Wilson Bull., 99(4), 1987, pp. 579–600

THE BIRDS OF CAT ISLAND, BAHAMAS

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ABSTRACT.—Ninety-seven species of birds are recorded from Cat Island and immediately adjacent cays, 46 for the first time. No species or subspecies is endemic. Of the 47 probable breeding species, 23 are land birds (exclusive of hawks and the introduced Rock Dove [*Columba livia*]); 24 and 26 are predicted from island size and rainfall data, respectively. Nests, eggs, and young are reported for 27 species, 25 of them recorded breeding on Cat Island for the first time. Most of the indigenous breeding land birds are widespread in all terrestrial habitats; habitat preferences are pronounced in several. Most of the breeding species are widespread in the Bahamas generally, but the Bahama Yellowthroat (*Geothlypis rostrata*) and Red-legged Thrush (*Turdus plumbeus*) are not known to breed in the archipelago south of Cat Island. The resident race of the American Kestrel (*Falco sparverius*) is near the northern limits of its range there. The Bahama Mockingbird (*Mimus gundlachii*) is the most abundant land bird. *Received 17 Dec. 1986, accepted 20 Mar. 1987.*

Ornithologically, Cat Island is one of the least known among the main islands of the Bahamas. Its avifauna has never been reviewed systematically, previous reports being largely noncumulative lists of species with few annotations. The present study brings up-to-date all information on the distribution and status of the birds of Cat Island, including several offshore cays. It is based in large measure on my observations during 23 May–28 July 1986.

STUDY AREA

Cat Island (92 km long, 389 km^2; Ministry of Education 1985) is on the eastern side of the Great Bahama Bank, roughly in the middle part of the Bahama archipelago (Figs. 1 and 2). It is fringed by both rocky and sandy beaches, and by cliffs that reach ca 60 m high on the southern coast; no part is more than 4 km from the sea. Mount Alvernia (elev. 67 m), just inland from New Bight, is the highest land in the Bahamas. Small settlements (total population 2657; Ministry of Education 1985) and several resort and housing complexes occur on the western coast and at the southern end. A paved road connects all settlements, and several dirt roads and many footpaths traverse the island.

Climatological data for New Bight for the years 1952–1962 are given by Lind (1969). The average monthly temperatures ranged from 22.2°C in January to 28.3°C in August, the mean annual temperature being 25.6°C. Rainfall averaged 995.7 mm/year, with January and February the driest months (30.5 mm each) and September and October the wettest (231.1 mm each).

The vegetation on Cat Island is predominately scrubland and xeric-to-semimesic broadleaf woodland growing in shallow soils or directly on a limestone base pockmarked by caves and sinkholes. A long history of slash-and-burn agriculture has created a patchwork of 1–2 acre (occasionally larger) plots, which are either under cultivation or in different stages of

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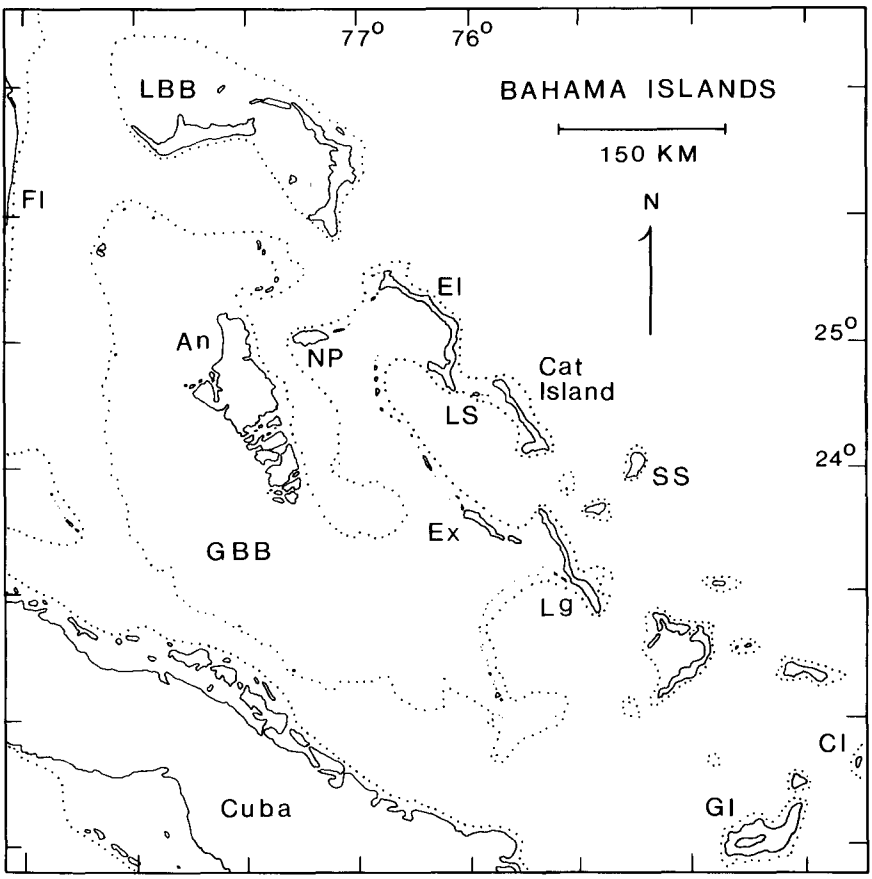

FIG. 1. Map showing the location of Cat Island and other Bahama Islands; dotted lines denote the 100-fathom contour. An = Andros, CI = Caicos Islands, El = Eleuthera, Ex = the Exumas, Fl = Florida, GBB = Great Bahama Bank, GI = Great Inagua, LBB = Little Bahama Bank, Lg = Long Island, LS = Little San Salvador, NP = New Providence, SS = San Salvador.

secondary succession. For the most part, the tallest trees (10–15 m) and the most extensive woodlands are on the sheltered slopes of the mainly north-south ridges. Stands of casuarinas (*Casuarina equisetifolia*) occur on the coast, being most numerous on the western side of the island. Mangroves are common in tidal creeks and along the shores of salt ponds, and small, temporary to semipermanent freshwater ponds, swamps, and marshes occur throughout. A comprehensive review of the vegetation is given in Byrne (1980).

ORNITHOLOGICAL HISTORY

The earliest surveys of the avifauna were made during wide-ranging expeditions that stopped only briefly on Cat Island: the *Albatross* Expedition, 11 March 1886 (Ridgway

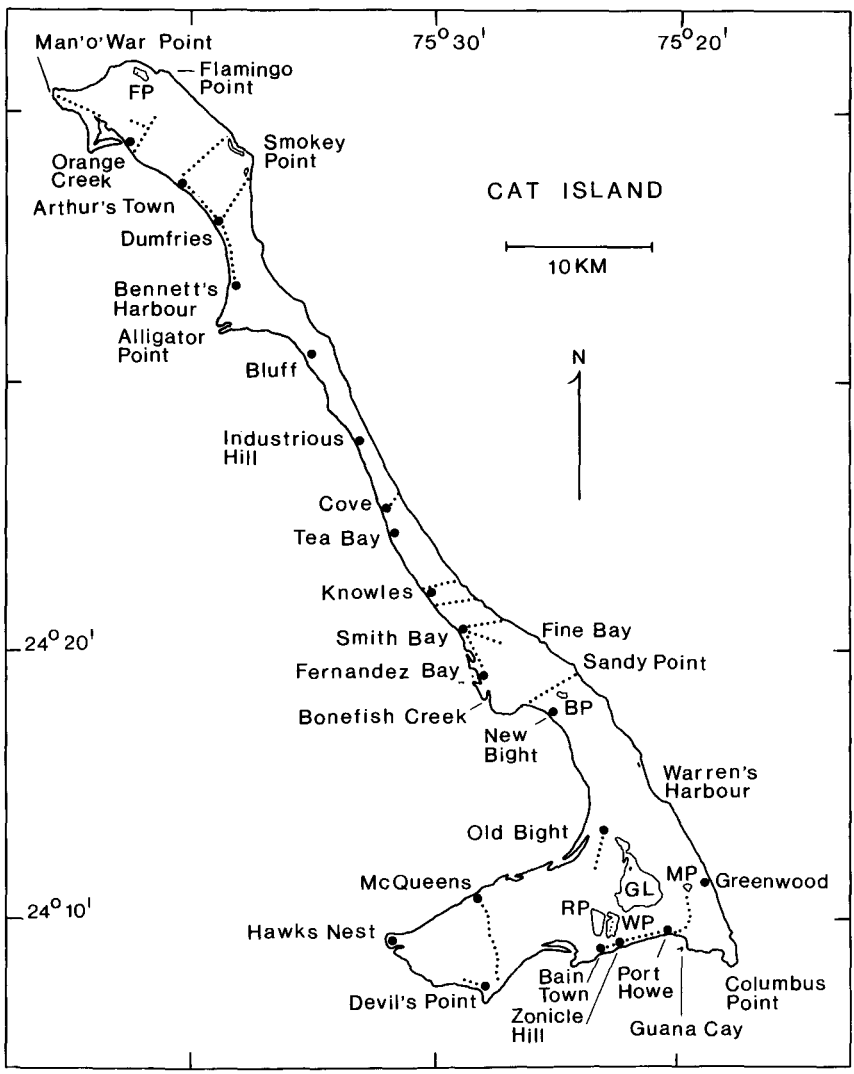

FIG. 2. Map of Cat Island. Large dots indicate settlements and resort-housing complexes; dotted lines show routes followed on census walks. BP = Brine Pond, FP = Flamingo Pond, GL = Gambier Lake, MP = McKinney Pond, RP = Red Pond, WP = White Pond.

1891); the Geographical Society of Baltimore Expedition, 9 July 1903 (Riley 1905); and the Carnegie Museum Expedition, 25–26 January and 6–7 April 1909 (Todd and Worthington 1911). Additionally, several specimens were collected by J. Percy Moore in November 1890 and deposited in the Academy of Natural Sciences of Philadelphia (M. Robbins, in litt.).

Paulson (1966) added 17 species to the birds known from Cat Island, based on his

observations during 27 November–2 December 1963, and he presented additional records for five others, thus providing the most comprehensive previous report on the avifauna. Schwartz (1970) reviewed *Geothlypis rostrata* and listed all the specimens known from Cat Island. The only other reports on the birds of Cat Island appear to be the brief comments and several new records mentioned in supplements to Bond's check-lists of West Indian birds (Bond 1951, 1957, 1959, 1978, 1980, 1982) and one questionable sight record of *Rissa tridactyla* (see Norton 1984). Also, Sprunt (1984) recorded *Sterna anaethetus* nesting on Port Howe Rock (=Guana Cay). Undated sight records by R. W. Hanlon (in Bond 1959) presumably are for 1958.

Many new locality records in the present study were contributed by James Perran Ross and Sarah Fay Baird who visited Cat Island in April, May, August, and December 1982. See Acknowledgments for other contributors. Specimens that I collected during a brief visit on 2 and 3 March 1968 and those collected by Paulson in 1963 were deposited in the Albert Schwartz Collection (Louisiana State University Museum of Zoology). Those that I collected in 1986 are in the Museum of Comparative Zoology, Harvard University.

METHODS

English names and binomials are those of the American Ornithologists' Union (1983). Subspecies are mentioned only in selected cases and are from Bond (1956), unless indicated otherwise. Abbreviations of names of observers are AS = Alexander Sprunt, DWB = Donald W. Buden, JPR and SFB = James Perran Ross and Sarah Fay Baird, and PM and MM = Peter and Madeleine Mann. Abundance is based largely on numbers of individuals usually seen during a day in the field: VC = very common, 30 or more/day; C = common, 15–30/day, FC = fairly common, 5–15/day, UC = uncommon, 1–5 on most days but not seen every day; S = scarce, 5–15/season; and R = rare, 1–5/season.

Residents occur year-round and breed on the island; summer visitors breed on the island but are less numerous or absent in winter. Nonbreeding visitors are mainly winter visitors and transients from continental North America, but include birds that occur in smaller numbers throughout the summer but do not breed, birds that are known to breed on other Bahama Islands, and those that are occasional visitors or vagrants to the Bahamas generally. Introduced birds are those established on the island by humans. In view of the brief and scanty winter surveys—and only one extensive summer survey—I have not attempted to distinguish among the different kinds of nonbreeding visitors. That many herons and shorebirds are unrecorded during autumn, winter, and spring, for example, almost certainly is an artifact of sampling. In some cases where records for Cat Island are especially scanty, "probable" or "possible" status is inferred from records for nearby islands, relying largely on Bond (1956), Brudenell-Bruce (1975), and Connor and Loftin (1985).

Census counts were obtained by recording all birds seen and heard during 17 rapid walks (ca 3 km/h) covering 64 km along trails and roadsides during 30 May–21 July 1986 between 05:30 and 14:00 h (Table 1). Scrublands and woodlands, together with small patches of cultivation, account for about 90% of the total area surveyed, roughly proportional to the amount of area they cover on the island. Settlements account for about 5%, which is slightly more than their proportional area of the island, and mangroves, stands of casuarinas, and the edges of marshes or savannahs account for most of the remainder (ca 5%). Distances were estimated from Bahamas Government Maps (BLS series 318, scale 1:25,000).

Species-area and species-rainfall equations for calculating the predicted number of land bird species (excluding hawks) are $\log S = 0.970 + 0.160(\log A)$ and $S = -3.278 + 0.029(R)$, where S = species and A and R = island size and rainfall, respectively. The constants are from the equations for numbers of land birds on 11 Bahama Islands, not including Cat Island (Buden 1987).

All previous records are included for nonbreeding visitors; rare, scarce, and uncommon residents; and species whose status is uncertain. A species recorded on Cat Island for the first time is indicated by an asterisk.

SPECIES ACCOUNTS

Least Grebe (*Tachybaptus dominicus*).—Uncommon to fairly common resident. Usually seen at freshwater ponds with dense, emergent, weedy vegetation; occasionally on salt ponds. Breeding.—A half-grown young in a temporary freshwater pond, 3 km east of Smith Bay, 7 July 1986 (DWB); a nest with 4 eggs at a freshwater pond, 1 km north of Sandy Point, 8 July 1986 (DWB); an abandoned nest with 1 egg at a dried-out "saw grass pond," 0.5 km south of Gambier Lake, 23 July 1986 (DWB); a half-grown young collected 1 December 1963 (Paulson 1966).

White-tailed Tropic-bird (*Phaethon lepturus*).*—Status uncertain; possibly a summer visitor breeding in coastal cliffs and ledges. Three were seen off the highest cliffs between Port Howe and Columbus Point, 3 July 1986 (DWB), and one on the eastern coast opposite Knowles, 11 August 1982 (JPR and SFB).

Brown Pelican (*Pelecanus occidentalis*).*—Nonbreeding visitor. One was seen feeding close to shore near Flamingo Point, 12 July 1986 (DWB), and another seen at Hawks Nest Creek, August 1986 (C. Bostock and A. Chisholm).

Double-crested Cormorant (*Phalacrocorax auritus*) and Olivaceous Cormorant (*P. olivaceus*).—The status of these two species can not be assessed properly at this time because of insufficient data and records that pose more questions than they answer. The first mention of cormorants on Cat was by W. W. Worthington (in Todd and Worthington 1911) who included without comment "? Cat Island" among his locality records for *Phalacrocorax vigua* (=*olivaceus*). Bond (1956) reported *P. auritus* from "Cat Island (?)" probably inadvertently as the three previous editions of his check-list all mention a doubtful observation of *P. olivaceus* on Cat (presumably referring to Worthington's record), and none mentions *P. auritus* there. Later, sightings by J. R. Miller during the 1970s led Bond (1980) to suggest there was probably a colony of *P. olivaceus* on Cat Island. Miller (in litt.) recorded nests of *P. olivaceus* in December 1976 and on 15 December 1978.

I saw cormorants frequently at salt ponds during May–July 1986—maximum 85 together, Gambier Lake, 26 June. They were wary and generally did not allow close approach, but many of those observed through field glasses clearly showed the white facial border characteristic of *P. olivaceus*. The only specimens are bones of three individuals I found as partial skeletons on the shore of Gambier Lake, 26 June 1986. Storrs Olson (in litt.) considered two of them *P. auritus floridanus* and tentatively

assigned the other to an undescribed, diminutive subspecies of *P. auritus* known elsewhere only from San Salvador (see also Bond 1986). A resident of Zonicle Hill told me cormorants nested on islands in White Pond, usually beginning in August. I saw several cormorants (no nests) at the pond in July 1986, but was unable to visit the islands.

Magnificent Frigatebird (*Fregata magnificens*).—Nonbreeding visitor. Seen soaring high and offshore occasionally during June–July 1986 (DWB), and recorded during January and April 1908 (Todd and Worthington 1911) and on 9 July 1903 (Riley 1905). Widespread in the Bahamas generally, breeding on remote cays (Brudenell-Bruce 1975).

Great Blue Heron (*Ardea herodias*).*—Probably a nonbreeding visitor. Only four records: one seen in a tidal creek at Port Howe, 1 June 1986, another at Gambier Lake, 26 June 1986 (DWB); one seen at Tea Bay ponds, May 1982 (JPR and SFB); a skull and several limb bones collected at a "saw grass pond," 0.5 km south of Gambier Lake, 23 July 1986 (DWB).

Great Egret (*Casmerodius albus*).*—Status uncertain; possibly a rare breeder. No more than five seen during 23 May–28 July 1986 (DWB).

Snowy Egret (*Egretta thula*).*—Status uncertain; possibly a rare breeder. One seen at a salt pond south of Smokey Point, 12 June 1986 (DWB), another at Tea Bay ponds, 28 April 1982 (JPR and SFB).

Little Blue Heron (*Egretta caerulea*).*—Status uncertain; possibly a rare breeder. One immature seen in a tidal creek at New Bight, 23 May 1986 (DWB); one seen in a salt marsh at Smith Bay, 12 August 1982 (JPR and SFB).

Tricolored Heron (*Egretta tricolor*).*—Fairly common resident. Usually seen at salt ponds and tidal creeks. Breeding.—Colony, ca 50 adults and fledged young, 10–15 flightless young, many old nests, and 10 with 1–3 (mainly 2) eggs each, island at northern end of Gambier Lake, 26 June 1986 (DWB).

Reddish Egret (*Egretta rufescens*).*—Scarce summer visitor or resident. No more than five or six seen during June and July 1986, all of them white phase (DWB). Breeding.—A nest with 3 eggs, island at northern end of Gambier Lake, 26 June 1986 (DWB).

Cattle Egret (*Bubulcus ibis*).—Status uncertain; possibly breeding. Two seen during 27 November–2 December 1963 (Paulson 1966)—the first records; 2 seen, Alligator Point, 11 May 1981 (AS); 3 seen near airstrip at Arthur's Town, 11 June 1986, and 1 near Smith Bay, 4 July 1986 (DWB).

Green-backed Heron (*Butorides striatus*).*—Common resident and the most numerous heron. Found in all aquatic habitats and occasionally seen in scrublands far from water. Breeding (all records are 1986 [DWB]).—

Colony, 5 nests occupied by adults, salt pond north of Warren's Harbour, 28 May; a nest with 1 egg, mangrove flats at Fernandez Creek, 6 June; 4 nests (3 with 3 downy young each, 1 with 2 eggs), island at southern end of salt pond, north of Smokey Point, 12 June; colony, at least 6 pairs, some nests deep in patches of cactus (*Opuntia* sp.), eggs and young, island at northern end of Gambier Lake, 22 June; a nest with 3 eggs and another with 2, Guana Cay, off Port Howe, 3 July; 6 nests (2 with 2 eggs, 1 with 3 eggs, 1 with 1 egg and 2 nestlings, 1 with 1 nestling, 1 with 3 nestlings), island in Flamingo Pond, just west of Flamingo Point, 12 July. Most of the nests I saw were 1–3 m high in buttonwood trees (*Conocarpus erecta*), and most were over water.

Yellow-crowned Night-Heron (*Nycticorax violaceus*).*—Uncommon to fairly common resident; breeding is undocumented. Found mainly in aquatic habitats but seen also on roadsides and in cultivated areas (especially at night) and in scrublands and woodlands throughout. Approximately one fourth of those I saw during May–July 1986 were immatures.

Glossy Ibis (*Plegadis falcinellus*).*—Nonbreeding visitor. One seen at a salt marsh at Smith Bay, 12 and 23 August 1982 (JPR and SFB). There are few records for the Bahamas generally, though Brudenell-Bruce (1975) considers it an "uncommon passage migrant and vagrant" of regular occurrence on New Providence, and Connor and Loftin (1985) consider it a "sporadic visitor" on Eleuthera during autumn, winter, and spring.

Greater Flamingo (*Phoenicopterus ruber*).—Nonbreeding visitor. One photographed, 21–22 December 1976 (Miller in litt., Bond 1978).

West Indian Whistling-Duck (*Dendrocygna arborea*).*—Uncommon to fairly common resident, but breeding is undocumented. I saw and heard *D. arborea* in the southern half of Cat Island at freshwater ponds, in cultivated areas, and in flight regularly at night during May–July 1986. A pair seen on a rain-flooded trail 1.5 km east of McQueens during midafternoon, 19 June, is my only daytime record. One female with slightly enlarged follicles was collected (DWB) at a temporary freshwater pond 3 km east of Smith Bay, 22 June, and two individuals were hit by a car near New Bight, mid-June, but neither was collected (F. Major, pers. comm.). Villagers throughout the island consider *D. arborea* a permanent resident and an agricultural pest that feeds on corn and other crops.

White-cheeked Pintail (*Anas bahamensis*).*—Uncommon to fairly common resident at ponds and lakes throughout—maximum 10 together at McKinney Pond, 19 August 1982 (JPR and SFB). Breeding is undocumented, though many I saw during May–July 1986 were paired. Three "pairs" seen at Tea Bay ponds in December 1982 (JPR and SFB) are the only winter records.

Ruddy Duck (*Oxyura jamaicensis*).*—Status uncertain; possibly a rare

breeder. The four I saw at White Pond on 1 July 1986 are the only records. *O. jamaicensis* is an "uncommon permanent resident" and documented breeder on Eleuthera (Connor and Loftin 1985) and has been recorded elsewhere in the Bahamas previously only on New Providence, San Salvador, and Great Inagua (Brudenell-Bruce 1975).

Osprey (*Pandion haliaetus*).—Rare resident. A "pair" was seen at Flamingo Point, 17 May 1986, but no nest was found (AS). One example of the "West Indian subspecies," *P. h. ridgwayi,* was seen 27 May 1986, and one (possibly same bird) was seen 18 June 1986, both 1.5 km north of Fine Bay (DWB). Worthington (in Todd and Worthington 1911) recorded a *P. h. ridgwayi* seen at The Bight (=New Bight) 26 January 1909. Breeding.—A nest on a small cay at the entrance to Hawks Nest Creek contained eggs in 1978, but it has not been used in recent years (PM). I was told there were other nests on the coast between Hawks Nest Creek and Port Howe, but I found none. The darker headed, "continental race," *P. h. carolinensis* occurs widely in the Bahamas and the Antilles in winter and in passage (Bond 1956, Santana and Temple 1987) and may be expected to occur on Cat Island at times.

American Kestrel (*Falco sparverius*).—Uncommon resident (*F. s. sparveroides*) and a nonbreeding visitor (*F. s. sparverius*). The residents are most numerous in coconut (*Cocos*) groves in and near settlements. Breeding.—Several territorial birds (all very vocal, some swooping in attack) apparently were nesting in the crowns of coconut trees in Port Howe, Old Bight, New Bight, and Arthur's Town during May–July 1986 (DWB). I collected one *F. s. sparveroides* on 24 May 1986. This and all other kestrels I saw had snowy-white breasts characteristic of the pale phase of the "Cuban subspecies," which was reported on Cat Island first by Bond (1980) who based his remarks on sight records by J. R. Miller. Kestrels have been known as residents in the Bahamas only since 1960 (Schwartz and Klinikowski 1963), and Eleuthera is the northernmost record for *F. s. sparveroides* (see Bond 1986). Examples of the nominate race occur in the Bahamas in winter (Bond 1956); Paulson (1966) recorded the only one seen on Cat Island.

Clapper Rail (*Rallus longirostris*).—Probably a fairly common resident in mangrove swamps throughout. Heard calling from mangroves "on several occasions" during 27 November–2 December 1963 (Paulson 1966), and heard calling in the vicinity of tidal creeks regularly during May–July 1986 (DWB). No sightings and no other records.

Purple Gallinule (*Porphyrula martinica*).*—Probably a nonbreeding visitor. One collected dead (flattened) on the road between Fernandez Bay and New Bight, 24 July 1986 (DWB).

Common Moorhen (*Gallinula chloropus*).*—Scarce resident. Usually

seen in freshwater or slightly brackish ponds. Breeding.—Four half-grown young seen at a pond at the northern end of Tea Bay, 5 July 1986 (DWB).

American Coot (*Fulica americana*).*—Probably a fairly common nonbreeding visitor at ponds and lakes during winter, and possibly resident in small numbers. A flock of 15 was seen at the Tea Bay ponds in December 1982 (JPR and SFB). Local villagers told me coots were much more numerous in winter than summer. I saw only seven at three different localities in May and June 1986, and none in July.

Black-bellied Plover (*Pluvialis squatarola*).*—Nonbreeding visitor. Seen on beaches and tidal flats occasionally during May–July 1986 (DWB) and in August 1982 (JPR and SFB).

Wilson's Plover (*Charadrius wilsonia*).*—Probably a fairly common summer visitor, and possibly resident in small numbers. Usually seen on beaches and tidal flats and at shallow salt ponds. Recorded May–July 1986 (DWB) and August 1982 (JPR and SFB). Breeding.—Two downy young on a gravel causeway at Fernandez Creek, 18 June 1986, and two others on a sandy beach at Fine Bay, 21 June 1986 (DWB). There are no winter records of this plover for Cat Island, but Brudenell-Bruce (1975) considers it a "fairly common summer visitor" and a "rare resident or winter visitor" on New Providence, and Connor and Loftin (1985) state it is more common in summer than winter on Eleuthera.

Semipalmated Plover (*Charadrius semipalmatus*).*—Nonbreeding visitor. Two seen at Flamingo Pond, 18 May 1986 (AS), and five together at Tea Bay ponds, 15 August 1982 (JPR and SFB).

Killdeer (*Charadrius vociferus*).*—Uncommon to fairly common and probably resident. Observed in sparsely vegetated wet areas, including roadside puddles and rain-flooded yards during June–July 1986 (DWB). One that I collected (19 June) from among six on a beach at McQueens is a female *C. v. ternominatus* that had enlarged follicles. One seen on 9 July 1903 (Riley 1905), and one on 10 August 1982 (JPR and SFB) probably also were examples of the resident "West Indian subspecies." The nominate race may occur in winter and in passage, but I consider Worthington's sight record (in Todd and Worthington 1911) inconclusive.

American Oystercatcher (*Haematopus palliatus*).*—Probably an uncommon resident, but no winter records and breeding is undocumented. Pairs and single birds were seen on beaches (mainly at rocky headlands) regularly during May–July 1986 (DWB), and one was seen at Fernandez Creek, 14 August 1982 (JPR and SFB).

Black-necked Stilt (*Himantopus mexicanus*).*—Common summer visitor. Usually seen at salt ponds and in open areas in mangrove swamps. Breeding.—Eight nests (7 with 4 eggs, 1 with 2 eggs), 22 April 1984 (PM and MM), and 3 nests (2 with 4 eggs, 1 with 2 eggs) along with several

flightless young, 28 May 1986 (DWB), all at a pond north of Warren's Harbour; "4 pairs nesting," Tea Bay ponds, 1 May 1982 (JPR and SFB).

Greater Yellowlegs (*Tringa melanoleuca*).*—Nonbreeding visitor. Usually seen at ponds and tidal flats. Three were seen on 12 June, two on 19 June, two on 1 July, and one on 14 July, all 1986 and at different localities (DWB); one seen 12 August, another on 19 August 1982 (JPR and SFB).

Lesser Yellowlegs (*Tringa flavipes*).*—Nonbreeding visitor. Usually seen at ponds and tidal flats. Six were seen at Tea Bay ponds, and 2 others at Smith Bay, 14 July 1986 (DWB); recorded also on 2 May 1982 (JPR and SFB).

Willet (*Catoptrophorus semipalmatus*).*—Fairly common and probably resident, but no winter records and breeding is undocumented. Often seen at salt ponds and tidal flats, and occasionally on sandy and rocky beaches. All records are May–July 1986 (DWB) and August 1982 (JPR and SFB). Brudenell-Bruce (1975) considers it a "common resident" on most Bahama Islands, and Connor and Loftin (1985) state it is an "uncommon permanent resident" on Eleuthera.

Spotted Sandpiper (*Actitis macularia*).*—Nonbreeding visitor. Single birds seen 24 May, 14 July, and 18 July 1986 (DWB); "common at pond margins" in August 1982 (JPR and SFB).

Ruddy Turnstone (*Arenaria interpres*).*—Nonbreeding visitor. Seen frequently in small flocks of 5–10 on sandy and rocky beaches during May–July 1986 (DWB), and recorded in August 1982 (JPR and SFB). Presumably more numerous in winter, but no records.

Least Sandpiper (*Calidris minutilla*).*—Nonbreeding visitor. Five seen at Tea Bay ponds, 15 August 1982 (JPR and SFB).

Pectoral Sandpiper (*Calidris melanotus*).*—Nonbreeding visitor. An unspecified number seen at Tea Bay ponds, 11 August 1982 (JPR and SFB).

Short-billed Dowitcher (*Limnodromus griseus*).—Nonbreeding visitor. Sight records only: "large flock," Bennett's Harbour, 11 January 1957 (Bond 1957); one at Gambier Lake, 24 July 1986 (DWB); "dowitchers" (presumably *L. griseus*), Fernandez Creek, 14 August 1982, and at McKinney Pond, 19 August 1982 (JPR and SFB).

Laughing Gull (*Larus atricilla*).—Common to very common resident. Frequently seen on beaches and at salt ponds. Breeding.—Colony, ca 200 adults and 30 flightless young, island at northern end of Gambier Lake, 26 June 1986 (DWB).

Black-legged Kittiwake (*Rissa tridactyla*).—I consider the only record of two seen on 14 February 1984 (Norton 1984) in need of confirmation.

Gull-billed Tern (*Sterna nilotica*).*—Common to very common summer visitor. Usually seen at salt ponds and less frequently along the coast.

Breeding.—Colony, 75–100 adults, 25 nests (8 with 2 eggs, 5 with 3 eggs, 5 with 1 egg, 3 with 1 egg and 1 nestling, 1 with 1 egg and 2 nestlings, 1 with 2 eggs and 1 nestling, 1 with 2 nestlings, 1 with 3 nestlings), all on mud islands at the northern end of a salt pond north of Smokey Point, 11 June 1986 (ca 100 adults and recently fledged young, plus 5 nests with 1–3 eggs each and another with 1 egg and 1 nestling, same colony, 11 July 1986) (DWB); colony, ca 25 adults, 12 nests (5 with 2 eggs, 3 with 3 eggs, 3 with 1 egg, 1 with 2 eggs and 1 nestling), Brine Pond, east of New Bight, 16 June 1986 (DWB); colony, ca 50 adults, 13 downy young, 17 eggs, island at northern end of Gambier Lake, 26 June 1986 (DWB); ca 20 adults and 1 nest with 1 egg, Red Pond, north of Bain Town, 1 July 1986 (DWB); adult feeding a juvenile at Tea Bay ponds, 7–10 August 1982 (JPR and SFB).

Royal Tern (*Sterna maxima*).*—Uncommon generally and probably resident, but no winter records. Single birds and groups of 2–15 seen occasionally on beaches and tidal flats and at salt ponds during May–July 1986 (DWB). Breeding.—Colony, ca 100 adults, 50 downy young, and 10 nest "scrapes" with 1 egg each, island at northern end of Gambier Lake, 26 June 1986 (DWB).

Roseate Tern (*Sterna dougallii*).*—Probably a scarce summer visitor. Breeding.—Three pairs with 1 egg each, East Fernandez Cay, Fernandez Bay, 15 June 1986 (DWB); several individuals were seen at Flamingo Pond, 12 July 1986 (DWB).

Least Tern (*Sterna albifrons*).*—Fairly common summer visitor. Most numerous at salt ponds. Breeding (all records are 1986 [DWB]).—Colony, 15–20 adults, 6 clutches (4 with 2 eggs, 2 with 1 egg and 1 downy young), on flat rocks at southern end of salt pond north of Smokey Point, 11 June; pair copulating on sandbar, entrance to Bonefish Creek, 15 June; colony, 15–20 adults, 2 clutches (1 with 3 eggs, 1 with 1 egg), on flat rocks at northern end of Gambier Lake, 26 June.

Bridled Tern (*Sterna anaethetus*).—Common summer visitor. Usually seen in small colonies on the offshore cays, but seldom occurring on the "mainland." Breeding.—Twelve adults, 3 eggs, and 1 nestling on an unnamed cay 300 m offshore, Fernandez Bay, 15 June 1986 (DWB); 20–30 adults, 9 eggs, and 6 nestlings, East and West Fernandez cays, 15 June 1986 (DWB); ca 50 adults, 2 eggs, Guana Cay, off Port Howe, 3 July 1986 (DWB); "nesting," Port Howe Rock (=Guana Cay) (Sprunt 1984). All the clutches I found were comprised of one egg or nestling each, and they were on bare rock or pockets of sandy soil on ledges and cliffs.

Sooty Tern (*Sterna fuscata*).*—Probably a nonbreeding visitor, but nesting in large numbers in the Little San Salvador cays, ca 10 km east of Orange Creek (see Sprunt 1984). The only record for Cat Island is a

moribund individual I collected on a sandy beach north of Warren's Harbour, 30 June 1986.

Brown Noddy (*Anous stolidus*).*—Status uncertain. Possibly a summer visitor breeding on outlying cays. I saw ca 75 on Guana Cay and 10–15 on ledges at Columbus Point, 3 July 1986, but no evidence of nesting.

Rock Dove (*Columba livia*).*—Introduced. Uncommon and seen only in the settlements during May–July 1986 (DWB).

White-crowned Pigeon (*Columba leucocephala*).—Common to very common resident; more numerous in summer than in winter. Usually seen in coastal woodlands and mangrove swamps. Breeding (all records are 1986 [DWB]).—Two nests (1 with 3 eggs, 1 with 2 eggs), 6 June, and another with 2 eggs, 15 June, Fernandez Creek; a nest with 1 egg, East Fernandez Cay, Fernandez Bay, 15 June; a nest with 2 eggs, Bonefish Creek, 15 June; a nest with 2 eggs, Guana Cay, 3 July; many probable breeders heard calling and seen flying to and from islands at White Pond, north of Zonicle Hill, 1 July.

Zenaida Dove (*Zenaida aurita*).—Fairly common resident. Most numerous in cultivated areas. Breeding.—Eight nests with 2 eggs each, 29 May–8 July 1986, and 1 with 1 egg and another with 2 nestlings, 16 June 1986 (DWB). One of the nests was a grass-lined depression on the ground. The nine others were shallow bowls of twigs lined sparsely with leaves and were 1–4 m high in bushes and trees.

Mourning Dove (*Zenaida macroura*).—Status uncertain. Possibly a nonbreeding visitor or rare resident or both. Three sight records of single birds: during 27 November–2 December 1963 (Paulson 1966); Bennett's Harbour, 14 June 1986 (DWB); Old Bight, 13 August 1982 (JPR and SFB). That I saw only one during 23 May–28 July 1986 suggests nonbreeding visitor status only, but *Z. macroura* is widespread in the Bahamas and has been recorded breeding at least on New Providence (Bonhote 1903, Brudenell-Bruce 1975). Connor and Loftin (1985) consider it a "common permanent resident" on Eleuthera.

Common Ground-Dove (*Columbina passerina*).—Common resident. Most numerous in cultivated areas and along roadsides. Breeding.—Eight nests (4 with 2 eggs, 4 with 1 egg), 6 June–9 July 1986 (DWB).

Key West Quail-Dove (*Geotrygon chrysia*).*—Scarce resident. I saw no more than eight *G. chrysia* during 23 May–28 July 1986. All were in xeric woodlands and at three different localities—3 km southeast of Smith Bay, at Fernandez Bay, and between Port Howe and Gambier Lake.

Mangrove Cuckoo (*Coccyzus minor*).—Fairly common resident, but breeding is undocumented. Most numerous in scrublands and dense woodlands, and more often heard than seen.

Smooth-billed Ani (*Crotophaga ani*).*—Fairly common resident. Usu-

ally seen in scrublands, often in groups of 2–15. Breeding.—A pair at a nest of sticks and twigs, ca 6 m high in a dead tree between Tea Bay and Knowles, 14 July 1986 (DWB).

Common Barn-Owl (*Tyto alba*).*—Status uncertain, but probably a rare resident. One was heard calling and seen flying shortly after sunset 2.5 km east of Smith Bay, 20 June 1986 (DWB), and another was hit by a car at night in 1980 (F. Major, pers. comm.). In view of the availability of apparently suitable breeding sites (many caves and sinkholes) and food (rats, mice, and small birds), the scarcity of *T. alba* on Cat Island is unexpected. It is a fairly common resident on many Bahama Islands, including the Caicos Bank.

Burrowing Owl (*Athene cunicularia*).—Uncommon to fairly common resident. Usually seen in cultivated fields and open areas generally; active during day and night. Most numerous in the fields between Smith Bay and Old Bight—maximum six together east of Old Bight, 28 May 1986, and east of Smith Bay, 1 June 1986 (DWB). Breeding is not confirmed, but I saw four individuals near the entrance to a burrow in sandy soil in a grassy and weedy swale 200 m from the beach at the northern end of New Bight, 23 May 1986.

Antillean Nighthawk (*Chordeiles gundlachii*).*—Common summer visitor. Usually seen hawking for insects at dawn and dusk, mainly over roadways and coastal scrub. Maximum 15 together, Arthur's Town, 10 June 1986 (DWB). Breeding (all records are 1986 [DWB]).—Five eggs (28 May, 26 June, 3, 21, and 24 July) and 4 nestlings (21 and 30 June, 1 and 16 July). All nine "nests" were on the ground in sparsely vegetated areas, mainly beaches and the open shorelines of salt ponds.

Bahama Woodstar (*Calliphlox evelynae*).—Fairly common resident in terrestrial habitats throughout. Breeding.—A nest with 2 eggs, 20 June 1986 (DWB).

Belted Kingfisher (*Ceryle alcyon*).*—Nonbreeding visitor. Occurs regularly in winter (PM and MM), and one seen at Tea Bay ponds, 10 August 1982 (JPR and SFB).

Greater Antillean Pewee (*Contopus caribaeus*).—Uncommon resident. Seen and heard calling from the tops of tall trees in scrublands and woodlands regularly during June and July 1986, and one specimen (*C. c. bahamensis*) collected 14 June 1986 (DWB). The only other record is one collected 28 November 1963 by D. R. Paulson who saw no others during 27 November–2 December (Paulson 1966).

Eastern Kingbird (*Tyrannus tyrannus*).—Nonbreeding visitor. A sight record for 4 July by R. W. Hanlon (Bond 1959).

Gray Kingbird (*Tyrannus dominicensis*).—Common to very common summer visitor. Most numerous in settlements and coastal stands of

casuarinas. Frequently heard calling from the tops of tall trees and on telephone lines, and often beginning an hour or more before sunrise. Breeding.—Eight active nests (1 with 3 eggs on 16 June, another with 3 nestlings on 11 July), most of the 3–15 m up in trees (mainly casuarinas), all 7 June–23 July 1986 (DWB).

Barn Swallow (*Hirundo rustica*).—Nonbreeding visitor. No more than a few seen during 27 November–2 December 1963 (Paulson 1966), and a flock of 10–15 seen at Sandy Point, 17 May 1986 (AS).

Hermit Thrush (*Catharus guttatus*).—Nonbreeding visitor. One seen 18 December 1976 (Miller in litt., Bond 1978).

Red-legged Thrush (*Turdus plumbeus*).—Uncommon to fairly common resident. Usually seen in woodlands and dense scrublands, occasionally in trees in open, cultivated areas and in settlements. Many of those I saw during May–July 1986 were singing from exposed perches and several were feeding on both fallen and attached figs (*Ficus*). I collected two *T. p. plumbeus* on 3 March 1968, and two others on 28 May and 8 July 1986. The Red-legged Thrush has been recorded previously on Cat Island only by Riley (1905) who said it was "found sparingly."

Northern Mockingbird (*Mimus polyglottos*).—Scarce to uncommon resident and rarely seen outside the settlements. First recorded on Cat Island by R. W. Hanlon, presumably in 1958 (see Bond 1959). The only other records are a few individuals seen during 27 November–2 December 1963 (Paulson 1966), 10–15 seen during May–July 1986 (DWB), and several seen in August 1982 (JPR and SFB). Breeding.—A nest with 4 eggs 2 m high in a thorny tree in a vacant yard, Industrious Hill, 14 July 1986 (DWB).

Bahama Mockingbird (*Mimus gundlachii*).—Very common resident in terrestrial habitats throughout; the most abundant land bird. Breeding (all records are 1986 [DWB]).—Three nests under construction, 30 May, 15 June, and 20 June; 3 nests with 2 eggs each, 26 June, 13 July, and 20 July; 2 nests with 3 eggs, 2 and 11 July; 1 nest with 1 egg and 1 nestling, 13 June; 1 nest with 2 nestlings, 7 July; 1 nest with 3 nestlings, 14 July. Two of the 11 active nests I found were on the ground; the nine others were 1–3 m high in trees and bushes. Ten were constructed largely of sticks and lined sparsely with thinner twigs and occasionally grasses. One was made entirely of grasses and was on the ground near the edge of the tarmac on the New Bight airstrip. The eggs were pale, bluish-gray or bluish-white with dark brown spots and streaks, the markings being especially dense at the larger end. The mouth-linings of two nestlings were vivid yellow.

Pearly-eyed Thrasher (*Margarops fuscatus*).—Nonbreeding visitor. The only record is one bird seen in late November 1963 (Paulson 1966).

Although *M. fuscatus* has been recorded occasionally on the Great Bahama Bank (Eleuthera, Great Exuma, Cat, and Long islands), it apparently is not established there (see Paulson 1966, Bond 1977, 1978, 1980). It is common in the southern Bahamas and breeds as far north as San Salvador (Paulson 1966, Miller 1978).

Water Pipit (*Anthus spinoletta*).—Nonbreeding visitor. One photographed 23 December 1976 (Miller, in litt., Bond 1977).

European Starling (*Sturnus vulgaris*).—Probably a nonbreeding visitor. Ten seen 29 November 1963 (Paulson 1966). Becoming increasingly more numerous in the northern Bahamas in recent years, mainly during autumn and winter (Brudenell-Bruce 1975, Connor and Loftin 1985), but no evidence of breeding.

White-eyed Vireo (*Vireo griseus*).*—Nonbreeding visitor. One seen at Tea Bay, April 1982 (JPR and SFB).

Thick-billed Vireo (*Vireo crassirostris*).—Very common resident. Most numerous in woodlands and dense scrublands. Breeding.—Two nests with 2 eggs, 7 and 14 June 1986, and 2 others with 3 eggs, 31 May and 13 July 1986 (DWB).

Black-whiskered Vireo (*Vireo altiloquus*).*—Uncommon summer visitor. Most numerous in woodlands, and usually high in the canopy. Breeding not confirmed, but many I saw during May–July 1986 were paired.

Blue-winged Warbler (*Vermivora pinus*).—Nonbreeding visitor. One collected 28 November 1963 (Paulson 1966). The lack of winter records of this and other warbler species should not suggest that many are not common during that season.

Yellow Warbler (*Dendroica petechia*).*—Uncommon and presumably resident. Occurring in mangrove swamps and immediately adjacent scrub. Seen and heard singing during June and July 1986 (DWB) and August 1982 (JPR and SFB). Breeding (all records are 1986 [DWB]).—Two nests, both ca 1 m high in the tops of small black mangroves (*Avicennia nitida*): 1 with 3 eggs (Fernandez Creek, 6 June), the other empty (1 km east of McQueens, 16 June); 2 or 3 recently fledged young soliciting food from an adult at Old Bight, 20 June. No specimens were collected, but all records presumably are the resident "Cuban-Bahaman subspecies," *D. p. gundlachii,* which occurs also in the Florida Keys.

Magnolia Warbler (*Dendroica magnolia*).—Nonbreeding visitor. Two seen (one collected) during 27 November–2 December 1963 (Paulson 1966).

Yellow-throated Warbler (*Dendroica dominica*).*—Nonbreeding visitor. One seen at Fernandez Bay, 16 August (JPR and SFB).

Kirtland's Warbler (*Dendroica kirtlandii*).—Nonbreeding visitor. One specimen (Academy of Natural Sciences, Philadelphia, number 48134)

collected 20 November 1890 by J. Percy Moore (M. Robbins, in litt., see also Bond 1951).

Prairie Warbler (*Dendroica discolor*).—Nonbreeding visitor. Eleven collected 11 March 1886 (Ridgway 1891); two collected in November 1890 by J. Percy Moore.

Palm Warbler (*Dendroica palmarum*).—Nonbreeding visitor. Eight collected 11 March 1886 (Ridgway 1891) and one or more seen on 26 January 1909 (Todd and Worthington 1911).

American Redstart (*Setophaga ruticilla*).—Nonbreeding visitor. One seen 4 July by R. W. Hanlon (Bond 1959).

Worm-eating Warbler (*Helmitheros vermivorus*).—Nonbreeding visitor. Two specimens collected by D. R. Paulson on 30 November and 1 December 1963 (see Paulson 1966).

Swainson's Warbler (*Limnothlypis swainsonii*).*—Nonbreeding visitor. One collected 3 March 1968 (DWB).

Ovenbird (*Seiurus aurocapillus*).—Nonbreeding visitor. One collected 11 March 1886 (Ridgway 1891).

Louisiana Waterthrush (*Seiurus motacilla*).—Nonbreeding visitor. One seen during late November 1963 (Paulson 1966), and another on 7 August 1982 (JPR and SFB); 1 collected (partially decomposed) 17 July 1986, and 2 seen (one collected) on 24 July 1986 (DWB). The Northern Waterthrush (*S. noveboracensis*) is more common than the Louisiana Waterthrush in the Bahamas generally (Bond 1956, Paulson 1966, Brudenell-Bruce 1975, Connor and Loftin 1985), but it is unrecorded on Cat Island.

Common Yellowthroat (*Geothlypis trichas*).—Nonbreeding visitor. One collected 11 March 1886 (Ridgway 1891).

Bahama Yellowthroat (*Geothlypis rostrata*).—Fairly common resident, but breeding is undocumented. Usually seen in woodlands and dense scrublands, and generally low (ground to 3 m high) in the vegetation. I found it most numerous between the settlements of Devil's Point and McQueens—10 seen and heard during a 2-h walk (09:00–11:00) covering 6.5 km on 19 June 1986. *G. rostrata* was recorded on Cat Island for the first time by Paulson (1966) who "observed from one to three individuals at almost every locality visited" during 27 November–2 December 1963; he collected 2 specimens. I collected 5 on 2 and 3 March 1968 and five others during May–July 1986. The Cat Island population belongs to the race *G. r. coryi*, which occurs elsewhere only on Eleuthera.

Hooded Warbler (*Wilsonia citrina*).—Nonbreeding visitor. One male seen 29 November 1963 (Paulson 1966).

Bananaquit (*Coereba flaveola*).—Common resident in terrestrial habitats throughout, but breeding is undocumented.

Stripe-headed Tanager (*Spindalis zena*).—Uncommon resident in ter-

restrial habitats throughout; breeding is undocumented. Nearly half of those I saw during May–July 1986 were in *Ficus* trees and feeding on the figs. Others were calling from exposed perches in cultivated areas and in the settlements. Two *S. z. zena* were collected on 28 November 1963 by D. R. Paulson, another in November 1890 by J. Percy Moore, and five on 11 March 1886 by the *Albatross* Expedition (Ridgway 1891). Worthington (in Todd and Worthington 1911) mentioned a sight record for 6 April 1909.

Indigo Bunting (*Passerina cyanea*).—Nonbreeding visitor. Two specimens collected 11 March 1886 (Ridgway 1891).

Black-faced Grassquit (*Tiaris bicolor*).—Common resident. Most numerous in casuarinas and in weedy areas, especially roadsides and farmlands. Breeding (all records are 14 June–23 July 1986 [DWB]).—Nine active nests, all 0.5–2 m high in bushes, 1 with 1 egg, 2 with 2 eggs, 2 with 3 eggs, 1 with 1 egg and 1 nestling, 1 with 2 nestlings, 2 with 3 nestlings.

Greater Antillean Bullfinch (*Loxigilla violacea*).—Very common resident, but breeding is undocumented. Most numerous in dense scrublands and not infrequently seen gleaning figs in settlements and woodlands (DWB).

Savannah Sparrow (*Passerculus sandwichensis*).—Nonbreeding visitor. One collected on 2 December 1963 by D. R. Paulson.

Snow Bunting (*Plectrophenax nivalis*).—Nonbreeding visitor. One collected 1 December 1963 (Paulson 1966).

DISCUSSION

Of the 97 species of birds known from Cat Island and immediately adjacent cays, at least 47 probably breed there; no species or subspecies is endemic. Excluding the introduced Rock Dove, 24 of the probable breeders are land birds (pigeons to passerines, plus 1 kestrel) (Table 1), 11 are shorebirds (charadriiforms), 4 are herons, 2 are ducks, and the remaining 5 (six, if 2 species of cormorants breed) include a grebe, cormorant, Osprey, and 2 rails. Others possibly breeding, but known only form very few records include 1 land bird (Mourning Dove) and 8 waterbirds (White-tailed Tropicbird, Great Egret, Snowy Egret, Little Blue Heron, Cattle Egret, Ruddy Duck, American Coot, Brown Noddy); all of them have been confirmed breeding on at least one island elsewhere in the Bahamas. The numbers of land birds (excluding hawks) predicted both from island size (24 species) and the available rainfall data (26 species) agree fairly with the 23 recorded (see Methods). The wetter islands in the Bahamas tend to have greater habitat diversity and a more luxuriant vegetation than the drier ones, and, together with the larger islands, more

bird species (Buden 1977). Along these gradients, Cat Island falls roughly in the middle.

Most of the indigenous, breeding land birds of Cat Island are widespread in all the terrestrial habitats. The Yellow Warbler, however, occurs only in the mangroves and immediately adjacent scrub, the Northern Mockingbird is rarely seen outside the settlements, and the Key West Quail-Dove apparently is confined to the woodlands. Habitat preferences are also pronounced in several other species including American Kestrel (coconut groves near settlements), Burrowing Owl (cultivated areas), Antillean Nighthawk (dry, sparsely vegetated areas), Gray Kingbird (casuarinas and settlements), and Black-faced Grassquit (casuarinas and weedy areas). The White-crowned Pigeon is most numerous in mangroves and woodlands, and the Zenaida Dove and Common Ground-Dove occur most frequently on roadsides and in cultivated areas.

Table 1 lists the indigenous land birds of Cat Island in decreasing order of abundance based on general field observations together with the results of 17 census counts. The counts probably underestimate population size, as some birds seen and heard were unidentified and others doubtless went undetected during the rather fast walks (ca 3 km/h). With few exceptions, however, the counts match well the scale of relative abundance based on general observations. The Gray Kingbird and Antillean Nighthawk both are more numerous than the 17 counts indicate, but the kingbird is abundant only near settlements and in stands of casuarinas, and the nighthawk is crepuscular and thus often overlooked during daytime surveys. The slightly higher count for the Greater Antillean Pewee among "uncommon species" is due to 5 individuals seen in 2 km between Greenwood and Port Howe on 2 July 1986. The absence of the Yellow Warbler in the counts probably is due to its preference for low mangroves in tidal creeks, which were poorly represented in the 17 surveys.

For the most part, the species of birds breeding on Cat Island are widespread in the Bahamas generally. The Bahama Yellowthroat and Red-legged Thrush, however, both fairly common in mesic woodlands and thickets in the northern Bahamas, do not breed in the southern Bahamas. The thrush has been recorded once on Great Inagua (Sprunt in Bond 1962), but apparently is not established there. Conditions in the southern part of the chain may be too xeric to support them; alternatively, they may not have reached the relatively small banks that comprise the southern Bahamas in sufficient numbers to colonize. The "Cuban-Bahaman race" of the American Kestrel, on the other hand, occurs only as far north as Eleuthera (see Bond 1986), but it is a recent arrival to the Bahamas (see species account) and has been expanding its range northward. The Pearly-eyed Thrasher is common in the southern Bahamas and has been

TABLE 1

INDIGENOUS, BREEDING LAND BIRDS OF CAT ISLAND, IN DECREASING ORDER OF ABUNDANCE BASED ON GENERAL OBSERVATIONS AND WITH THE NUMBER OF BIRDS SEEN AND HEARD/KM DURING 17 COUNTS COVERING 64 KM

Species	Abundance[a]	Birds/km
Bahama Mockingbird (*Mimus gundlachii*)	VC	5.8
Thick-billed Vireo (*Vireo crassirostris*)	VC	3.4
Greatern Antillean Bullfinch (*Loxigilla violacea*)	VC	2.8
White-crowned Pigeon (*Columba leucocephala*)	C–VC	2.1
Gray Kingbird (*Tyrannus dominicensis*)	C–VC	1.2
Black-faced Grassquit (*Tiaris bicolor*)	C	1.9
Bananaquit (*Coereba flaveola*)	C	1.6
Common Ground-Dove (*Columbina passerina*)	C	1.1
Antillean Nighthawk (*Chordeiles gundlachii*)	C	0.1
Bahama Yellowthroat (*Geothlypis rostrata*)	FC	0.7
Zenaida Dove (*Zenaida aurita*)	FC	0.6
Smooth-billed Ani (*Crotophaga ani*)	FC	0.5
Mangrove Cuckoo (*Coccyzus minor*)	FC	0.4
Bahama Woodstar (*Calliphlox evelynae*)	FC	0.4
Red-legged Thrush (*Turdus plumbeus*)	UC–FC	0.2
Burrowing Owl (*Athene cunicularia*)	UC–FC	0.1
Black-whiskered Vireo (*Vireo altiloquus*)	UC	0.1
Greatern Antillean Pewee (*Contopus caribaeus*)	UC	0.2
American Kestrel (*Falco sparverius*)	UC	0.1
Stripe-headed Tanager (*Spindalis zena*)	UC	0.1
Yellow Warbler (*Dendroica petechia*)	UC	0.0
Northern Mockingbird (*Mimus polyglottos*)	S–UC	0.0
Key West Quail-Dove (*Geotrygon chrysia*)	S	0.0
Common Barn-Owl (*Tyto alba*)	R	0.0

[a] VC = very common, C = common, FC = fairly common, UC = uncommon, S = scarce, R = rare; see Methods for additional explanation.

recorded once on Cat Island, but it is not known to be established anywhere on the Great Bank.

The absence of La Sagra's (formerly Stolid) Flycatcher (*Myiarchus sagrae*) and Blue-gray Gnatcatcher (*Polioptila caerulea*) and the rarity of the Common Barn-Owl are somewhat unexpected. All three are widespread in the archipelago, although the gnatcatcher is absent on many islands in the central Bahamas, and the distribution of the flycatcher is spotty in the southern Bahamas. A medium-sized tyrannid with a reddish-brown tail that I saw fleetingly and poorly in xeric woodlands between Port Howe and Gambier Lake on 2 July possibly was a La Sagra's Flycatcher.

Many of the birds on Cat Island breed during summer, but there are

insufficient data for further generalizations regarding breeding cycles. Paulson (1966) recorded a half-grown Least Grebe taken in December 1963, and P. and M. Mann (pers. comm.) reported an Osprey nest active in 1978 and Black-necked Stilts nesting in April 1984. J. Perran Ross and Sarah Fay Baird (in litt.) reported Black-necked Stilts nesting in May 1982 and a juvenile Gull-billed Tern being fed by an adult in August 1982. Miller (in litt.) reported Olivaceous Cormorants nesting in December 1976 and 1978. All other records of breeding are mine from summer 1986.

During 23 May–28 July, I found active nests, eggs, or young of 13 species of waterbirds and 12 species of land birds. Additionally, territorial American Kestrels probably had nests in the tops of coconut trees, and groups of up to six Burrowing Owls seen regularly at the same localities during the summer probably had nesting burrows nearby. The nests of Gray Kingbirds usually were at least 3–15 m high in trees (mainly casuarinas), and the one Smooth-billed Ani nest was 6 m high in a tree. Eleven species nested usually 0.5–4 m high in bushes and small trees, although some nests among those of the White-crowned Pigeon (1 of 6), Zenaida Dove (1 of 8), and Bahama Mockingbird (2 of 11) were on the ground. The eight other species that usually had nests low in bushes and trees were Tricolored Heron, Green-backed Heron, Common Ground-Dove, Bahama Woodstar, Northern Mockingbird, Thick-billed Vireo, Yellow Warbler, and Black-faced Grassquit. Ten species nested only on the ground. Five of them were terns (Gull-billed, Royal, Roseate, Least, Bridled), one was a land bird (Antillean Nighthawk), and the four others were Least Grebe, Reddish Egret, Black-necked Stilt, and Laughing Gull. Among the more common birds on Cat Island that I did not observe nesting were the Bananaquit and Greater Antillean Bullfinch.

In summary, roughly half of the 97 species of birds known from Cat Island breed there, and approximately half of these are land birds. Additional winter surveys doubtless will provide many more records of nonbreeding visitors, but few land birds are likely to be added to the list of breeding species as the number recorded is close to predicted values, and because the species composition is generally similar to that found on comparable, nearby islands. The status of many of the waterbirds is uncertain; eight are considered potential breeders. Most of the species seem to breed mainly in summer (May–August) and usually nest on the ground or only 2–3 m high in the vegetation.

ACKNOWLEDGMENTS

I am very grateful to J. P. Ross and S. F. Baird for providing a list of the birds they saw on Cat Island in 1982 (during a study of the endemic freshwater turtle, *Chrysemys felis*), many of which were previously unrecorded. Others who furnished locality records are C. Bostock and A. Chisholm, members of an Oxford University research team studying the

Cat Island turtle; F. Major, District Education Officer, Cat Island; P. and M. Mann, teachers at Old Bight High School during 1976–1986; and A. Sprunt, Research Director, National Audubon Society, who visited Cat Island in 1981 and 1986. I thank J. R. Miller for additional data supplementing his records published elsewhere; S. Olson for identifying bones of cormorants to subspecies; J. V. Remsen, Jr. for copies of pages of Schwartz's catalog covering Cat Island collections; and M. Robbins for a list of birds collected by J. P. Moore. M. H. Clench and A. Sprunt reviewed the manuscript and provided suggestions for its improvement. Permission to do field work and collect in the Bahamas was granted by the Bahamas Department of Agriculture and the Bahamas National Trust. Their cooperation and prompt attention to requests have been greatly appreciated.

I am especially grateful to P. and M. Mann for generously and frequently providing lodging, meals, and transportation. Their company and assistance made my visit both more enjoyable and productive than it might otherwise have been. Among the other residents of Cat Island who contributed significantly in different ways are Mrs. F. Armbrister, T. Armbrister, Commissioner O. Brown, C. and O. King, F. Major, L. Newell, and the A. Russell family. Also, for their many kindnesses and courtesies, I thank the people of Cat Island throughout.

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