción de Naveira (1983), con exiguas citas sobre la fauna, prácticamente nada se conoce, especialmente en material de aves.

Hasta el momento no existe una lista fehaciente de la avifauna del parque, ni de su distribución, a pesar de que varias especies que ocurren dentro de su ámbito son señaladas como nuevos registros para el Estado Sucre; i.e., el Chíparo (*Phaethon aethereus*), la Paloma Ala Blanca (*Columba corensis*), la Cotúa

Agujita (*Anhinga anhinga*) (Marín and Rodríguez 1992; Rodríguez 1999). Otros son endemismos subespecíficos – e. g., el Chiví Silbador (*Basileuterus culicivorus olivascens*) y la Candelita Gargantipizarrera (*Myioborus miniatus pallidiventris*) – o específicos – e. g., el Chiví Cabecigris (*Basileuterus griseiceps*) y la Diglosa Negra (*Diglossa venezuelensis*) (Phelps y Meyer 1994) – del Macizo Oriental (que incluye parte del área continental del parque), el cual, conjuntamente con la Península de Paria, constituye un subcentro de endemismos en Sudamérica (Phelps 1966, Cracraft 1985, Phelps and Meyer 1994).

Así, con la finalidad de hacer un levantamiento de su avifauna se iniciaron inventarios preliminares, sin establecer estimaciones estadísticas comparativas, en la franja marino-insular y litoral, para identificar las especies presentes en sus costas, cayos y bahías, de manera de contribuir con cualquier plan de manejo e investigación que conlleve, en última instancia, a su auténtica conservación (Jácome 1986, Flores 1992, M.A.R.N.R. 1989, Gómez et al. 1997).

#### MATERIALES Y METODOS

##### Área de Estudio

El área de estudio comprendió gran parte del litoral continental e insular (cayos e islotos), desde el golfete de Santa Fe hasta la Bahía de Mochima, 10° 21'00" y 10°24'00" N; 64°19'33" y 69°22'30" O. Está enmarcada fitofisiográficamente dentro de las subregiones insular costera y continental costera; viz, 0 y 100 m s.n.m.; TMA > 28°C; PMA entre 300 y 1000 mm (Huber 1997).

La mayoría del área está caracterizada por una vegetación xerófila, tipo espinar costero (predominante en el sector insular), manglares y monte espinoso tropical (Ewell et al. 1976, Cumana 1997). No obstante, debido a la intervención antrópica (incendios y/o actividades agrícolas) existen zonas con vegetación de sabana, con notorios afloramientos rocosos en algunas zonas a consecuencia de la erosión, que conforman ecotonos interesantes con el bosque xeromorfo y deciduo (Zurita 1983). También existen, especialmente en las hondonadas, bosques de galería con árboles de altura considerable y cultivos de frutales.

##### Procedimientos

Se practicaron salidas de campo de un día de duración (08:00 a 16:00 hr), dos veces por mes, durante los meses de abril y mayo de 1998. Por otro lado, se realizaron recorridos en botes “peñeros,” a todo lo

largo de la línea de costa continental y de los islotos, para identificar aves marinas y del manglar. Las aves fueron identificadas mediante el uso de binoculares, capturas con redes de niebla (3 x 12 m, 32 mm de abertura de malla) – con transectos de ≈ 50 m, perpendiculares a la línea de costa – y guías de las aves de Venezuela (Phelps and Meyer 1994, Lentino 1997).

La situación (status) y el orden hipotético de los diferentes taxa listados fueron establecidos según Phelps and Meyer (1994); mientras que la ubicación en las diferentes categorías y los nombres científicos se basaron en la recopilación de Lentino (1997).

#### RESULTADOS

Se registraron 15 órdenes, 39 familias y 91 especies (Apéndice 1), siendo los más representativos: en el área marino-insular, los Pelecaniformes; e. g., Cotúas Oliváceas (*Phalacrocorax olivaceus*), Alcatrazes (*Pelecanus occidentalis*), y Bobas Marrones (*Sula leucogaster*). En el matorral xerófilo costero, los Falconiformes; e. g., los lechoseros (*Saltator* spp.), Semilleros Chirrí (*Volatinia jacarina*), Tordillos (*Tiaris bicolor*), bobitos copetones (*Elaenia* spp.), Pitirres Chicharrereros (*Tyrannus melancholicus*), Cristofués (*Pitangus sulphuratus*), Chocolateiros (*Tachyphonus rufus*), azulejos (*Thraupis* spp.), Gonzalitos (*Icterus nigrogularis*), Maiceros (*Gymnomystax mexicanus*) y Conotos (*Psarocolius decumanus*). En el manglar, Martínez Pescadores (*Ceryle torquata*), Martín Pescador Matraquero (*Chloroceryle amazona*), Canarios de Mangle (*Dendroica petechia*), Mieleros Mangleros (*Conirostrum bicolor*) y Playeros Coleadores (*Actitis macularia*). Para este censo preliminar, no se hicieron valoraciones estadísticas comparativas de abundancia, uniformidad y diversidad, entre la avifauna litoral continental e insular. Sin embargo, es pertinente integrar análisis cualicuantitativos de algunos parámetros ecológicos en este sentido.

#### DISCUSIÓN

Dos especies, la Cotúa Agujita (*Anhinga anhinga*) y el Chíparo (*Phaethon aethereus*), destacan en este primer inventario; la primera porque se le señala por vez primera, al menos en Venezuela, como nidificante en un área continental (Península de Manare, sector El Aguirre), y la segunda por ser una especie inusual en ambientes marino-costeros, puesto que se le halla generalmente en ecosistemas acuidulces (Lentino 1976). Cabe destacar que las poblaciones del Chíparo a nivel del Caribe, en los últimos inven-

tarios, informan de menos de 2000 parejas nidificantes. Por otro lado, según modelos estadísticos recientes, un total de 10,000 individuos en panmixia se necesitarían para mantener una viabilidad evolutiva, por lo que, a largo plazo, esta especie podría extinguirse (Walsh y Lee 1998).

Ahora bien, las características geomorfológicas del área continental del parque, presentando laderas con pendientes abruptas, hace que el piedemonte se encuentre muy cercano al mar, por lo que los ecotonos entre el bosque premontano y el bosque tropófilo y xerófilo estén poco definidos y, en algunos sectores, relativamente cercanos a la costa intercambiándose regularmente, al menos en esta época, especies orníticas de uno a otro ecosistema. En la vecina Península de Araya, por ejemplo, se han realizado inventarios (el primer y Segundo autor) en el bosque acantoxeromorfo litoral, para los mismos meses, y no se ha señalado la presencia de algunas especies observadas en Mochima; e. g., el Lechosero Pechiblanco (*Saltator orenocensis*), el Semillero Ventricastaño (*Oryzoborus angolensis*) y la Cotara Caracolera (*Aramides cajanea*). Sin embargo, factores como la fenología, disponibilidad de recursos alimentarios y los rigores climáticos severos (exceso de lluvias o sequías prolongadas) pudieran influir en la presencia o no de algunas especies en determinados meses o años (Karr 1976, McNeil 1982, Poulin *et al.* 1992); a esto se uniría, lógicamente, la poca cantidad de muestreos practicados.

La topografía de las zonas supralitorales insulares y continentales combinadas con factores antrópicos, parecen impedir el establecimiento de colonias de nidificación de especies de aves marinas (excepto *P. aethereus*), sino más bien de sesteo y alimentación. Por el contrario, algunas especies continentales han colonizado algunos cayos. En efecto, se pudo observar nidificación en el Carpintero Pechipunteado (*Colaptes punctigula*) y la Paraulata Llanero (*Mimus gilvus*). Si bien la colonización insular depende de factores como diversidad de hábitat, distancia de tierra firme, extensión territorial, capacidad de dispersión, tasas de inmigración y extinción (Gorman 1991), en nuestro caso, en principio, parece ser la diversidad de hábitat y la distancia de tierra firme los factores predominantes. Ciertamente, la mayor abundancia y diversidad de especies (basadas solo en el número de capturas y aves observadas) se encontró en los cayos más cercanos a la costa y de vegetación más exuberante, e. g., Isla Larga (freos de  $\approx 500$  m), Isla Arapo (freos  $< 1$  km); pues en los otros cayos, aunque de mayor extensión territorial; e. g., Isla Venado, Isla Caracas, solo se observaron aves marinas; lo que pudiera obedecer, en parte, a su ubicación en

mar abierto, expuesta a los constantes vientos salinos, que impiden el establecimiento de una flora con una entomofauna asociada relativamente abundante, al contrario de Isla Larga e Isla de Arapo las cuales se ubican resguardadas dentro de bahías.

Finalmente se debe señalar un aspecto conductual interesante, observado en Isla Arapo, y es la naturaleza pasiva de algunas especies, e. g., el Canario de Mangle y el Granero Cabecita de Fósforo (*Chlorospingus pileatus*), ante la presencia humana, permitiendo un acercamiento notorio, inusual en las poblaciones continentales. Este “comportamiento insular” ha sido observado en otras especies; e. g., la Reinita (*Coereba flaveola*) en Bonaire (R. Egáñez, com. pers.), el Colibrí Jamaiquino (*Trochilus polytmus*), en Jamaica (Bond 1985). La ausencia de depredadores y competidores y el aislamiento territorial (Lack 1969) parecen contribuir, parcialmente, a la aparición de este tipo de conducta, e indicarían que estas especies, más que intercambiarse consuetudinariamente con las poblaciones de tierra firme, mantienen grupos residentes permanentes en dichos cayos.

Los factores ecoetológicos antes señalados, ineludiblemente, deberán tomarse en cuenta, a la hora de diseñar las estrategias de ordenamiento, uso y conservación de las áreas insulares y marino-costeras continentales del parque (Egáñez 1989).

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Apéndice 1. Lista de aves marino-insulares y del matorral acantoxeromorfo litoral del Parque Nacional Mochima, Venezuela. Status: Residente (R), Migratoria Neártica (mN), Migratoria Austral (mA), Migratoria Local (mL). Habitat: Marino-costero (M), Xerofítico (X), Manglar (Mg).

Order	Family	Species	Status	Hábitat
Pelecaniformes	Phaethontidae	Chíparo <i>Phaethon aethereus</i>	R	M
	Pelecanidae	Alcatraz <i>Pelecanus occidentalis</i>	R	M
	Sulidae	Boba Marrón <i>Sula leucogaster</i>	R	M
	Phalacrocoracidae	Cotúa Olivácea <i>Phalacrocorax brasilianus</i>	R	M
	Anhingidae	Cotúa Agujita <i>Anhinga anhinga</i>	R	M
	Fregatidae	Tijereta de Mar <i>Fregata magnificens</i>	R	M
Ciconiiformes	Ardeidae	Garza Blanca Real <i>Ardea alba</i>	mL	Mg
		Chusmita <i>Egretta thula</i>	mL	Mg-M
		Garcita Azul <i>Egretta caerulea</i>	mL	Mg
		Chicuaco Cuello Gris <i>Butorides striatus</i>	R	Mg
Falconiformes	Threskiornithidae	Corocoro Colorado <i>Eudocimus ruber</i>	mL	Mg
	Cathartidae	Zamuro <i>Coragyps atratus</i>	R	X-Mg
		Oripopo <i>Cathartes aura</i>	R	X
	Accipitridae	Cernicalo <i>Gampsonyx swainsonii</i>	R	X
		Gavilán Tejé <i>Buteo albicaudatus</i>	R	X
		Gavilán Habado <i>Buteo magnirostris</i>	R	X
		Gavilán Andapié <i>Parabuteo unicinctus</i>	R	X-Mg
		Gavilán Cangrejero <i>Buteogallus anthracinus</i>	R	Mg
		Aguila Negra <i>Buteogallus urubitinga</i>	R	X
	Pandionidae	Aguila Pescadora <i>Pandion haliaetus</i>	mN	M
	Falconidae	Halcón Macagua <i>Herpethotes cachinnans</i>	mL	X
		Caricare Sabanero <i>Milvago chimachima</i>	R	X
		Caricare Encrestado <i>Caracara plancus</i>	R	X
		Halcón Peregrino <i>Falco peregrinus</i>	mN	X-Mg
Galliformes	Cracidae	Guacharaca del Norte <i>Ortalis ruficauda</i>	R	X
Gruiformes	Rallidae	Cotara Caracolera <i>Aramides cajanea</i>	R	X-Mg
Charadriiformes	Scolopacidae	Playero Coleador <i>Actitis macularia</i>	mN	Mg
	Laridae	Guanaguanare <i>Larus atricilla</i>	mL	M
	Sternidae	Tirra Medio Cuchillo <i>Sterna hirundo</i>	mN	M
Columbiformes	Columbidae	Gaviota Pico Amarillo <i>Sterna superciliaris</i>	mL	M
		Paloma Ala Blanca <i>Columba corensis</i>	mL	X
		Paloma Sabanera <i>Zenaida auriculata</i>	mL	X
		Tortolita Grisácea <i>Columbina passerina</i>	R	X
		Tortolita Rojiza <i>Columbina talpacoti</i>	R	X
		Palomita Maraquita <i>Columbina squammata</i>	R	X
		Paloma Turca <i>Leptotila verreauxi</i>	R	X
		Perico Cara Sucia <i>Aratinga pertinax</i>	R	X
Psittaciformes	Psittacidae	Periquito <i>Forpus passerinus</i>	R	X-Mg
		Periquito <i>Forpus passerinus</i>	R	X-Mg
Cuculiformes	Cuculidae	Pizcua <i>Piaya cayana</i>	R	X
		Garrapatero Común <i>Crotophaga ani</i>	R	X-Mg
		Saucé <i>Tapera naevia</i>	R	X
Strigiformes	Strigidae	Pavita Ferruginea <i>Glaucidium brasilianum</i>	R	X
Caprimulgiformes	Caprimulgidae	Aguaitacamino Chiquito <i>Chordeiles acutipennis</i>	R	X
		Aguaitacamino Rastrojero <i>Caprimulgus cayennensis</i>	R	X
Apodiformes	Trochilidae	Colibri Verdecito <i>Chlorostilbon mellisugus</i>	R	X
		Colibri Anteado <i>Leucippus fallax</i>	R	X
Coraciiformes	Alcedinidae	Martin Pescador Grande <i>Ceryle torquata</i>	R	Mg
		Martin Pescador Matraquero <i>Chloroceryle amazona</i>	R	Mg
Piciformes	Picidae	Carpintero Pechipunteado <i>Colaptes punctigula</i>	R	X
		Carpintero Habado <i>Melanerpes rubricapillus</i>	R	X
		Bobito <i>Hypnelus ruficollis</i>	R	X
Passeriformes	Dendrocolaptidae	Trepador Subesube <i>Xyphorhynchus picus</i>	R	X
	Furnariidae	Güitio Gargantiblanco <i>Synallaxis albescens</i>	R	X
	Formicariidae	Coicorita <i>Formicivora grisea</i>	R	X
		Pitirre Chicharrero <i>Tyrannus melancholicus</i>	R	X
	Tyrannidae	Cristofué <i>Pitangus sulphuratus</i>	R	X
		Atrapamoscas de Venezuela <i>Myiarchus venezuelensis</i>	R	X
		Bobito Copetón Vientre Amarillo <i>Elaenia flavogaster</i>	R	X
		Bobito Copetón Pico Corto <i>Elaenia parvirostris</i>	mA	X
		Atrapamoscoas Tijereta <i>Tyrannus savanna</i>	mA	X
Gran Atrapamoscas Listado <i>Myiodynastes maculatus</i>		R	X	



## Apéndice 1. Lista de aves del Parque Nacional Mochima, Venezuela (continued).

Passeriformes	Tyrannidae	Pico Chato Vientre Perla <i>Hemitriccus margaritaceiventer</i>	R	X	
		Pico Chato Amarillento <i>Tolmomyias flaviventris</i>	R	X	
	Hirundinidae	Golondrina de Agua <i>Tachycineta albiventer</i>	R	M	
	Troglodytidae	Cucarachero Currucuchú <i>Campylorhynchus griseus</i>	R	X	
		Cucarachero Común <i>Troglodytes aedon</i>	R	X	
	Mimidae	Paraulata Llanera <i>Mimus gilvus</i>	R	X	
	Sylviidae	Chirito de los Chaparrales <i>Polioptila plumbea</i>	R	X	
	Vireonidae	Julián Chivi Ojirrojo <i>Vireo olivaceus</i>	R	X	
		Siriri <i>Ciclarhis gujanenensis</i>	R	X	
		Tordo Pirata <i>Molothrus bonariensis</i>	R	X	
		Tordo Común <i>Quiscalus lugubris</i>	R	X	
		Gonzalito <i>Icterus nigrogularis</i>	R	X	
		Maicero <i>Gymnomystax mexicanus</i>	R	X	
		Conoto Negro <i>Pasarocolius decumanus</i>	R	X	
		Parulidae	Canario de Mangle <i>Dendroica petechia</i>	¿R?	Mg
			Mielero Manglero <i>Conirostrum bicolor</i>	R	Mg
			Reinita Común <i>Coereba flaveola</i>	R	X-Mg
		Emberizidae	Reinita de Charcos <i>Seiurus noveboracensis</i>	mN	X-Mg
			Curruñata Saucito <i>Euphonia trinitatis</i>	R	X
			Azulejo de Jardín <i>Thraupis episcopus</i>	R	X
	Azulejo Verdeviche <i>Thraupis glaucocolpa</i>		R	X	
	Chocolatero <i>Tachyphonus rufus</i>		R	X	
	Lechosero Ajicero <i>Saltator coerulescens</i>		R	X	
	Lechosero Pechiblanco <i>Saltator orenocensis</i>		R	X	
	Lechosero Pechirrayado <i>Saltator striatipectus</i>		R	X	
	Granero Cabecita de Fósforo <i>Coryphospingus pileatus</i>		R	X	
	Tordillo Común <i>Tiaris bicolor</i>		R	X	
	Semillero Ventriacastaño <i>Oryzoborus angolensis</i>	R	X		
	Semillero Chirri <i>Volatinia jacarina</i>	R	X		
	Semillero Ventriamarillo <i>Sporophila nigricollis</i>	R	X		

REVIEWERS FOR *EL PITIRRE* VOLUME 13

The Editor thanks the following reviewers for their help in the preparation of volume 13 of *El Pitirre*: Wayne J. Arendt, Herlitz Davis, Catherine Levy, Douglas B. McNair, Shawn O'Brien, José Julián Placer, Herbert A. Raffaele, Alma Ramírez, Brigitte Wotzkow-Straub, and Carlos Wotzkow.

## LEUCISM IN CRESCENT-EYED PEWEE (*CONTOPUS CARIBAEUS*) IN WESTERN CUBA

GUY M. KIRWAN<sup>1</sup> AND ARTURO KIRKCONNELL<sup>2</sup>

<sup>1</sup>74 Waddington Street, Norwich NR2 4JS, UK; and <sup>2</sup>Museo Nacional de Historia Natural de Cuba, La Habana, Cuba

*Resumen.*— LEUCISM EN EL BOBITO CHICO (*CONTOPUS CARIBAEUS*) EN EL OESTE DE CUBA. Leucism se reporta en dos individuos del Bobito Chico (*Contopus caribaeus*) de la Ciénaga de Zapata y Pinar del Río, Cuba.

*Key words:* coloration, *Contopus caribaeus*, *Crescent-eyed Pewee*, Cuba, leucism, plumage

LEUCISM AMONG PEWEES of the genus *Contopus* appears to be virtually unknown. Kimball Garrett (*in litt.*, February 2000) has drawn our attention to a leucistic specimen of Western Wood-Pewee (*Contopus sordidulus*), in the Los Angeles County Museum (LACM 46036), with typical plumage except for a pure white chin and throat, and numerous pure white primaries (p4–10 on the right wing and p8–10 on the left wing). It was taken in Orange County, California, USA, in September. In addition, George Wallace (*in litt.*, February 2000) noted the presence of a leucistic Eastern Phoebe (*Sayornis phoebe*) wintering in Florida in 1999–2000, and reports that the only other known instance of such aberration in this species was also recorded in Florida in winter.

We possess extensive experience with the Crescent-eyed Pewee (*C. caribaeus*), having observed probably over 1000 individuals over the years, and have not noted any instances of albinism or leucism in the species. Neither Wallace, nor Allan Keith, who shared the observations below, is aware of any instances of leucism in *C. caribaeus*.

On 10 February 2000, in an area of Ciénaga de Zapata, Matanzas Province, western Cuba, known as La Majagua, ca. 5 km east of Soplillar, we noted a striking individual of *C. caribaeus*. It had a gleaming white crown, streaked darker, forehead and supraloral, whereas the majority of the underparts from the chin to the belly were off-white, with tiny dark

streaks. The tertials were broadly fringed creamy-white (but asymmetrically patterned), extending narrowly onto the greater coverts, as well as onto at least one primary. The rectrices were also extensively fringed and, with the exception of the two outermost pairs, tipped creamy-white. It was very approachable, although this behavior is entirely “normal,” and it continued to feed unconcernedly despite our presence. On 16 February 2000, at Parque Nacional La Güira, Pinar del Río Province, we found a second leucistic individual, although it was substantially less marked than the first. This individual was much less well marked, with the wing and tail markings being more normal, and the leucistic coloration being largely confined to the head and underparts.

We consider it extraordinary to have discovered two leucistic individuals within a matter of days when such an aberration appears unknown within the species, and is apparently extremely rare for the genus.

### ACKNOWLEDGMENTS

We are grateful to Kimball Garrett and George Wallace for drawing our attention to records of leucism among *Contopus* and *Sayornis*, and Robert Fox for supplying photographs of the La Majagua individual.

GIANT COWBIRD (*SCAPHIDURA ORYZIVORA*): A NEW BIRD  
FOR BARBADOS AND THE WEST INDIES

MARTIN FROST

*Featherbed Lane, St. John, Barbados*

*Resumen.* – EL TORDO GIGANTE (*SCAPHIDURA ORYZIVORA*): UNA NUEVA AVE PARA BARBADOS Y LAS ANTILLAS. Se reporta el primer avistamiento del Tordo Gigante (*Scaphidura oryzivora*) en las Antillas, en Barbados. Aunque aparentemente esta especie, un estricto parásito de nidos, se está dispersando hacia el norte desde América del Sur, no se espera que se establezca en las Antillas Menores al menos que las especies huéspedes de esta ave también colonicen estas islas.

*Key words:* Barbados, Giant Cowbird, habitat, Lesser Antilles, range expansion, record, *Scaphidura oryzivora*

ON 9 MARCH 2000, while at Palm Beach, Hastings, Christ Church with Yvonne Robinson, I observed a Giant Cowbird (*Scaphidura oryzivora*) in a mahogany tree (*Swietenia mahagoni*) at eye level, no more than 7.5 m away. I was immediately struck by its size since it was longer and considerably more robust, due to its deep-chested appearance, than the familiar Carib Grackle (*Quiscalus lugubris*). The second feature that caught my attention was its eye coloration, which I noted as a pale red with a yellowish tinge. The eye coloration contrasted noticeably with its entirely black plumage, which had no gloss or sheen. The tail was “normally shaped” and lacked the “V” or keel shape of a Carib Grackle. Its sturdy legs were black as was the pointed bill, which was longer than that of a Carib Grackle, but considerably deeper at its base. A single, harsh call was heard. I was able to view the bird at this close range for about 1 min before it flew off to perch about 6 m up in a nearby almond tree (*Terminalia catappa*). Here I was able to compare it directly with a Carib Grackle almost side-by-side, about 60 cm apart, and appreciate its heavier-bodied appearance as well as estimate that it was about 1.5 times the length of a Carib Grackle. It remained in the same position in the almond tree for about 3 min before returning to the original mahogany tree.

This observation represents the first report of the Giant Cowbird from Barbados and the West Indies. The Giant Cowbird is an obligate brood parasite which occurs in Trinidad and Tobago, as well as throughout most of northeastern South America, where its occurrence is generally linked to oropendola (*Psarocolius* sp.) and cacique (*Cacicus* sp.) colonies (Ridgely and Tudor 1989). It was first reported from Tobago in 1937 (French 1992) and is now well established there (F. Hayes, *pers. comm.*). Thus, it appears that this species is spreading northwards, much as the Shiny Cowbird (*Molothrus bonariensis*) did about a century ago, and future reports from the southern Lesser Antilles should be expected. It is unlikely, however, to establish itself on any of the Lesser Antilles unless it is preceded by successful colonization by one of its preferred hosts.

I thank Floyd Hayes for providing additional information and Edward Massiah for reviewing this note.

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# AN OBSERVATION OF ANTILLEAN NIGHTHAWK (*CHORDEILES GUNDLACHII*) ON BARBADOS

MARTIN FROST

*Featherbed Lane, St. John, Barbados*

*Resumen.*—AVISTAMIENTO DEL QUEREQUETÉ (*CHORDEILES GUNDLACHII*) EN BARBADOS. Se reporta el primer avistamiento del querequeté (*Chordeiles gundlachii*) en Barbados, y en las Antillas Menores. Este observación provee evidencia tentativa de la teoría que el Querequeté se migra hacia y por las Antillas Menores.

*Key words:* Antillean Nighthawk, Barbados, behavior, *Chordeiles gundlachii*, Lesser Antilles, record, vocalization

AROUND 18:25 HR, shortly after sunset, on 17 May 2000 while at Bailey Hill, St. Thomas, I heard an unfamiliar call which caused me to look skyward. A few moments later the source of the calling – a bird – flew over, almost overhead, at about 18 m (60 ft). It flew around for about a minute before heading eastward calling continuously and I immediately determined that it was a vocalizing nighthawk species. In the twilight I could see that the bird was relatively slim in appearance, about the length of a Zenaida Dove (*Zenaida aurita*), with long, slim wings, which were well angled at the carpal joint. The under parts appeared silvery brown, as did the underwings except for a white patch on the primaries. Although not clearly seen as the bird flew away, the upper parts appeared dark. The flight was direct, but there were at least two sudden changes of direction. The call was a rapid, rhythmic four-syllable call which I recorded as “pu-du-du-dunt,” rising on the last syllable, and audible at a distance, even when the bird was no longer visible.

Voice provides one of the best methods of identifying nighthawk species, which are notoriously difficult to separate in the field. Within an hour of the observation, I was able to confirm that it was an Antillean Nighthawk (*Chordeiles gundlachii*) by perfectly matching the call heard to a tape recording of this species' call in the Dominican Republic (Reynard 1981). This represents the first report of this species from Barbados and the Lesser Antilles.

The Antillean Nighthawk breeds in the Bahamas, Cuba, Cayman Islands, Jamaica, and Hispaniola, and less commonly in Puerto Rico and US Virgin Islands. It may occur in the Lesser Antilles on migration to and from its presumed winter range in South America (Raffaele *et al.* 1998). Although apparently no confirmed records exist from the mainland, September and April specimens occur from Curacao, Netherland Antilles (Voous 1983). Based on the departure from the breeding grounds by late August to mid-September, it has been suggested by some authors that nighthawks seen in the Lesser Antilles in August and early September may be Antillean rather than Common Nighthawks (*C. minor*), which likely

migrate later through the region (Norton 1984, Evans 1990). At this time of the year, however, birds are invariably silent and therefore not safely identified without a specimen. There appear to be few nighthawk specimens from the Lesser Antilles. A recent examination confirmed that a specimen collected on Barbados on 29 September 1887 was a Common Nighthawk (Feilden 1889), whereas one collected on Martinique on 16 October (year not stated) was also identified as this species (Bond 1956). The possibility of specifically identifying a nighthawk in the Lesser Antilles is greatest in spring and early summer when calling is more likely. The Barbados observation provides the first evidence supporting the notion that Antillean Nighthawks may migrate through the Lesser Antilles. This evidence, however, should be considered as tentative because it is possible that the bird could have been a vagrant, well off its usual course.

I thank Edward Massiah for providing the tape of Dominican Republic bird songs, which permitted identification, and for reviewing this note, as well as Phil Hansbro for examining the Barbados Common Nighthawk specimen.

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## NESTING OF THE ORANGEQUIT (*EUNEORNIS CAMPESTRIS*) IN JAMAICA

MARCIA MUNDLE

*Jamaica Conservation and Development Trust, 95 Dumbarton Avenue, Kingston 10, Jamaica*

*Resumen.* –ANIDAJE DE *EUNEORNIS CAMPESTRIS* EN JAMAICA. Se reportan datos del anidaje de *Euneornis campestris*, un passeriforme endémico y común en Jamaica. Ambos sexos atendieron a los dos pichones en el nido, una masa holgada de bambú y enredaderas colocada en la rama de un árbol a 6 m de altura sobre una carretera.

*Key words:* behavior, breeding, *Euneornis campestris*, habitat, Jamaica, nest, Orangequit

I remember some years ago there was a discussion in the Gosse Bird Club (now BirdLife Jamaica) about the nesting of the Orangequit (*Euneornis campestris*). There existed very few reports on the nesting of this common endemic species of bird. The Jamaica Conservation and Development Trust (JCDDT) started a bird monitoring program in 1998. During this time I encouraged my co-workers to look for the nest of the Orangequit. On 11 May 2000, Dwight Pryce and Ryan Love, Park Rangers of the Blue and John Crow Mountains National Park, found a nest with two young birds at Silver Hill in St Andrew.

The nest was approximately 6 m from the ground on a branch of a woman wood tree (*Alcornea latifolia*), overhanging the road. It was hidden in the fork of the branch behind some berries of the tree. The nest was approximately 12 cm in diameter and made of loosely woven bamboo leaves and small woody vines. The inside of the nest was lined with moss.

The sighting of this nest would have been missed had it not been for the noisy chirping of the nestlings. Both male and female Orangequits visited the nest. The male perched by the nest briefly and then

left to feed in a nearby tree. He was seen chasing a Bananaquit (*Coereba flaveola*) and a hummingbird from the tree in which he was feeding. The female would visit the nest periodically and she would stay away for up to 10 min before returning to feed the nestlings. No observation was made of the type of food given to the young birds. One nestling was seen climbing out of the nest onto a branch of the tree while the other remained in the nest.

The nest was photographed using a digital camcorder with the photographer precariously perched on a small branch overhanging the road. The nest was visited again on 15 May but, by then, the young birds had fledged.

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### IMPORTANT NOTICE

Dr. Rosemarie S. Gnam, Treasurer of the Society of Caribbean Ornithology, has recently moved to New York. Correspondence regarding the Society, including membership, should be addressed as follows:

Dr. Rosemarie Gnam  
PO Box 863208  
Ridgewood, NY 11386 USA

Membership renewals for 2001 will be mailed early in 2001. The Treasurer encourages all members to pay their 2001 membership dues and notes that only members who have paid their dues will be eligible to vote in Society elections.

GRENADA HOOK-BILLED KITE (*CHONDROHIERAX UNCINATUS MIRUS*)  
SURVEYS AND NESTING ACTIVITY

RUSSELL THORSTROM<sup>1</sup>, EDWARD MASSIAH<sup>2</sup>, AND CHRISTI HALL<sup>3</sup>

<sup>1</sup>*The Peregrine Fund, 566 West Flying Hawk Lane, Boise, ID 83705 USA (rthorstrom@peregrinefund.org);* <sup>2</sup>*Nelson Apartments, Johnson Road, Fitts Village St. James, Barbados, West Indies;* and <sup>3</sup>*5914 Marvin St., Boise, ID 83709 USA*

*Resumen.*—INVENTARIOS Y NIDIFICACIÓN DE LA GAVILÁN DE GRENADA (*CHONDROHIERAX UNCINATUS MIRUS*). En febrero y agosto de 2000, investigamos a los Milanos Pico Ganchudo y observamos 15 individuos. En agosto, localizamos dos parejas anidando y coleccionamos datos sobre la nidificación de este especie.

*Key words:* *Chondrohierax uncinatus mirus, conservation, diet, ecology, Grenada, habitat, Hook-billed Kite, nest, status*

WE SURVEYED FOR Grenada Hook-billed Kites (*Chondrohierax uncinatus mirus*) from 22 to 28 February and 2 to 10 August 2000. In February we spent 63.5 hrs, covered 487 km by car, and observed from selected sites throughout the island. We had 19 sightings of kites, which represented an estimate of 15 individual Grenada Hook-billed Kites. Fifteen of these sightings were in the southwestern section of the island. From the information we collected during this survey, it appears that the kites were in some areas and habitats different from the reported preferred habit of the southwestern xeric forests. Our sighting at Palmiste Lake in the wet forest, in the western part of the island, was the first record for a kite in that area. We also detected several birds in the south-central interior region where the species has not been recorded in the wet forest. No nesting activity was observed during this period.

In August we spent 50 hrs searching for kites in the same areas by the same method used in February and conducted 36 hrs of nest observations. Two nesting pairs were located in the southern part of Grenada and two pairs exhibiting nesting behavior were observed in the south-central part of the island. Nests were 15 m and 17 m above ground in 67.5-cm diameter-at-breast (DBH) *Ceiba pentandra* and 59.9-cm DBH *Erythrina micropteryx* trees, respectively. Nest #1 contained a nestling approximately 2-3 weeks of age and at Nest #2 the pair was incubating.

We recorded 156 Grenada Hook-billed Kite prey items, predominantly at nest #1; 133 were identified

to species level. Three species of snails comprised all of the identified prey: *Drymaeus dominicus* 55% ( $N = 76$ ), *Orthalicus undatus* 34.6% ( $N = 46$ ), and *Pleurodonte perplexa* 9.8% ( $N = 13$ ). During nest observations, the male delivered 46.8% (73) and the female 53.2% (83) of the snails. The distance between nest #1 and #2 was 2.7 km.

In general, we feel optimistic about the chances of survival of the Grenada Hook-billed Kite and we speculate that the species is more common than previously thought. Perhaps these birds may be adaptable to human-modified habitat to a limited degree. Kites need mature trees for nesting and woodlands for food resources. The survival of this endangered insular kite will depend on maintaining both nesting and foraging habitat. Further investigation is needed to determine kite distribution island-wide, its taxonomic relationship with the mainland subspecies, the existence of breeding pairs in the wetter habitat of the central region of the island, insular movements, survival rate, and general natural history characteristics.

We thank Rick Watson and Bill Burnham of The Peregrine Fund for their support of this project. The survey work was conducted in cooperation with the Grenada Government, Ministry of Agriculture, Forestry Division, with thanks to Alan Joseph and Anthony Jeremiah. A special thanks to Lloyd Kiff, David Blockstein, Bonnie Rusk, J. Peter Jenny, Fred G. Thompson, and Jim Wiley for their advice and interest in this project.



*St. Vincent Parrot*

# WINGED AMBASSADORS

## Bird Conservation in the Caribbean

*Focus on Wildlife Fact Sheet Series*  
*U. S. Fish & Wildlife Service, Office of International Affairs*

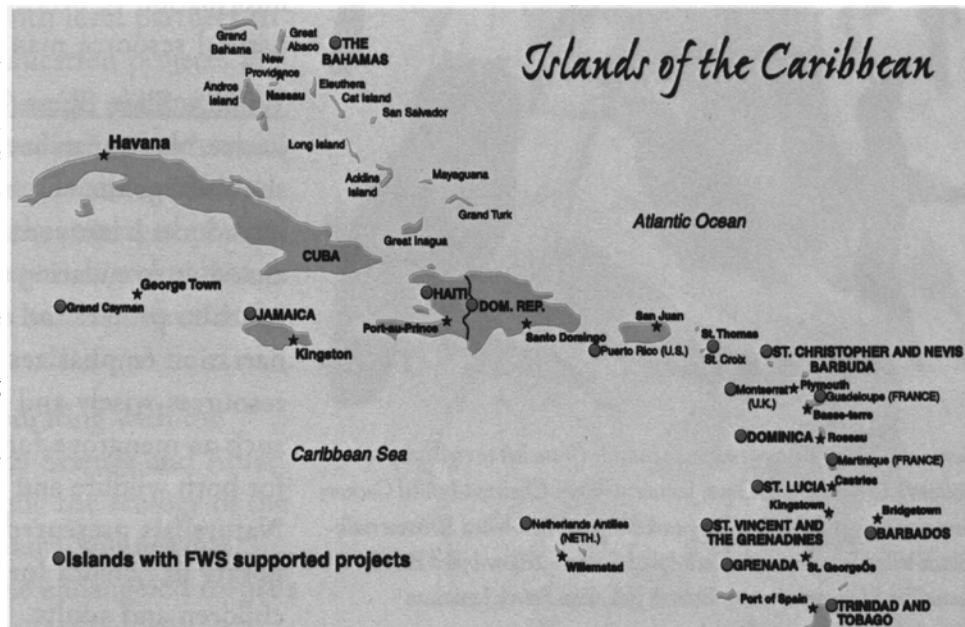
From large, gaudy parrots to small, migratory warblers, the birds of the Caribbean represent a wide diversity of species. Many of the islands have a special endemic avifauna found no where else in the world. Hundreds of migratory birds are dependent upon the islands either as a stopover site for resting and refueling, or as a place to spend the nonbreeding season. These species are a source of pride to the Caribbean people who treasure their uniqueness and value their role as consumers of agricultural insect pests and seed dispersers. As a key tourist attraction, they also provide an important boost to the local economy.

The long-term survival of these birds is in jeopardy. Deforestation, wetland loss, over hunting, and predation from introduced predators threaten most bird species. Several endemics (restricted species), such as the Cuban Macaw and the Grand Cayman Thrush are now extinct. Islanders concerned about these problems are dedicated to preventing further extinctions.

*Winged Ambassadors*, the hemisphere-wide conservation initiative of the Fish and Wildlife Service,

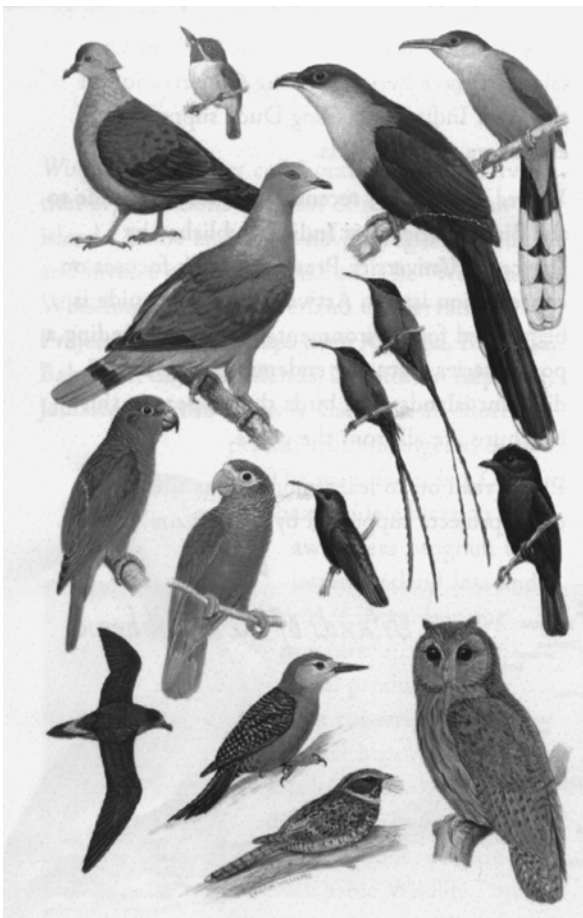
is assisting Caribbean efforts to protect birds. For more than 15 years, the initiative has helped local people in the region conserve key bird habitat, and has provided training to resource managers in bird conservation techniques, and promoted environmental education programs to inform communities about the plight of birds. The Society of Caribbean Ornithology is one of the Service's key partners, in addition to numerous national organizations. Projects such as the Conservation Education Campaign to Save the St. Vincent Parrot, The Birds of Our Islands Poster Series, and the Conservation of the West Indian Whistling Duck support local endeavors to help birds.

*Winged Ambassadors* recently produced "A Guide to the Birds of the West Indies." Published by Princeton University Press, the book focuses on conservation issues. Artwork from the guide is being used for environmental projects including a poster series featuring endemic birds from 12 different islands. The birds that appear in this brochure are all from the guide.



## From Jamaica...

Jamaica has more endemic bird species than any other island in the Caribbean. And from September to May, almost two-fifths of the songbirds in Jamaica are migrants from North America. This rich birdlife is threatened by the country's extremely high deforestation rate of 5.3% per year, which is one of the highest in the world. At least three endemic bird species are considered extinct and many are endangered. Conservation efforts are hampered



Some of Jamaica's many endemics include (from left to right, top to bottom): Crested Quail-Dove, Jamaican Tody, Chestnut-bellied Cuckoo, Jamaican Lizard-Cuckoo, Ring-tailed Pigeon, Red-billed Streamertail, Black-billed Streamertail, Black-billed Parrot, Yellow-billed Parrot, Jamaican Mango, Jamaican Becard, Jamaican Petrel, Jamaican Woodpecker, Jamaican Owl, and Jamaican Poorwill.

by the general population's lack of environmental awareness and knowledge of Jamaica's natural heritage.

Environmental education is a high priority for Jamaica and *Winged Ambassadors* has supported several projects to enhance people's understanding of their local wildlife and the importance of protecting it. Highlights include:

Teacher's Guide to the Birds of Jamaica. BirdLife Jamaica (formerly Gosse Bird Club) published a guide to help teachers develop children's appreciation of birds and other wildlife. The guide complements the book, "Birds of Jamaica," by A. Downer and R. Sutton, and includes a series of activities to make students aware of birds and their habitats, and the need to conserve them. Using the guide, students learn how to identify birds, collect basic data, and set up simple conservation projects on school or community grounds. An accompanying color poster illustrates five birds, which are discussed in the guide.

Library of Natural Sounds. West Indies College produced a recording of songs and calls from many of Jamaica's birds. The College used a combination of previously existing recordings along with new ones obtained from the field to create this definitive collection. Software accompanies the recordings, which identifies each species and discusses pertinent natural history and conservation issues. The Library of Natural Sounds is used to train young people, and, provide information to ornithologists, educators and natural resource managers about Jamaica's birds.

Wildlife Slide Show, "Why Conserve?" Jamaica Junior Naturalists created a special narrated slide show about the country's wildlife. The show introduces basic conservation concepts and issues aimed at stimulating the interest of Jamaica's youth to protect the environment. The 10 minute narration emphasizes the need to use natural resources wisely and the value that ecosystems such as mangrove forests and coral reefs provide for both wildlife and humans. Jamaica Junior Naturalists presented the show to each parish library in Jamaica for an audience of older schoolchildren and adults.



*Imperial Parrot*

### *Dominica ...*

Known as the “Nature Island of the Caribbean,” Dominica’s pristine forests and lush green valleys are home to more bird species than any other island in the Lesser Antilles. Two charismatic parrots, the Imperial Parrot, and the Red-necked Parrot, are found only in Dominica.

*Winged Ambassadors* partnered with several organizations to raise public awareness about the need to conserve wildlife in Dominica. The Conservation Education Campaign to Save the Imperial and Red-necked Parrots, conducted by the Forestry Division of Dominica and RARE Center for Tropical Conservation, delivered a conservation message to every person on the island through songs, music videos, publications, posters, bumper stickers, sermons, and school visits. As a result of the campaign, 200 acres of forest were set aside as a Parrot Reserve. *Winged Ambassadors* has also collaborated with the Forestry Division to publish the booklet, “Wildlife of Dominica.”

### *Dominican Republic ...*

The Dominican Republic forms the eastern two-thirds of the island of Hispaniola and is the second largest country in the Caribbean. Endemism is high on the island and 26 bird species are found only here. Among these is the Bay-breasted Cuckoo, which is endangered due to habitat loss and its use as a cure for arthritis.

*Winged Ambassadors* works with local partners to implement environmental education projects in the Dominican Republic. Through evening classes, the “Postgraduate Studies in Environmental Education” of the Instituto Tecnológico de Santo Domingo trains actively employed professionals in environmental education techniques. Participants can apply these lessons immediately during their day jobs.

*Winged Ambassadors* is collaborating with the Vermont Institute of Natural Science and American Bird Conservancy to study the ecology of the Bicknell’s Thrush. This research will provide crucial information about the endangered thrush’s winter habitat in the Dominican Republic.

*Bay-breasted Cuckoo*

### Bahamas...

The Bahamas are an extensive chain of 2,700 islands and cays located just southeast of Florida. Only 30 of these islands are permanently inhabited by approximately 280,000 people. A large number of birds migrate between the Bahamas and North America. Endemic species include the Bahama Woodstar, Brace's Hummingbird, and the Bahama Yellowthroat.

*Winged Ambassadors* is partnering with the Bahamian Department of Agriculture to enhance bird conservation in the archipelago. Efforts include the publication of a booklet entitled, "Natural Winged

History of Cat Island," with a special section on migrant and resident birds. The Department is also producing a hunter's guide listing all the species found in the Bahamas and detailing their protection status. This year, the Bahama Woodstar will be featured on a poster, which will be accompanied by a conservation information factsheet.



### Antigua, Barbuda, Cayman Islands, Grenada, Guadeloupe, Haiti, Montserrat, Nevis, St. Kitts, St. Lucia, St. Vincent, Turks & Caicos...

*Winged Ambassadors* collaborates with conservation organizations on most of the Caribbean islands. Working with the Society of Caribbean Ornithology, important regional projects have been developed. The "West Indian Whistling-Duck and Wetland Conservation Project" connects groups from Antigua, Barbuda, Bahamas, Cayman Islands, Dominican Republic, Jamaica, and the Turks & Caicos in an effort to protect this endangered duck. The main focus is a Caribbean-wide education and awareness program to lessen wetland loss and reduce illegal hunting pressure. Activities include: production of a duck conservation and natural history slide show, a coloring book for children, and a wetland education workbook; construction of Watchable Wildlife Ponds where the public can view ducks; and distribution of identification cards for hunters which distinguish the ducks that can be hunted legally.



The "Birds of Our Islands" poster series is

another region-wide effort to conserve birds in the Caribbean. *Winged Ambassadors* partnered with the Caribbean Conservation Association to produce educational posters focused on both resident and migratory birds of the Lesser Antilles. The posters are used in schools and other public facilities to increase local awareness about bird conservation issues.

"Decattiere Nature Trail" is an example of an island specific project supported by *Winged Ambassadors*. Managed by St. Lucia's Forestry Department, the income-generating trail attracts ecotourists and provides excellent viewing of the magnificent St. Lucia Parrot. RARE Center for Tropical Conservation assisted in the design of the trail. RARE Center also was involved in the Conservation Education Campaigns for Montserrat and St. Vincent. These campaigns elevated local knowledge and appreciation for the Montserrat Oriole and the St. Vincent Parrot.

To further bird conservation in Haiti, *Winged Ambassadors* collaborated with the University of Florida and Haiti-NET in "Green Actions," a series of training workshops on wildlife conservation and protected areas management for Haiti.

Reprinted from a color brochure available from the Office of International Affairs, US Fish and Wildlife Service.

## *IN MEMORIAM*



### LISA SALMON

10 NOVEMBER 1907 – 2 AUGUST 2000

LEO DOUGLAS

LISA SALMON, THE FIRST LADY of Jamaican Ornithology, passed away on 2 August 2000 at the age of 92. In her lifetime, Lisa's eccentric passion for birds made her a national figure, and her independent style, spunk, and wit in all she said and did was a hallmark of The Lisa Experience. She was best known for her home – Rocklands Bird Sanctuary and Feeding Station – near Anchovy, St. James. Here, by great patience, Lisa trained wild birds to be hand-fed, to the delight of multitudes of people that came from far and wide.

Lisa's close friend, Audrey Downer, remembers her: "Lisa was mad keen on animals. She wouldn't even use an oven when a mouse nested in it. To Lisa, bird shooters/hunters were the worst. She was a woman determined as she was fearless, packing her licensed .45 [caliber pistol] where-ever she went. Nothing was going to scare her."

Lisa's campaign against the hunting of birds was "fought" both on the local and international front, from the neighborhood young boys with their sling shots to as far afield as a letter to the Pope protesting the Italian practice of eating lark's tongues. In response, the Pope reportedly sent her a picture of himself.

Miss Lisa, as she was affectionately called, was an avian ecologist of no mean order. In her younger days, she spent extensive periods roaming western Jamaica observing, photographing, and taking detailed notes on all aspects of bird biology. She cared for abandoned nestlings and injured birds with the patience of a saint, calling many of them by name. But Lisa was much more than a researcher and bird lover. She was an educator, who invested much time and resources in using the print media, her artwork, and photographs to do bird education. In addition to giving slide shows at local schools and libraries, along with guided field trips, Lisa was a strong believer in teacher training.

The fame of Lisa Salmon, a woman who could coax beautiful hummingbirds to sit on the fingers of visitors to Rocklands, eventually spread internationally. Subsequently, Lisa's bird-feeding pastime was featured in numerous documentaries and publications from *Vogue* magazine, to *National Geographic*, to the BBC's – the "Really Wild Show." In its heyday from the 1950s to 1980s, Rocklands Bird Sanctuary and Feeding Station became one of the most popular tourist attractions in the Montego Bay area. Her porch and forest garden, the centers of her bird feeding activities, were graced by the presence of American Presidents, among other international heads of state, European royalty, and celebrities. "Everybody who was anybody who came to Jamaica went to see Lisa and her birds," her friend Audrey remembers. The late James Bond (author of *Birds of the West Indies*), who it is said was equally blunt and vivacious, also reportedly spent much time at Rocklands knocking heads with Lisa.

Lisa Salmon was a founding member of the Gosse Bird Club (now BirdLife Jamaica), the only Jamaican organization specifically interested in birds and their habitats, and one of the oldest environmental non-government organizations of the island. In recognition of her tremendous contribution to this organization, she was made an Honorary Member at the inaugural meeting of the Club in 1963. Beyond this, Lisa received many citations and awards from numerous organizations, among which are the Silver Musgrave Medal and the Centenary Medal from the Institute of Jamaica and a Grace Kennedy Award. She received citations from the Natural History Society of Jamaica, The Jamaica Tourist Board, The St. James Cultural Society, and the Anchovy Cultural Society. In addition, she was made an honorary member of the Natural History Society of Jamaica.

Lisa will be greatly missed by many, and her contribution to the knowledge and appreciation of our natural history will long be remembered.



# STATUS AND CONSERVATION OF WEST INDIAN SEABIRDS

EDITED BY E. A. SCHREIBER AND DAVID S. LEE

*Society of Caribbean Ornithology Special Publication No. 1*

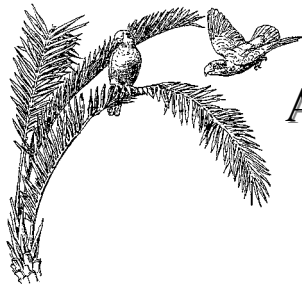
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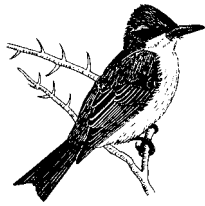
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