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New avifaunal records and checklist for the island of Saba, Caribbean Netherlands

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Abstract The avifauna of the Dutch Caribbean island of Saba has been little studied, as the last comprehensive publication dates from 1983. Here I document 31 new species records up to 2016, including some introduced species, and I discuss new and notable avifaunal developments for the island.

Keywords avifauna, birds, Caribbean Netherlands, checklist, Dutch Caribbean, Saba

Resumen Listado de aves y nuevos registros para la avifauna de la isla de Saba, Caribe holandés—La avifauna de la isla de Saba, en el Caribe holandés, ha sido poco estudiada; ya que la última publicación exhaustiva data de 1983. Aquí documento 31 nuevos registros de especies hasta 2016, incluidas algunas introducidas y discuto nuevos y notables registros para la avifauna de la isla.

Palabras clave aves, avifauna, Caribe holandés, listado, Países Bajos del Caribe, Saba

Résumé Nouvelles mentions pour l'avifaune et liste des espèces de l'île de Saba, Antilles néerlandaises—L'avifaune de l'île néerlandaise de Saba, dans les Caraïbes, a été peu étudiée, la dernière publication complète datant de 1983. Le présent article documente 31 nouvelles mentions d'espèces observées jusqu'en 2016, y compris des espèces introduites. L'évolution récente de l'avifaune de l'île est discutée.

Mots clés Antilles néerlandaises, avifaune, liste d'espèces, oiseaux, Saba

The island of Saba (17°37'N, 63°14'W) is the most northern island in the inner arc of the Lesser Antilles, a chain of volcanic islands of relatively recent geological origin. Saba is one of the smallest (13 km², 4-km diameter) and youngest (< 500,000 yr old) islands in the region. It consists of a single volcano rising steeply from the sea. The main peak, Mt. Scenery, stands more than 870 m above sea level (asl); several lower satellite peaks were produced by different eruptions, the last of which occurred around 5,000 yr ago (Roobol and Smith 2004). Saba has very few flat areas, and beaches are almost absent. Fresh water is limited to swimming pools and occasional temporary rain pools. The vegetation varies from steep, bare cliffs and dry low vegetation, heavily grazed by feral goats (Capra aegagrus hircus), in the lower regions, through dry evergreen forest to tropical rainforest at higher altitudes. The amount of rain varies highly on this small island, with an average annual rainfall of about 1,100 mm, though the higher slopes of Mt. Scenery can receive over 2,000 mm. This results in a small area of cloud forest around the summit of Mt.

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Scenery (Rojer 1997).

The avifauna of Saba is not well known. Voous (1983) described 58 species from the island, with 6 additional species observed in the surrounding seas. Rojer (1997) provided a bird list for the island as part of an overall assessment of biodiversity. This list was based on Voous (1983) and more recent sources, but listed 2 fewer species than Voous. More recently, Brown et al. (2009) reported 87 species for the island. The source of this number is never mentioned; it may be a checklist that was published by Walsh-McGehee (2004) on the website of local dive center SeaSaba, but which has since been removed. In their report of waterbirds on Saba, Collier and Brown (2006) cited the Walsh-McGehee (2004) list numerous times, including for two species—American Wigeon (Mareca americana) and Great Blue Heron (Ardea herodias)—which actually did not appear on the Walsh-McGehee (2004) list.

From July 2010 until July 2012, I observed birds on a monthly basis in different parts of the island. This resulted in records of 18 new species not previously listed by Voous (1983), of which 8 were also new to the Walsh-McGehee (2004) list. I combined my own observations with other new species records made before 2017 by reliable Saba birdwatchers: 10 were published on Observation.org (2017) and 3 I obtained through personal communication. Of these 13 additional species records, 11 were new to the Walsh-McGehee (2004) list. Altogether, my compilation totals 31 new species records not listed by Voous (1983) for Saba. Here I provide detailed accounts of these records and an update on the status of some of the island's breeding birds. I also provide an updated checklist for the island (Appendix 1).

New Species Records

Spatula discors (Blue-winged Teal)

In October 2011, a partly decayed specimen washed ashore at Wells Bay (17°38'23"N, 63°15'11"W). I collected the remains and donated them to the Naturalis Biodiversity Centre (Leiden, The Netherlands). One year later, in October 2012, an exhausted individual was collected by Martin Ruijter, given supplemental feed, and released the next day at a natural pool near Fort Bay (17°36'58"N, 63°15'05"W; pers. comm.). This is the first record of a live individual of this species on Saba. Blue-winged Teal are common on St. Martin, 40 km north of Saba, especially in winter (Voous 1983).

Gallus gallus (Red Junglefowl)

On Saba, as on many other islands, this is an introduced and escaped species. It is a common bird breeding in the rainforest up to the summit of Mt. Scenery (17°38'04"N, 63°14'15"W), and has been present for many years. The species' feral status is likely the reason that neither Voous (1983) nor Walsh-McGehee (2004) mentioned it.

Columba livia (Rock Pigeon)

I observed feral individuals throughout the year, especially near the steep slope of Booby Hill in Windwardside (17°37'50"N, 63°13'48"W). Voous (1983) did not report this species for the Dutch Caribbean, while Raffaele *et al.* (2003) described this introduced species as common through much of the West Indies. This species was listed for Saba by Walsh-McGehee (2004).

Patagioenas leucocephala (White-crowned Pigeon)

On 13 and 14 May 2011, I observed and photographed a single accomodating individual in a tree along the road in the English Quarter near Windwardside (17°37'56"N, 63°13'44"W). This species is listed in Walsh-McGehee's (2004) list as a vagrant. Voous (1983) reported it from St. Martin as a breeding bird that has experienced dramatic population declines due to excessive shooting. According to Raffaele *et al.* (2003), the species is uncommon on St. Barthélemy, rare on St. Martin and Guadeloupe, and very rare elsewhere in the West Indies.

Streptopelia decaocto (Eurasian Collared-Dove)

This species was not listed by Voous (1983), but was recorded by Walsh-McGehee (2004) as a "recent vagrant." It is presently a very common breeding bird in The Bottom (17°37'33"N, 63°14'56"W), and also along the road in Hell's Gate (17°38'16"N, 63°13'48"W). Raffaele *et al.* (2003) did not report this introduced species for Saba, but expected that it would soon colonize the entire West Indies.

Zenaida asiatica (White-winged Dove)

During summer (April–September) 2010–2012, I saw this species frequently, both as individuals and groups of up to six

birds, throughout the island. Jacob Jan de Vries and I also made an observation on 11 October 2014, and Hans Verdaat made an observation on 27 November 2016 (Observation.org 2017). This species was not listed by Voous (1983) for Saba, St. Eustatius, or St. Martin, but was on Walsh-McGehee's list (2004). Raffaele *et al.* (2003) noted that the range of this species in the Caribbean was expanding to the east, at that time, the species was still rare on the Virgin Islands, which lie to the west of Saba. Since then, this species seems to have become common on St. Eustatius, which lies to the east of Saba: I consistently observed large flocks during April 2011 and 2012 and November 2011. In 2012, Madden *et al.* (2015) confirmed an instance of this species breeding on St. Eustatius.

Coccyzus americanus (Yellow-billed Cuckoo)

From 8 to 29 October 2010, I observed a migratory flock of this species stopping over on Saba. I saw this species and found dead individuals all over the island, ranging from sea level up to ~350 m asl. Voous (1983) described similar observations of this species stopping over on St. Martin and St. Eustatius during migration in autumn 1974.

Cypseloides niger (Black Swift)

On 19 May 2012, Walter Wagenaar captured video footage of a swift at the top of Great Hill (17°37'35"N, 63°15'16"W; pers. comm.). Although I observed a Chimney Swift (*Chaetura pelagica*) almost exactly one year later at the same location (see below), the video shows a larger, totally black bird with a longer tail, which indicates a Black Swift. On 12 April 2016, this species was observed by Hans Verdaat foraging in Windwardside (17°37'44"N, 63°13'54"W; Observation.org 2017). This species was not included by Voous (1983), nor by Walsh-McGehee (2004), though Raffaele *et al.* (2003) did mention that the Black Swift migrates infrequently into the Lesser Antilles.

Chaetura pelagica (Chimney Swift)

On 21 May 2011, I saw a single individual foraging with a flock of Caribbean Martins (*Progne dominicensis*) above the summit of Great Hill. Neither Voous (1983), Raffaele *et al.* (2003), nor Walsh-McGehee (2004) recorded this species for the Lesser Antilles.

Himantopus mexicanus (Black-necked Stilt)

In spring 2010 (no accurate date available), Tom van 't Hof observed a first individual at a rain pool near Tent Bay (17°37'00"N, 63°15'13"W; pers. comm.). On 19 June 2013, Dolfi Debrot recorded one bird at Cove Bay (17°38'35"N, 63°13'13"W; pers. comm.). Black-necked Stilts are breeding birds on St. Martin (Voous 1983).

Haematopus palliatus (American Oystercatcher)

I observed two birds flying along the shore at Fort Bay on 11 March 2011, which is the first record of this species on Saba. Saba park rangers recorded two birds at Wells Bay on 17 May 2012 (Observation.org 2017). On 27 November 2016, Hans Verdaat observed two birds foraging east of the local airport (17°38'38"N, 63°13'05"W; Observation.org 2017). This species is described as a probable breeding bird on St. Martin (Voous 1983).

Charadrius semipalmatus (Semipalmated Plover)

I observed an individual at a natural rainwater pool at Tent Bay on 9 October 2010. In October 2011, I saw the species foraging in the grass at the local airport (17°38'42"N, 63°13'14"W). Martijn Terpstra photographed an individual, again near Tent Bay, on 24 October 2013 (Observation.org 2017). Voous (1983) recorded this species as a passage migrant and winter visitor on St. Martin, seen at all times of the year.

Arenaria interpres (Ruddy Turnstone)

This species was observed and photographed by Martijn Terpstra on 10 December 2013 near Fort Bay (Observation.org 2017). It is striking that this species had never been seen on Saba before; it is a common shorebird on St. Martin, especially on rocky coastline, which is a feature Saba also has in abundance. Voous (1983) stated that it was "certainly overlooked on Saba."

Gallinago delicata (Wilson's Snipe)

I saw a single individual near the communications tower at the summit of Mt. Scenery on 6 November 2010. Both Voous (1983) and Walsh-McGehee (2004) reported this species as Common Snipe (*G. gallinago*), for St. Martin and Saba, respectively, before Common and Wilson's Snipe were split into separate species. On St. Martin, the species is a passage migrant and winter visitor, especially during October and November (Voous 1983).

Larus delawarensis (Ring-billed Gull)

A notably tame first-winter individual was photographed in the harbor of Fort Bay by Martijn Terpstra on 27 November 2013, the first record for Saba (Observation.org 2017). Voous (1983) recorded this species as a scarce winter visitor on St. Martin.

Sternula antillarum (Least Tern)

On 5 July 2011, Stef Strik observed five individuals from a boat traveling between St. Martin and Saba (Observation.org 2017). Least Terns are breeding residents on St. Martin (Voous 1983, Raffaele *et al.* 2003), and no other records are available from Saba.

Thalasseus sandvicensis (Sandwich Tern)

On the same offshore boat trip on 5 July 2011, Stef Strik also observed two individuals of the *T. s. acuflavida* subspecies (Observation.org 2017). Voous (1983) described this species as an irregular summer visitor on St. Martin; it had not been reported on Saba previously.

Ardenna gravis (Great Shearwater)

On 9 June 2010, a group on a yacht found a young Great Shearwater floating, alive, at Ladder Bay (17°38'02"N, 63°15'24"W). The bird was brought to the Marine Park office and fed for several days before being released (Marine Park staff pers. comm.). Although the bird was identified by the park staff as an Audubon's Shearwater (*Puffinus Iherminieri*), which breeds locally, photographs and a video showed that it had the size and color pattern (brown cap) of a juvenile Great Shearwater. Immature individuals of this pelagic species are found dead or exhausted all over the world (e.g., Lee 2009, Haman *et al.* 2013), but had not previously been reported from Saba.

Ardea herodias (Great Blue Heron)

On three consecutive days, 4–6 December 2012, Steve Geelhoed and Meike Scheidat observed an individual flying over Windwardside (Observation.org 2017). Voous (1983) reported this species as a migrant and winter visitor on St. Martin. Collier and Brown (2006) listed this heron as accidental, citing Walsh-McGehee (2004). However, this species was not included on the Walsh-McGehee (2004) list. No previous record could be found.

Egretta thula (Snowy Egret)

On 11 June 2012, I saw a single individual foraging on the semi-submerged breakwater rocks of the artificial beach at Cove Bay. Walsh-McGehee (2004) listed this species as a "casual visitor." It is a common breeding resident on St. Martin (Raffaele *et al.* 2003).

Falco peregrinus (Peregrine Falcon)

This species is a frequent visitor to the island during the winter months (October–April). On two occasions (February and April 2012), I observed two birds together near Old Booby Hill (17°38'03"N, 63°13'06"W) on the eastern side of the island. Voous (1983) recorded only a few observations from St. Martin and Raffaele *et al.* (2003) described it as "uncommon to rare and local" throughout the West Indies. The species was recorded for Saba by Walsh-McGehee (2004).

Eupsittula pertinax (Brown-throated Parakeet)

This introduced species was reported by Raffaele *et al.* (2003) as uncommon, and also mentioned by Walsh-McGehee (2004). A rather small population lives on the southwest side of the island.

Vireo flavifrons (Yellow-throated Vireo)

On 22 November 2016, Paul Ruiter observed one individual on the west side of Mt. Scenery (17°38'10"N, 63°14'50"W; Observation.org 2017). This species was not listed by Walsh-McGehee (2004), and Voous (1983) did not include it for Saba, St. Eustatius, or St. Martin. Raffaele *et al.* (2003) described it as a vagrant in the northern Lesser Antilles.

Petrochelidon pyrrhonota (Cliff Swallow)

Steve Geelhoed and Hans Verdaat observed one individual flying over the Saba Bank (17°32'N, 63°17'W) on 24 October 2011 (Observation.org 2017). During 10–18 October 2014, Jacob Jan de Vries and I observed flocks of this species at several locations on the island. On 2 December 2015, Hans Verdaat reported a single individual in Windwardside (Observation.org 2017). This species was mentioned by Walsh-McGehee (2004). Voous (1983) did not report it for Saba, St. Eustatius, or St. Martin. Raffaele *et al.* (2003) called it a vagrant in the northern Lesser Antilles.

Passer domesticus (House Sparrow)

In July 2010, I observed a population of ~20 birds at Fort Bay, as well as small groups of varying numbers at The Bottom. Additionally, I frequently saw a group of 15–20 individuals in upper St. Johns (17°37'35"N, 63°14'40"W) at 350 m asl. This species was not mentioned in the list by Walsh-McGehee (2004), so it

is probable that colonization occurred after 2004. Raffaele *et al.* (2003) reported this introduced species from nearby St. Martin with the note "range expanding." Colonization of the Lesser Antilles started in 1999 on St. Martin and Guadeloupe (Levesque and Clergeau 2002). The first informal record on Saba dates from June 2010 (Observation.org 2017).

Parkesia motacilla (Louisiana Waterthrush)

One individual was observed and photographed by Martijn Terpstra 500 m asl near the Ecolodge (17°37'44"N, 63°14'11"W) on 20 October 2013 (Observation.org 2017). Photographs clearly show the white eyebrow stripe and unstreaked throat. On 13 October 2014, I observed one individual on Mt. Scenery (17°38'02"N, 63°14'14"W). Voous (1983) reported one record for St. Martin; Raffaele *et al.* (2003) described this species as a vagrant in the Lesser Antilles.

Setophaga tigrina (Cape May Warbler)

I observed an immature individual of this species on 17 October 2010 in a garden in the English Quarter. According to Voous (1983), who reported it from St. Martin and St. Eustatius, this species winters all over the West Indies. Raffaele *et al.* (2003) described it as "rare to very rare in Lesser Antilles," and Walsh-Mc-Gehee's list (2004) did have the warbler listed.

S. striata (Blackpoll Warbler)

I frequently observed this warbler during the month of October, both in 2010 and 2011, on different parts of the island up to 400 m asl. The only record during a different month is from Dolfi Debrot, who saw two birds on 11 November 2012 (pers. comm.). This species was recorded on Walsh-McGehee's list (2004). Voous (1983) reported the species for St. Martin; Raffaele *et al.* (2003) described it as "uncommon to rare" for the Lesser Antillor

S. virens (Black-throated Green Warbler)

I observed and photographed two male specimens, which clearly showed black throats and streaked sides, in the cloud forest at the summit of Mt. Scenery on 21 April 2011. This species was not recorded by Voous (1983) for Saba, St. Eustatius, or St. Martin, nor was it mentioned by Walsh-McGehee (2004). Raffaele *et al.* (2003) described it as "very rare in some Lesser Antilles."

Pheucticus ludovicianus (Rose-breasted Grosbeak)

On 26 November 2016, Hans Verdaat observed a female foraging in Lower Hell's Gate (17°38'33"N, 63°13'40"W; Observation. org 2017). The species was not included by Voous (1983), but was on Walsh-McGehee's list (2004). Raffaele *et al.* (2003) mentioned it as a "vagrant among larger Lesser Antilles."

Passerina caerulea (Blue Grosbeak)

In lower St. Johns (17°37'14"N, 63°14'36"W) on 13 December 2011, I observed two female individuals, conspicuous by their heavy bills and light wing bars. Hans Verdaat observed a female on 7 April 2016 in Windwardside (Observation.org 2017). Voous (1983) did not mention this species at all; neither did Walsh-Mc-Gehee (2004). Raffaele *et al.* (2003) reported it as very rare in the

Virgin Islands, and did not mention the Lesser Antilles.

Recent Status of Some Breeding Birds Anous stolidus (Brown Noddy)

I recorded this species nesting on Diamond Rock (17°38'51"N, 63°15'22"W) and the cay Green Island (17°38'57"N, 63°13'47"W) with an estimated total of 30–35 breeding pairs in June and July 2012, which agrees with Lee and Mackin's (2009c) estimate of 30–60 pairs.

Onychoprion fuscatus (Sooty Tern)

Voous (1983) was unsure of the breeding status; Lee and Mackin (2008b) reported 15–30 breeding pairs in a single colony. I observed a few birds on Diamond Rock in July 2012, while on Green Island I counted a colony of 75–85 nests in June and July 2012.

O. anaethetus (Bridled Tern)

Voous (1983) reported "at least 25 pairs" on Diamond Rock while Lee and Mackin (2009a) estimated for Saba "52–70 pairs in 3 colonies." During June–July 2012, I counted the nesting birds on Green Island eight times by spotting scope. I saw no more than 10–15 nests; most were scattered in the lower parts of Green Island below the much more abundant Sooty Terns. During a boat trip near Diamond Rock on 14 July 2012, I observed 20–30 birds sitting on and flying around the rock. No other nesting site is known around Saba. The total number of breeding pairs appeared to be fewer than 50 during the 2012 season.

Phaethon lepturus (White-tailed Tropicbird)

Voous (1983) described only a few breeding pairs of White-tailed Tropicbird. About 15 yr later, the number was estimated as 50–100 pairs (Lee and Walsh-McGehee 2000, Walsh-McGehee 2000, Collier and Brown 2006). Lee and Mackin (2009b) gave an estimate of 7–45 pairs. After extensive personal observation and countless visits to the tropicbird breeding colonies, I have concluded that this species has not been seen since the summer of 2010, which should confirm that this species no longer breeds on Saba.

P. aethereus (Red-billed Tropicbird)

Voous (1983) estimated a maximum of 20 pairs of Red-billed Tropicbirds, but during the first decade of this century the breeding population on Saba was estimated as 750–1,000 breeding pairs, amounting to about 35% of the total West Indian population (Lee and Walsh-McGehee 2000, Walsh-McGehee 2000, Collier and Brown 2006, Lee and Mackin 2008a). More recent observations yield conservative estimates of 1,200–1,500 pairs (Geelhoed *et al.* 2013, Boeken 2016).

Puffinus Iherminieri (Audubon's Shearwater)

Audubon's Shearwater populations were estimated by Lee (2000) to be 1,000 breeding pairs based on available habitat. Collier and Brown (2006) discuss some difficulties in estimating population size. Based on my own observations, the estimation of 1,000 pairs appears to be too high. My observations concur with the estimates of 15–21 pairs by Lee and Mackin (2009d) and 25 pairs by Bradley and Norton (2009).

Bubulcus ibis (Cattle Egret)

Voous (1983) described the Cattle Egret as having been present on Saba, St. Eustatius, and St. Martin since the 1960s and breeding on St. Martin since 1973. On Saba I have frequently seen this species during the summer (April–November) in very small numbers. Although Walsh-McGehee (2004) listed it as a breeding resident, breeding status could not be confirmed.

Butorides virescens (Green Heron)

Voous (1983) noted, "Nest and eggs not yet found, but most certainly breeding." Walsh-McGehee (2004) reported a status of "probable breeder." I made occasional observations in October 2010 and January 2011, but could not confirm breeding status. The Saba checklist on Avibase.org (2018) also lists the Striated Heron (*B. striata*), the sister species previously regarded as a conspecific (as *B. striatus*). No additional indications for the presence of the Striated Heron were found. Furthermore, the undocumented records of this and several other species on the Avibase (2018) checklist are not reliable (D. Lepage pers. comm.).

Nyctanassa violacea (Yellow-crowned Night-Heron)

The breeding status of this species was given by Voous (1983) and referred to St. Martin and St. Eustatius, but not to Saba. Walsh-McGehee (2004) listed this species as a non-breeding visitor. Although I made several observations of juvenile birds in October 2010 and 2011, and in May 2011, it is probable that these were incidental visitors from other islands.

Vireo altiloquus (Black-whiskered Vireo)

This species was recorded by Voous (1983) as a breeding species on Saba based on an observation of an adult feeding young in 1979. Walsh-McGehee (2004) declared the species' status "uncertain." I can confirm only two observations during 2010–2012: 18 February 2011 and 24 April 2012, both consisting of only a single individual in the dry evergreen forest zone between 250 and 350 m asl.

Euphonia musica (Antillean Euphonia)

No sightings of this "probable breeding bird" have been recorded since the last one mentioned by Voous (1983) in 1952. As no records have been documented for more than 50 yr, this species can be regarded as no longer present on Saba.

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Appendix 1. Checklist of the birds of Saba and surrounding seas. V = Voous (1983), W = Combined lists of Walsh-McGehee (2004) and Collier and Brown (2006), R = Combined lists of Walsh-McGehee (2006) based on a reference to Walsh-McGehee (2004), but the species was not included on the Walsh-McGehee (2004) checklist.

Common Name	Scientific Name	Status	V	W	R
Wood Duck	Aix sponsa	vagrant	Х	Х	
Blue-winged Teal	Spatula discors	vagrant			X
American Wigeon	Mareca americana	vagrant		X*	
Red Junglefowl	Gallus gallus	introduced, feral			X
Least Grebe	Tachybaptus dominicus	vagrant		Х	
Rock Pigeon	Columba livia	introduced, feral		Х	X
Scaly-naped Pigeon	Patagioenas squamosa	breeding resident	X	Х	X
White-crowned Pigeon	Patagioenas leucocephala	vagrant		Х	X
Eurasian Collared-Dove	Streptopelia decaocto	introduced, breeding		Х	X
Common Ground-Dove	Columbina passerina	breeding resident	X	Х	X
Bridled Quail-Dove	Geotrygon mystacea	breeding resident	X	Х	X
White-winged Dove	Zenaida asiatica	regular visitor (April–September)		Х	Х
Zenaida Dove	Zenaida aurita	breeding resident	Х	Х	Х
Yellow-billed Cuckoo	Coccyzus americanus	vagrant			Х
Mangrove Cuckoo	Coccyzus minor	vagrant		Х	
Smooth-billed Ani	Crotophaga ani	vagrant		Х	
Chuck-will's-widow	Antrostomus carolinensis	vagrant	X	Х	
Black Swift	Cypseloides niger	vagrant			Х
White-collared Swift	Streptoprocne zonaris	vagrant	Х	Х	
Chimney Swift	Chaetura pelagica	vagrant			Х
Purple-throated Carib	Eulampis jugularis	breeding resident	Х	Х	Х
Green-throated Carib	Eulampis holosericeus	breeding resident	Х	Х	Х
Antillean Crested Hummingbird	Orthorhyncus cristatus	breeding resident	Х	Х	Х
Purple Gallinule	Porphyrio martinicus	vagrant		Х	
Common Gallinule	Gallinula galeata	vagrant	X	Х	
Black-necked Stilt	Himantopus mexicanus	vagrant			Х
American Oystercatcher	Haematopus palliatus	occasional visitor			Х
Black-bellied Plover	Pluvialis squatarola	rare passage migrant	Х	Х	Х
Semipalmated Plover	Charadrius semipalmatus	passage migrant (October)			Х
Ruddy Turnstone	Arenaria interpres	vagrant			Х
Least Sandpiper	Calidris minutilla	rare passage migrant	Х	Х	Х
Short-billed Dowitcher	Limnodromus griseus	rare passage migrant		Х	
Wilson's Snipe	Gallinago delicata	rare passage migrant		Х	Х
Spotted Sandpiper	Actitis macularius	regular visitor	Х	Х	Х
Solitary Sandpiper	Tringa solitaria	rare passage migrant		Х	
LesserYellowlegs	Tringa flavipes	rare passage migrant	Х	Х	Х
Pomarine Jaeger	Stercorarius pomarinus	incidental visitor, Saba seas	Х		
Laughing Gull	Leucophaeus atricilla	occasional visitor	Х	Х	Х
Ring-billed Gull	Larus delawarensis	vagrant			Х

Appendix 1. cont.

Common Name	Scientific Name	Status	٧	W	R
Herring Gull	Larus argentatus	vagrant, Saba seas	Х	Х	Х
Brown Noddy	Anous stolidus	breeding visitor (May–September)	Χ	Χ	Χ
Sooty Tern	Onychoprion fuscatus	breeding visitor (May–August)	X	X	Χ
Bridled Tern	Onychoprion anaethetus	breeding visitor (May–August)	Χ	Χ	Χ
Least Tern	Sternula antillarum	incidental visitor, Saba seas			Χ
Roseate Tern	Sterna dougallii	incidental visitor		X	
Common Tern	Sterna hirundo	incidental visitor	X	X	
Royal Tern	Thalasseus maximus	common visitor (April–September)	X	X	Χ
Sandwich Tern	Thalasseus sandvicensis	incidental visitor, Saba seas			Χ
White-tailed Tropicbird	Phaethon lepturus	breeding, recently extirpated	Х	Х	
Red-billed Tropicbird	Phaethon aethereus	breeding visitor	Х	Х	Х
Wilson's Storm-Petrel	Oceanites oceanicus	occasional visitor, Saba seas	Х	Х	
Leach's Storm-Petrel	Oceanodroma leucorhoa	occasional visitor, Saba seas	Х	Х	
Great Shearwater	Ardenna gravis	vagrant			Х
Audubon's Shearwater	Puffinus lherminieri	breeding visitor	Х	Х	Х
Magnificent Frigatebird	Fregata magnificens	common visitor	X	X	Х
Masked Booby	Sula dactylatra	occasional visitor, Saba seas	X	X	X
Brown Booby	Sula leucogaster	common visitor	X	X	X
Red-footed Booby	Sula sula	occasional visitor, Saba seas	X	X	X
Brown Pelican	Pelecanus occidentalis	regular visitor	X	X	X
Great Blue Heron	Ardea herodias	occasional visitor	^	^ x*	X
Great Egret	Ardea alba	regular visitor			
Snowy Egret	Egretta thula	occasional visitor	Х	X	X
Little Blue Heron	5			X	X
	Egretta caerulea	occasional visitor	X	X	X
Cattle Egret	Bubulcus ibis	possibly breeding	X	X	X
Green Heron	Butorides virescens	probably non-breeding visitor	X	Х	Х
Yellow-crowned Night-Heron	Nyctanassa violacea	casual visitor	Х	Х	Χ
Osprey	Pandion haliaetus	casual visitor	Х	Х	Х
Red-tailed Hawk	Buteo jamaicensis	breeding resident	Х	Х	Χ
Belted Kingfisher	Megaceryle alcyon	regular visitor	Х	Х	Х
American Kestrel	Falco sparverius	breeding resident	Х	X	Х
Merlin	Falco columbarius	passage migrant (October–March)	X	Х	Х
Peregrine Falcon	Falco peregrinus	winter visitor (October–April)		X	Х
Brown-throated Parakeet	Eupsittula pertinax	introduced, breeding		Χ	Χ
Caribbean Elaenia	Elaenia martinica	breeding resident	Χ	Χ	Χ
Gray Kingbird	Tyrannus dominicensis	breeding resident	Χ	Χ	X
Yellow-throated Vireo	Vireo flavifrons	vagrant			Χ
Red-eyed Vireo	Vireo olivaceus	vagrant		Χ	
Black-whiskered Vireo	Vireo altiloquus	visitor, possibly breeding	X	Χ	Χ
Caribbean Martin	Progne dominicensis	breeding visitor (March–September)	X	X	Χ
Cliff Swallow	Petrochelidon pyrrhonota	vagrant		X	Χ
Barn Swallow	Hirundo rustica	passage migrant (August–April)	X	X	X
Scaly-breasted Thrasher	Allenia fusca	breeding resident	X	X	X
Pearly-eyed Thrasher	Margarops fuscatus	breeding resident	X	X	X
Brown Trembler	Cinclocerthia ruficauda	breeding resident	X	X	X
House Sparrow	Passer domesticus	introduced, breeding			X
Antillean Euphonia	Euphonia musica	locally extirpated	X		
Bobolink	Dolichonyx oryzivorus	vagrant	Х	Х	
Shiny Cowbird	Molothrus bonariensis	vagrant		Х	
Ovenbird	Seiurus aurocapilla	vagrant		Х	
Louisiana Waterthrush	Parkesia motacilla	vagrant			Х
Northern Waterthrush	Parkesia noveboracensis	rare winter visitor	Х	Х	Х
Black-and-white Warbler	Mniotilta varia	rare winter visitor	X	X	••
Hooded Warbler	Setophaga citrina	vagrant	X	X	

Appendix 1. cont.

Common Name	Scientific Name	Status	V	W	R
American Redstart	Setophaga ruticilla	passage migrant	Х	Х	Х
Cape May Warbler	Setophaga tigrina	rare winter visitor		Х	Х
Northern Parula	Setophaga americana	rare winter visitor (September–April)	Х	Х	Χ
Yellow Warbler	Setophaga petechia	vagrant		Х	
Blackpoll Warbler	Setophaga striata	passage migrant (mainly October)		Х	Х
Palm Warbler	Setophaga palmarum	vagrant		Х	
Prairie Warbler	Setophaga discolor	rare winter visitor	Х	Х	
Black-throated Green Warbler	Setophaga virens	vagrant			Х
Summer Tanager	Piranga rubra	vagrant		Х	
Scarlet Tanager	Piranga olivacea	rare passage migrant	Х	Х	Х
Rose-breasted Grosbeak	Pheucticus ludovicianus	vagrant		Х	Х
Blue Grosbeak	Passerina caerulea	vagrant			Х
Indigo Bunting	Passerina cyanea	vagrant	Х	Х	
Bananaguit	Coereba flaveola	breeding resident	Х	Х	Х
Black-faced Grassquit	Tiaris bicolor	breeding resident	Х	Х	Х
Lesser Antillean Bullfinch	Loxigilla noctis	breeding resident	Х	Х	Х

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