

SHORT COMMUNICATIONS

Additional observations on the birds of the Exumas, Bahama Islands.—The avifauna of the Exumas has been recently reviewed by Buden (1992) who listed 125 species. The present study covers 51 species, adding ten nonbreeding visitors new to the list (indicated by *) breeding records for 11, including the first for the Snowy Plover (*Charadrius alexandrinus*) and American Oystercatcher (*Haematopus ostralegus*) in the Exumas, new late dates for migrants, and new locality records for poorly known species. This report is based largely on observations by R. Sutherland (RS) during 30 March–2 May 1988 and 13 March–3 May 1992, and A. Sprunt (AS) who spent 79 days visiting islands throughout the chain during 17–19 May 1979, 17–20 May 1981, 12–27 May 1983, 17–19 May 1984, 10–19 and 24–27 May 1985, 9–12 and 22–23 May 1986, 24–28 January and 2–4 February 1988, 6–11 and 19–20 May 1988, 18–20 August 1989, 11–18 and 25–26 May 1991, and 9–12 May 1992. Information on previously reported records is from Buden (1992) unless stated otherwise.

The islands mentioned in this report that are not identified as to location in the species accounts or in Buden's (1992) map are Lobster Cay (between Highborne Cay and Norman's Cay), Saddle Cays (south of Cistern Cay), White Bay Cay (between Waderick Wells Cay and Halls Pond Cay), South Sandy Cay (west of Big Major's Spot), South Gaulin Cay (between Bitter Guana Cay and Great Guana Cay), Big Farmer's Cay (southeast of Little Farmer's Cay), Big Galliot Cay (south of Big Farmer's Cay), Little Darby Island, Salt Cay, and Lignum Vitae Cay (all just east of Darby Island), Square Rock Cay and Glass Cay (off the northeastern coast of Great Exuma), and Channel Cay (off the east-central coast of Great Exuma, NE Moss Town, and not to be confused with Channel Cays near Rocky Dundas). Bell Island and Little Bell Island are known also as Bells Cay and Little Bells Cay, respectively.

Audubon's Shearwater (*Puffinus lherminieri*).—Nine incubating and many heard calling at dusk at Twin Cays on 30 March 1992 [eggs and shell fragments but no young during return visits on 17 and 25 April, and some adults heard calling on 2 May], and another incubating on South Sandy Cay, 25 April 1992 (RS); 15 pairs with eggs and young (the largest ones approximately half-grown) on Sail Rocks, 10 May 1986 (AS). Probable breeders include 2–4 heard calling at dusk on Sandy Cay on 22 March and ca six on 22 April 1992, and others on Little Cistern Cay, 2 April 1992 (RS).

Northern Gannet (*Morus bassanus*).—Two subadults were seen off the eastern coast of Halls Pond Cay by Susan Sprunt on 7 May 1988.

Brown Pelican (*Pelecanus occidentalis*).—To the scanty list of Exuma records we add singles observed at Staniel Cay on 29 April 1988 (RS), Waderick Wells Cay in mid-April 1992 (L. Albury, park warden), and at Conch Cut (vicinity of Rocky Dundas) on 1 May 1992 (RS).

Magnificent Frigatebird (*Fregata magnificens*).—Seen regularly at Sail Rocks (AS), the 45 roosting on 8 May 1981 being the largest group encountered in the Bahamas by the authors outside the breeding colony on Cay Verde observed by AS.

Great Blue Heron (*Ardea herodias*).—One was seen on Waderick Wells Cay on 27 January 1988 and another on Shroud Cay on 9 May 1992 (AS); singles (mainly) and up to six together were seen on Lee Stocking Island, and Little Wax, Shroud, Hawksbill, Little Cistern, Compass, Big Galliot, and Square Rock cays during 16 March–5 April 1992, and 12 on Great Guana Cay on 10 April and one on Little Bell Island on 17 April 1992 (RS). Previous Exuma records also are mainly March–April suggesting status predominately as a transient.

Great Egret (*Casmerodius albus*).—One seen on Pipe Cay, 28 April 1992 (RS). Few previous records and status uncertain.

Snowy Egret (*Egretta thula*).—One was seen on Allen's Cay, 13 May 1983 and two on Shroud Cay on 9 May 1992 (AS), and 1–4 each on Big Farmer's, Waderick Wells, and Staniel cays during 19–29 March 1992, and 10 on Bitter Guana Cay, 11 April 1988 (RS). These and other (mainly March and April) records suggest *E. thula* is predominately a transient in the Exumas.

Little Blue Heron (*E. caerulea*).—Single birds were seen on Waderick Wells Cay and Lobster Cay during 23–26 March 1992, ten on Shroud Cay on 3 April 1992, and others on Great Guana Cay on 9 April and Shroud Cay on 20 April 1988 (all RS). The preponderance of March and April sightings suggests *E. caerulea* is mainly a transient in the Exumas.

Cattle Egret (*Bubulcus ibis*).—Observed on Norman's (10 birds), Shroud (8), Cistern (3), Saddle (4), and Staniel (6) cays during 24 March–11 April 1992, and on Great Guana Cay (5) and Wax Cay (16) on 9 and 21 April 1988, respectively (RS). Possibly breeding in the Exumas, but very few summer records.

Green-backed Heron (*Butorides striatus*).—A nest with two chicks was seen on South Gaulin Cay, 6 April 1988 (RS).

Yellow-crowned Night-Heron (*Nyctanassa violacea*).—Four pairs were nesting on 6 April 1988 and four adults and 12 empty nests were observed on 20 March 1992, all on South Gaulin Cay (RS), and one adult was in a nest with two eggs and one recently hatched young on Long Cay, 26 May 1983 (AS).

Osprey (*Pandion haliaetus*).—A nest with two young and one adult was seen on the southern tip of Bitter Guana Cay on 20 March 1992 (RS).

Snowy Plover (*Charadrius alexandrinus*).—Unspecified numbers were seen on White Bay, Sampson, Little Bell, and Twin cays during 8 April–2 May 1992 (RS), and one downy young accompanied by an adult at an inland salt flat near Farmer's Hill, Great Exuma on 12 May 1992 (AS) is the first breeding record for the Exumas.

Wilson's Plover (*C. wilsonius*).—A nest with three eggs was seen on Norman's Cay on 11 May, and another with two eggs on Leaf Cay (east of Norman's Pond Cay) on 17 May 1991 (AS). Recorded "year-round" on Lee Stocking Island, but one seen on Waderick Wells Cay on 27 January 1988 (AS) is the first documented winter sighting.

Piping Plover (*C. melodus*).—One was seen on Leaf Cay (Allen's Cays), 25 January, two on Waderick Wells Cay, 27 January and (different birds?) 19 August 1988 (AS), and two others on South Gaulin Cay on 20 March 1992 and another on South Sandy Cay, 10 April 1988 (RS).

American Oystercatcher (*Haematopus ostralegus*).—One nest containing two eggs on Salt Cay on 16 May 1985 (AS) is the first breeding record for the Exumas.

Black-necked Stilt (*Himantopus mexicanus*).—Eleven seen in Rolletown Pond, Great Exuma on 3 February 1988 (AS) are the first winter records of this common summer breeder in the Exumas.

Solitary Sandpiper (*Tringa solitaria*).—One was seen on Compass Cay, 29 April 1992 (RS).

Spotted Sandpiper (*Actitis macularia*).—One was seen on Staniel Cay on 2 May 1992 (RS), and others on Leaf Cay (east of Norman's Pond Cay) on 15 May 1985, Little Bell Island on 18 May 1983, and Shroud Cay on 15 and 16 May 1983 (AS). The previous late date for the Exumas was 25 April.

Dunlin (*Calidris alpina*).—A flock of 40 was seen in a salt pond on Little Exuma, 3 February 1988 (AS).

Short-billed Dowitcher (*Limnodromus griseus*).—To the scanty list of Exuma records we add a small flock seen on Duck Cay (west of Georgetown, Great Exuma) on 16 May 1979, and sightings on Waderick Wells Cay, 19 May 1979, 26 May 1983, and 15 on 19 August

1988 (AS). Fifteen “dowitchers” (probably *L. griseus*) were seen on Glass Cay on 16 March and three others on South Gaulin Cay, 20 March 1992 (RS).

Laughing Gull (*Larus atricilla*).—Up to 300 pairs were nesting in the Sail Rocks-Ship Channel Cays region on several visits during 1986–1992, with eggs observed at Sail Rocks on 9 May 1986 and again on 25 and 26 May 1991 when they were being taken by islanders off a Spanish Wells (Eleuthera) fishing boat (AS).

Ring-billed Gull (*L. delawarensis*).—One immature was seen on Shroud Cay, 11 May 1985 (AS).

Roseate Tern (*Sterna dougallii*).—Buden (1992) reported *S. dougallii* scarce in the vicinity of Great and Little Exuma, but AS observed up to 150 together in feeding flocks among outlying cays during several summer visits, 1985–1991.

Bridled Tern (*S. anaethetus*).—Seen almost daily among many of the smaller cays throughout the Exumas in May 1979–1991, and one egg was found on a rocky islet off Little Bell Island on 25 May 1983 (AS). Reported as scarce by Buden (1992).

Sooty Tern (*S. fuscata*).—In the southern Exumas, ca 750 pairs nested on Little Darby Island, Salt Cay, and Lignum Vitae Cay on 16 May 1985, and others on two rocky islets just north of Norman’s Pond Cay in May 1985 and 1991, and ca 600 pairs on Channel Cay (off Great Exuma) on 18 May 1985 (AS). All previous records are from the northern Exumas to as far south as Channel Cays (near Rocky Dundas).

Brown Noddy (*Anous stolidus*).—In the southern Exumas, ca 100 nested on Little Darby Island, Salt Cay, and Lignum Vitae Cay on 16 May 1985, others on two rocky islets just north of Norman’s Pond Cay in May 1985 and 1991, on islets in Rudder Cut (south of Rudder Cut Cay) and between Darby Island and Bock Cay on 16 May 1985, and ca 250 pairs on Channel Cay (off Great Exuma) on 18 May 1985 (AS). Sooty and Noddy terns both were seen on Channel Cay also in May 1991, but at a distance from a boat and numbers were not estimated (AS). All previous records are from the northern Exumas to as far south as Staniel Cay.

Yellow-billed Cuckoo (*Coccyzus americanus*).—One was seen on Great Guana Cay on 9 April, another on 22 April 1988 (RS). The few other Exuma records are “October,” “winter,” or undated.

Barn Owl (*Tyto alba*).—One seen on Lobster Cay on 21 April 1988 (RS) is the fifth record for the Exumas, one of the previous four being only a single feather.

Common Nighthawk (*Chordeiles minor*).—One was heard calling on Staniel Cay, 12 April 1988 (RS).

Chuck-will’s-widow (*Caprimulgus carolinensis*).—Buden (1992) reported the first records for the Exumas and remarked on status in the West Indies. Additional Exuma records are two on Waderick Wells Cay in April 1988 and two heard calling on 21 April 1992, and one seen and another heard at White Bay Cay, 8 April 1992 (all RS).

Chimney Swift (*Chaetura pelagica*).—Two were seen at Allen’s Cays on 22 April and two on Bitter Guana Cay, 1 May 1988 (RS).

Bahama Woodstar (*Calliphlox evelynae*).—A nest with one egg, ca 1.5 m high and at the tip of a branch of a *Casuarina* tree on a beach at Bell Island was seen on 30 March 1988 (RS).

Yellow-bellied Sapsucker (*Sphyrapicus varius*).—A female observed feeding at drill holes in *Casuarina* at Norman’s Cay on 4 April 1992 (RS) is the second confirmed sighting for the Exumas.

Purple Martin (*Progne subis*).—Two seen on Compass Cay on 10 April 1992 (RS) represent the second record for the Exumas.

Tennessee Warbler (*Vermivora peregrina*).—Two were seen on Compass Cay, 29 April 1992 (RS).

Northern Parula (*Parula americana*).—Five were seen on Great Exuma on 3 February

1988 (AS) and one on Compass Cay, 29 April 1992 (RS). Recorded in the Exumas previously only as an occasional fall and spring visitor in the Lee Stocking Island-Great Exuma region.

Cape May Warbler (*Dendroica tigrina*).—Several were seen on Great Exuma, 3 February 1988 (AS). No other winter records specified as to date, but reported as less common in winter than spring or fall in the Lee Stocking Island-Great Exuma region. Many sightings throughout the chain during March–April 1988 and 1992 (RS), the late date being 11 May 1992 on Little Farmer's Cay (AS).

Black-throated Blue Warbler (*D. caerulescens*).—One was seen on Halls Pond Cay on 11 May 1985, and another on Staniel Cay on 10 May 1992 (AS). The previous late date for the Exumas was 25 April.

Yellow-throated Warbler (*D. dominica*).—Several seen on Great Exuma on 3 February 1988 (AS) are the first winter records for the Exumas.

Prairie Warbler (*D. discolor*).—AS saw many on Great Exuma on 3 February 1988, and RS saw 1–6 on each of five different islands during 9–22 April 1988 and 1–3 on four islands during 17 March–22 April 1992. The few previous Exuma records are December or are undated.

Palm Warbler (*D. palmarum*).—Numerous records for the Exuma Cays, but recorded for the first time on Great Exuma by AS who saw many on 3 February 1988.

Blackpoll Warbler (*D. striata*).—One was seen on South Gaulin Cay on 2 April 1988, and two others on Compass Cay on 29 April 1992 (RS), and single birds were observed on Great Guana Cay, 10 May 1992, Halls Pond Cay, 11 May 1985, Allen's Cays, 13 May 1983, and Great Exuma, 18 May 1985 (AS). Recorded in the Exumas only twice previously and in April.

Worm-eating Warbler (*Helminthos vermivorus*).—Three were seen on Great Exuma on 3 February 1988 and another on Staniel Cay on 10 May 1992 (AS). Recorded in the Exumas previously once from "Great and Little Exuma" (undated) and on Highborne Cay in December.

Ovenbird (*Seiurus aurocapillus*).—One seen on Staniel Cay on 10 May 1992 (AS) extends the previous late date (22 April) for the Exumas.

Northern Waterthrush (*Seiurus noveboracensis*).—RS saw 1–2 on each of six different islands during 3 April–1 May 1992, and AS saw one on Great Guana Cay on 10 May 1992 and another on Leaf Cay (east of Norman's Pond Cay) on 17 May 1985. The only previous records are for Wax Cay in April and an unknown number of undated sightings in the Lee Stocking Island-Great Exuma region.

Bananaquit (*Coereba flaveola*).—Two recently fledged young were seen on Cistern Cay on 7 April and an active nest was observed on White Bay Cay, 8 April 1992 (RS).

Stripe-headed Tanager (*Spindalis zena*).—One seen on Little Farmer's Cay on 11 May 1992 (AS) is only the fourth locality record for the Exumas, the previous three being Highborne Cay, Waderick Wells Cay, and Great Exuma, and it is not common on any of these islands.

Indigo Bunting (*Passerina cyanea*).—Several were seen on Great Exuma on 3 February 1988 and one on Great Guana Cay on 10 May 1992 (AS), another on Staniel Cay on 14 April 1988 and two on Norman's Cay, 5 April 1992 (RS). A common visitor to the Bahamas generally (Brudenell-Bruce 1975), but few previous records for the Exumas.

Swamp Sparrow (*Melospiza georgiana*).—*—One was observed clearly and under good viewing conditions on Bell Island on 19 May 1983 (AS). The only other West Indian records (all Bahamas) are sightings on New Providence on 10 and 18 November, Mayaguana on 10 April (Brudenell-Bruce 1975, Bond 1988), and another Mayaguana on 23 November 1962 (AS, unpubl. notes). Bond (1982) reported *M. georgiana* as of hypothetical occurrence in the West Indies, but later (Bond 1988) considered it a vagrant.

Bobolink (*Dolichonyx oryzivorus*).—*—More than 100 were observed on Halls Pond Cay

on 28 April 1988 and seven on Compass Cay, 29 April 1992 (RS), and 25–30 on Leaf Cay (east of Norman's Pond Cay), 17 May 1985 (AS).

Discussion.—The Blue-gray Gnatcatcher (*Polioptila caerulea*) is noteworthy by its apparent absence from the Exumas. It breeds commonly in the northern Bahamas and among the predominately scrub-covered southern islands, but is unknown from much of the central part of the archipelago. Additionally, Blue-gray Gnatcatchers that breed in continental North America have been recorded in the Bahamas and Antilles during August–May (Bond 1956), and Brudenell-Bruce (1975) reported the current status of *P. caerulea* on New Providence (just northwest of the Exumas) as “uncommon autumn passage migrant” only.

Additional fall and winter surveys are needed to assess the status of this and many other Exuma bird species more accurately. Doubtless many new nonbreeding visitors will be recorded, but we expect few if any additions to the list of 23 native, breeding land birds on these small, low-lying islands with little habitat diversity. Further explorations during summer may add some heron and egret species (of currently uncertain status) to the list of breeders and are certain to reveal many more seabird colonies, underscoring the importance of these islands as a breeding area for numerous seabird species.

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Predation by Herring Gulls and Great Black-backed Gulls on Horseshoe Crabs.—Spring migration of shorebirds through Delaware Bay coincides with seasonal egg laying by horseshoe crabs (*Limulus polyphemus*) on intertidal beaches (Myers 1986). We here report on a previously undescribed aspect of the interaction between birds and horseshoe crabs, the predation by Herring Gulls (*Larus argentatus*) and Great Black-backed Gulls (*L. marinus*) on these large (ca 20–30 cm carapace width) arthropods. Adult horseshoe crabs live in sublittoral, mainly nearshore, coastal habitats for most of the year but migrate to estuaries every spring. In Delaware Bay, spawning occurs in the intertidal zone, on high tides throughout May and June (Shuster and Botton 1985). As much as 10% of the spawning population may be left stranded on the beach, principally due to wave action during spawning or disorientation during their return to the sea (Botton and Loveland 1987, 1989). Although