

STUDIES ON THE FAUNA OF CURAÇAO AND OTHER CARIBBEAN ISLANDS: No. 176

NOTES ON THE BIRDS OF ST. MARTIN, SABA AND ST. EUSTATIUS

by

A. HOOGERWERF †

	pages	plates
Introduction	61	
General notes	62	
St. Martin (Fig. 11)	62	V-VII, XIVa
Saba (Fig. 12)	64	XVII-XVIII
St. Eustatius (Fig. 13)	65	XIVb-XVIa
Annotated list	67	
ST. MARTIN	68	VIII-XIII
SABA	111	
ST. EUSTATIUS	113	XVIb
References	123	

ANDRIES HOOGERWERF suddenly passed away on February 5, 1977, at Bakkum in the province of North-Holland. Only a few days before he approved of the final manuscript version of the present publication and was, once again, working on a report of his observations made during a solitary voyage to some small islands of the Windward Group in 1976.

ANDRIES and I have been primary-school class-mates. There he not only got better grades, but with his self-made dip-net he was also able to catch more fish than I in the harbour of the fisherman's town of Vlaardingen, where he had been born on August 29, 1906. After school we lost sight of each other. He became a taxidermist and, in 1931, got a function at the Zoological Museum at Buitenzorg (now Bogor).

In Indonesia HOOGERWERF developed into an excellent field-biologist and a prominent nature conservationist, who worked with enormous energy and enthusiasm, stimulating all those near him. His impressive bibliography concerns mainly the avifauna of Indonesia, along with a number of publications on mammals, nature conservation and nature education. His major work on "Udjung Kulon, the land of the last Javan Rhinoceros", 1970, was published seven years after he returned to the Netherlands.

Our paths again crossed when he became interested in the birds of the Caribbean, an interest which grew into a passion for the Lesser Antilles; this certainly must have given this untiring worker a great deal of happiness, until the day that he was finally taken from it - a great loss to his family, friends and colleagues.

P.W.H.

In 1973, 1974 and 1975 I visited St. Maarten, Netherlands Antilles. During these visits I spent much time observing birds on this island, while short excursions were also made to the neighbouring islands Saba and St. Eustatius.

The periods of our visits were:

ST. MARTIN: 7–19 April, 30 April–3 May and 11–19 May 1973, 1–7 and 16–27 February, 2–11 and 18–31 December 1974, 6–13 January 1975.

SABA: 4–8 May 1973.

ST. EUSTATIUS: 8–10 May 1973, 8–15 February and 12–17 December 1974.

The papers previously published on the avifauna of these islands by VooUs (1955, 1955a, 1965) and by VooUs & KOELERS (1967) formed important incentives and proved indispensable aids in the field, as were of course BOND's *Birds of the West Indies* (1961) and *Birds of North America* by ROBBINS, BRUUN, ZIM & SINGER (1966).

In the first place I wish to thank my son HENK HOGERWERF (H. H.) and my son-in-law ANNE DE HAAN (A. de H.), who then lived in St. Martin for five and three years, for their continuous interest and support. They were always willing to take me to even the most remote spots of St. Martin and furnished me with additional ornithological information beyond the periods of my visits.

I also wish to thank Prof. dr. K. H. VooUs and Dr. J. WATTEL of the Instituut voor Taxonomische Zoölogie, Amsterdam, for permitting me to study the collections in their institute and for their kind assistance in many other ways. I am also grateful to the Director of the Rijksmuseum van Natuurlijke Historie in Leiden for giving me the opportunity to study specimens there.

Finally, I am most grateful to Dr. P. WAGENAAR HUMMELINCK and Dr. J. H. WESTERMANN of the Foundation for Scientific Research in Surinam and the Netherlands Antilles, Utrecht, for providing me with literature and much valuable information. Special thanks are due to the Foundation's Secretariat for preparing the manuscript for printing.

GENERAL NOTES

Below some information is given, mainly of recent date, additional to the general notes published by Voous (1955a) and HARTOG (1964).

ST. MARTIN (Fig. 11; Pls. V-VII, XIVa)

As a result of the rapid increase of touristic activities on St. Martin, numerous biotopes attractive to birds have been seriously damaged and several will soon be completely destroyed. This is often the case where hotels have been constructed along a lagoon. It is evident that such radical changes badly influence birdlife and it would seem useful to be kept informed regularly of these developments. I believe that my personal experience during the many hours spent in the field, together with

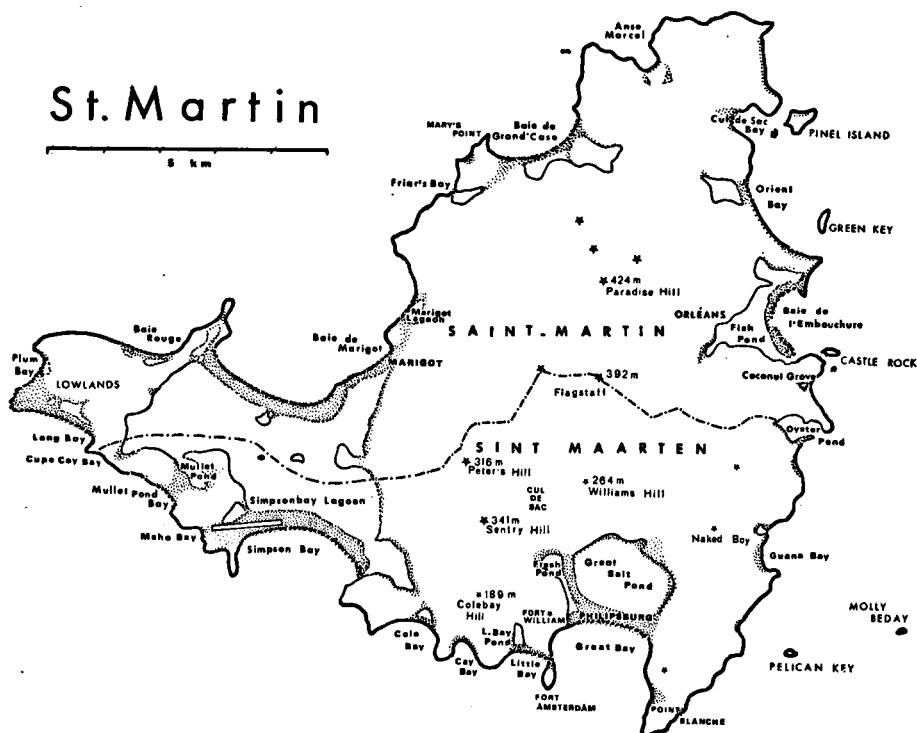


Fig. 11. Sketch-map of the island of St. MARTIN, with localities.

the information forwarded regularly after I had left St. Martin, have made it possible to give a reliable picture of the present situation in this island.

The island, covering an area of 89 square kilometers, is divided into a French part (52 sq. km, the northern half) called SAINT-MARTIN, and a Netherlands Antillean part (37 sq. km, the southern half) called SINT MAARTEN. With the exception of some flat areas, of which the so-called Lowlands in the most western part is the most important, the island almost exclusively consists of low hills; the highest of these is Paradise Hill (Pic du Paradis, 424 m) in the French part. The most beautiful hills in the Netherlands Antillean part are Sentry Hill (341 m), Peter's Hill (316 m), Naked Boy Hill (296 m), William's Hill (264 m) and Colebay Hill (189 m).

There are a great many beautiful sandy beaches, alternating with coral limestone plateaux, rocky headlands and muddy lagoons. In the dry season, which almost coincides with the summer of the Temperate Zones, there is hardly any freshwater available, and permanent brooks or rivers fail completely, although the annual rainfall averages 110 cm.

The well-known Great Salt Pond, where a thriving salt-industry once existed, is situated close to St. Martin's N.A. capital Philipsburg (Pl. Vb). It is no longer connected with the sea and has a varying salinity which is generally too high to be attractive to birds. The exception is the so-called Fresh Pond, separated from the Great Salt Pond by a road; this is an extensive brackish water reservoir (Pl. VIa). It is a valuable bird habitat that will be repeatedly mentioned below; in very dry periods, however, it dries up completely.

The island is covered mainly with low trees and shrubs, often almost impenetrable and thorny, alternating with some higher trees and palms, among which quite a few coconut palms and mangrove forests bordering the lagoons. Cactuses, although locally fairly numerous, do not form an important element in the vegetation. In the valleys and plains, and also along the lower slopes of some hills, the ground is often covered with grasses, herbaceous plants and weeds. These are sometimes used for cattle-grazing, but more frequently lie fallow; they are mainly in the hands of ground speculators, and offered for sale.

In the past centuries numerous efforts have been made to give the island an agricultural basis. Nowadays only some traces are left of the many old cotton, sugar and tobacco plantations and of the gardens where vegetables and other food-plants were grown. Although cattle-breeding is still of some importance, it is chiefly concentrated in the French part of the island, where also some poultry-growing is done. There is a reasonable stock of sheep and goats, but pigs, horses and donkeys are rare.

The entire island is covered with a network of roads, so that almost any corner of the island can be reached by car.

Besides the capitals Philipsburg and Marigot there are several smaller settlements. Also there is an increasing number of hotels and luxurious private homes, belonging to non-residents (mainly Americans), who spend their vacations here, especially during wintertime. The tremendously risen landprices make it impossible to establish nature reserves, presuming that there are any areas left worth preserving. Finally many fine places have been defaced by refuge heaps.

Between 1945 and 1963 the population of the N.A. part of St. Martin doubled (from 1744 to 3643), though it still did not reach the level of almost two centuries ago when the Dutch part counted 5520 inhabitants.

Nowadays tourism is the foremost source of income. Since World War II the

island has undergone an explosive development; this is clearly evidenced by the immense amount of air traffic and the increasing frequency in which big cruise-ships enter the Great Bay of taxfree St. Martin. There is also a growing number of taxi-cabs, touring-busses and rental cars, giving the small town of Philipsburg an overcrowded and somewhat chaotic appearance.

SABA (Fig. 12; Pls. XVII–XVIII)

This island is situated about 50 kilometers to the southwest of St. Martin; it is an inactive composite volcano with an area of about 13 square kilometers. It has quite a number of peaks; the highest is Mount Scenery – generally called The Mountain – 870 meters high. The other peaks vary from 200 meters to 600 meters in height, leaving very few flat areas where villages and other settlements have been built. Almost everywhere else there are rocky cliffs dropping down into the sea; there are no beaches and no lagoons on the island.

Rainfall is more evenly distributed over the whole year than in St. Martin and the summit of The Mountain is shrouded in clouds during the greater part of the year. As a result the vegetation of Saba differs considerably from that of St. Martin; it reminded me very much of certain parts of Indonesia, though there are no brooks, rivers or other freshwater reservoirs. Several mountain slopes are covered with fairly heavy forest, where the trees are often loaded with epiphytes and moist lumps of moss, as is usually the case in real tropical rainforest (Pl. XVIII). The lower veg-

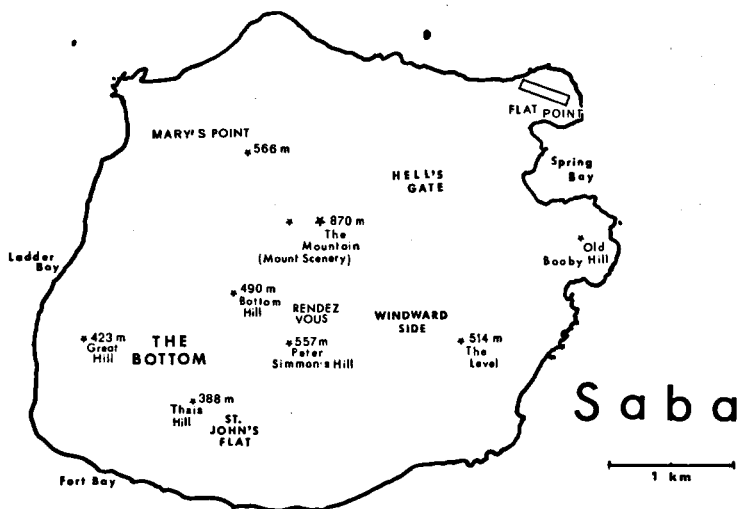


Fig. 12. Sketch map of the island of SABA, with localities.

etation too is in fact considerably more luxuriant than in St. Martin (Pl. XVII). Climbing The Mountain along the jungle-bordered path is one of the most pleasant experiences in this part of the Caribbean. However, in our case this pleasure was spoilt when we found the summit almost completely stripped of its splendid vegetation, and covered by a tremendous heap of materials for construction purposes.

There are four villages on the island, The Bottom, St. John's, Windward Side and Hell's Gate, all connected by excellent concrete roads of which the final part, the road to the airstrip in the northeastern part of Saba, was opened as recently as 1964. Cars were not introduced to the island until 1947; prior to that all transport took place on foot or on horse- or donkeyback. In those days the settlements could only be reached by narrow stone stairs, such as remain along the southern slope of The Mountain and between The Bottom and Ladder Bay.

Almost the entire population is concentrated in the four villages, which make an unbelievably clean and orderly impression on any visitor from abroad. The absence of refuse-dumps, the insignificant automobile traffic, and the serene atmosphere prevailing here, are an agreeable contrast to St. Martin.

There is no industry, no cattle or poultry breeding, no agriculture or horticulture other than kitchen gardens, but the many deserted gardens point to much more activity in the old days.

For many years the population has fluctuated between 1000 and 2000 after a maximum of 2500 persons around 1915; in the Sixties and Seventies it dropped to just above 1000.

The absence of sandy beaches, also the very rugged and mountainous terrain are among the reasons why Saba does not attract many tourists, although there is an increase in "one-day tourism", chiefly from St. Martin. A few Americans have discovered the island and built a "vacation home". There are only a few small hotels.

ST. EUSTATIUS (Fig. 13; Pls. XIVb–XVIa)

This island – commonly called Statia – lies about 60 km South of St. Martin; it covers an area of about 21 square kilometers, only about 8 square kilometers larger than Saba.

In contrast with both other islands the flat or slightly undulating regions are proportionately more extensive, and cover almost the entire central part of the island where also the airstrip is situated.

The northwestern region is mountainous, reaching up to 289 m, with about ten hills consisting of volcanic rock.

The southeastern part of the island is occupied mainly by an inactive volcano, The Quill, almost perfectly conical with a wide and deep crater with very steep inner slopes (Pl. XVa). The highest part of the narrow crater rim reaches a height of 600 m, the lowest point of the crater bottom is about 278 m above sea level. On the south side of this volcano the so-called White Wall is situated, the only limestone formation on Statia.

In general the coast is rocky, often rugged and steep; there are only a few sandy beaches along the central part of the island (Pl. XIVa, XVb).

Two centuries ago there were about 70 plantations, mainly cultivating sugar

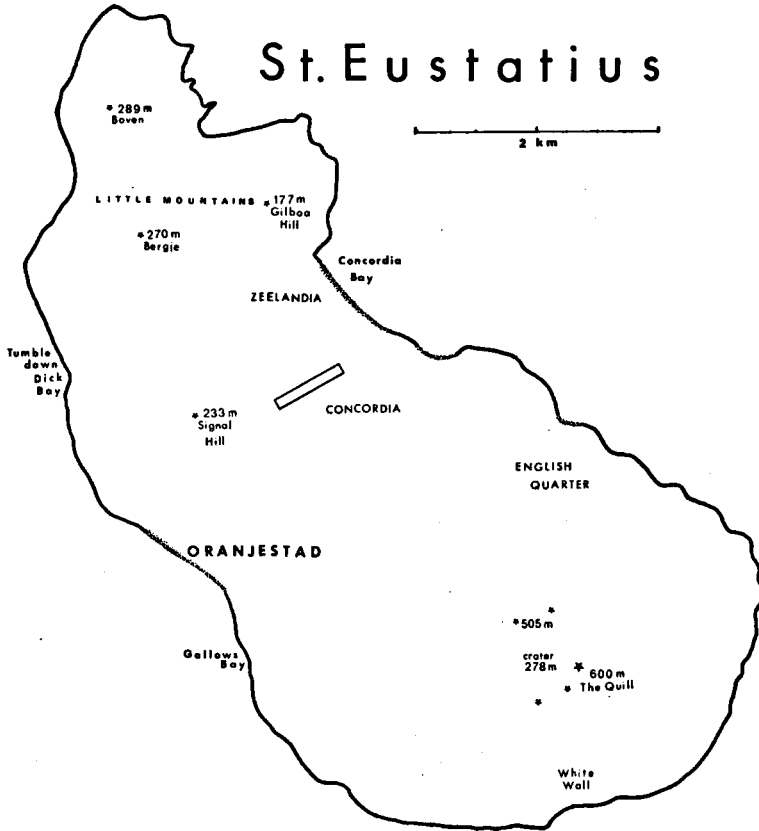


Fig. 13. Sketch map of the island of St. EUSTATIUS, with localities.

cane; of these are left only a few old ruins of sugar mills, neglected pastures and some agricultural plots of little importance.

On account of extensive clearing done in the past centuries, not much is left of the original vegetation, although the highest zone of The Quill and the walls of the crater are still covered with forest. These forests reminded us of the higher portions of The Mountain in Saba, although there are differences due to the long and very severe droughts that occasionally come over Statia.

When we visited the bottom of the crater, now partly occupied with some banana plants, it was littered with empty bottles, tins and other rubbish, left there by picnicking people, who had made fires and apparently spent the night there. The forest along the outer slopes of The Quill also suffered from such disastrous activities. As a result the area covered with heavy forest is continuously decreasing,

a process that, especially along the eastern side, is taking place much faster than most local people seem to realize.

The other parts of the island are chiefly covered with low, often thorny shrubbery with some scattered trees alternating with extensive areas with grasses, herbaceous plants and low weeds (Pl. XVIa).

Statia too has no brooks, rivers or other freshwater reservoirs. Anyhow this was the case when we were there in 1973 during a very dry period and also when we visited the island in 1974 still in the rainy season.

In those years there was not much cattle; but in addition to quite a number of goats and sheep, we saw more donkeys than in St. Martin and Saba together. Considering the extensive areas recently cleared, agriculture and horticulture is more important here than in both other islands.

Although here too a net of fairly good roads enables the car-driving visitor to see some interesting parts of St. Eustatius, most localities can only be reached on foot or on donkeyback.

The population is chiefly concentrated in the capital Oranjestad situated along the Southwest coast. The population fluctuated from 970 to 1096 between 1950 and 1963. When compared with the situation of two centuries ago, this is a considerable decline, for in 1786 there had been 7600 and in 1790 even 8124 inhabitants on the island of Statia.

From a touristic point of view the island has little to offer, although its historical past enjoys growing interest. As is the case with Saba the hotel accommodation of Statia is limited.

ANNOTATED LIST

In their checklist of the birds of the islands VOOUS & KOELERS (1967) have consistently included only those species of which the occurrence is substantiated by collected specimens. Sight records are mentioned, but in small letter type only, without a number.

It must be regretted, however, that in many instances they do not state in their checklist when and where the first certain records were obtained. It is also not sufficiently clear whether a species mentioned for more than one of the three islands involved, was secured in each of them. Therefore it would not be consistent to include St. Martin into the range of a certain bird if it has been collected in Saba and St. Eustatius, but is known from St. Martin only from sight records. Neither would it be consistent to include both or one of the other islands into the range of species of which specimens have been obtained in St. Martin, and only sight records from Saba and St. Eustatius are known. In many cases the present author has not succeeded in obtaining the desired evidence in this

respect, not even after consulting previous papers by Voous (1955, 1955a).

Although one may have different ideas about the validity of sight records and their value for a checklist, I am of the opinion that in cases as the present one, neglecting modern field records and only accepting species of which material has been secured, is carrying it a bit too far. Especially for the islands involved such a commitment must be seriously advised against as the entire region is in urgent need of nature preservation measures. And bird-shooting does not fit into these.

ST. MARTIN

When we visited St. Martin in April–May 1973 there was an extreme drought, such as “old-timers” remembered rarely to have experienced. Consequently, a well-known habitat, the Fresh Pond along the Bushroad, which usually contains brackish water, had completely dried up and the island made a desert-like impression. During the last ten days of April heavy showers occurred, resulting in an explosive sprouting of the vegetation; but they lasted only a few days and the Fresh Pond dried up again, so that drinking water again had to be imported.

In February and December 1974 and also in January 1975 the situation was quite different, as it rained almost every day and night and part of the hills and the valleys were covered with a luxuriant vegetation. The Fresh Pond was filled with clear, only slightly brackish water. The temperature was considerably lower than in 1973 which made “birding” more comfortable.

Voous (1955a) repeatedly stressed his impression that St. Martin’s birdlife is poor in species and individuals. We had about the same impression, but during the first three days of April 1973 no less than 30 species were observed, and the first three days in February 1974 as many as 44 (whereas Voous recorded a total of 34 species in 16 days, Feb.–March 1952). After one week our list contained already 46 species in 1973 and 50 in February 1974. And we succeeded in

establishing 64 species when we left St. Martin after a stay of about 26 days in 1973.

The number of birds recorded daily was not unsatisfactory either, as 30 species or more (including migratory waders) were repeatedly counted within two or three hours of "birding". In February 1974 35 species were identified on 2 February and as many as 40 on 20 February. The fact, however, that during our December 1974–January 1975 stay there were only very few days on which more than 20 species were recorded (maxima: 24, 25, 27, 28) proves that the situation may vary considerably.

Also when comparing the total number of bird species now known from this island (111) with that of Bonaire (108) – which is almost three times the size of St. Martin and is favoured with a great diversity of biotopes – it is perhaps not right to suppose that the island is poor in birds.

The fairly large number of pigeons and doves and the familiar behaviour of some of these did not indicate excessive hunting. Shooting was very rarely heard, although we found quite a few empty cartridges and some dead and crippled waders along the Fish Pond and Plum Bay lagoons. We did not obtain information on the detrimental influence of the imported mongoose, though we observed these animals repeatedly. On 17 February 1974 a small, long-tailed monkey was seen in the French part of the island.

VOOUS & KOELERS (1967) mention 98 species for St. Martin, including 20 only known from sight records. Since we only incidentally collected some birds, our list almost exclusively relates to sight records, in many cases confirmed by my son (H. H.) or by my son-in-law (A. de H.), and repeatedly established. However, 5 of the listed species have not been seen by me, because they were observed during my absence, *viz.*: *Phalacrocorax olivaceus*, *Anas americana*, *Porzana carolina*, *Pluvialis dominica*, and *Coccyzus americanus*.

Among the 88 species of the present survey, there are 13 not previously recorded from St. Martin, *viz.* *Phalacrocorax olivaceus* (only seen by H. H. and A. de H.), *Egretta alba*, *Anas americana*

(A. de H.), *Gallinula chloropus*, *Fulica caribaea*, *Charadrius collaris*, *Pluvialis dominica* (A. de H.), *Tryngites subruficollis*, ? *Zenaida auriculata*, *Coccyzus americanus* (H. H. and A. de H.), *Dendroica coronata*, *Piranga olivacea* and *Quiscalus lugubris*, of which only the last one was secured.

The following 23 species listed by VOOUS & KOELERS (1967) were not recorded by us in St. Martin: *Puffinus lherminieri*, *Oceanites oceanicus*, *Phaeton aethereus*, *Sula dactylatra*, *Sula sula*, *Dichromanassa rufescens*, *Nycticorax nycticorax*, *Ajaia ajaia*, *Phoenicopterus ruber*, *Anas acuta*, *Buteo jamaicensis*, *Circus cyaneus*, *Porzana porzana*, *Larus argentatus*, *Gelochelidon nilotica*, *Sterna hirundo**, *Sterna fuscata**, *Caprimulgus carolinensis*, *Sphyrapius varius*, *Muscivora tyrannus*, *Seiurus aurocapillus*, *Oporornis agilis* and *Setophaga ruticilla*.

Except for the two marked with an asterisk, all of these species which we did not see are considered to be very rare in St. Martin, some of them having been recorded only once or else a considerable time ago. The only striking exception is *Setophaga ruticilla*, the American Redstart, found by Voous (1955a) as one of the most abundant birds in dense scrubbery and bush in February and March 1952, and not recorded by me during our three trips, nor by H. H. and A. de H. during a much longer period.

Together with our experiences with many other migrating and wintering species, this clearly confirms Voous' statement that much still is unknown about the avifauna of St. Martin. This not only applies to the regularity and frequency of the appearance of migrating and wintering North American warblers, but also to the seabirds and other water birds, like *Sula dactylatra*, *Sula sula*, *Nycticorax nycticorax* and *Anas acuta*, so far only mentioned by PINCHON (1963).

In the following **List of bird species from St. Martin**, nomenclature and sequence are those used by VOOUS & KOELERS (1967) in their *Check-list*. The subspecific names are those mentioned in that list, and by Voous (1965). Parts of the remarks made by Voous

& KOELERS about the species involved are inserted in the heading between inverted commas.

PODICIPEDIDAE

Podilymbus podiceps (Linnaeus)

Pied-billed Grebe

subsp. *podiceps* – "Winter visitor. One record: 17 November 1965 Fresh Pond".

subsp. *antarcticus* (Lesson) – Not known from St. Martin, but an irregular visitor in Curaçao and Bonaire (Vooûs 1965).

subsp. *antillarum* Bangs – "Casual visitor. One specimen from the previous century."

First recorded by A. de H. in Oct. 1972 (Fresh Pond), not observed in April–May 1973, but on 28 Sep. 1973 and regularly thereafter two specimens were seen by H. H. and A. de H. This was at the same locality where in Nov. 1965 KOELERS collected the subsp. *podiceps*, viz. in the Fresh Pond along the busy Bushroad. The pond contained some water after a long period of drought. On 11 Nov. 1973 even four Grebes were observed at the same locality.

At least four specimens were seen by me in the Fresh Pond in Feb. 1974. At that time its depth was about 50 cm, the water was clear and crowded with *Ruppia*. In the beginning of that month courting was observed, and one bird building a nest, which disappeared afterwards. On 23 Feb. a second nest with two eggs was found (Pl. VIII), containing dead embryo's of about 10 days old. The size of the eggs was 41.8×28.8 and 40.8×28.2 mm. About the same time two more Grebes were seen in the Marigot Lagoon.

In Dec. 1974–Jan. 1975 none were seen in the Fresh Pond, but one was regularly found in the brackish water of Little Bay Lagoon, in company of one *Fulica caribaea*.

It may be supposed that all these specimens belong to subsp. *antarcticus*.

PHAETHONTIDAE

Phaethon lepturus catesbyi Brandt White-tailed Tropicbird

"Probably breeding resident. Scarce. Birds hiding or sitting in rock crevices have been recorded in St. Martin (Mary's Point, Maho Bay)". – First certain record from 26 June 1958, when KOELERS collected one specimen.

In 1973 this species was regularly seen in several places along coastal escarpments, most frequently at Cupe Coy Bay (Pl. VIIb), a locality that was not visited by us without seeing several individuals, flying over the sea or sitting in crevices. On 9 April an adult was removed from a "nest" containing one egg (Pl. Xa), but several other birds – once two sitting in one hollow – proved to have no eggs. On 1 May a chick was found in a fairly deep crevice, and in the beginning of June A. de H. discovered at least three nests containing young, one of which was almost capable to fly.

In Jan. 1974 no Tropicbirds were met at Cupe Coy Bay, but in April there were at least 5 pairs, in May 4 pairs and 3 more at Cole Bay, and in June even 7 pairs at Cupe Coy Bay (A. de H.).

After their absence during the winter, the birds returned about April 1975: 6 pairs at Cupe Coy Bay, 3 at Maho Bay and 7 at Baie Rouge (H. H. and A. de H.). We may accept the species' absence during wintertime, because we did not record Tropicbirds in Feb. and Dec. 1974–Jan. 1975 either, but during summer they were certainly not scarce.

We doubt whether the birds recorded by KOELERS on 26 June 1958 near Mary's Point and Maho Bay (VOOUS & KOELERS 1967) really belonged to *Ph. aethereus*, a species which we did not see at St. Martin, although VOOUS (1955a) refers to a specimen collected in the previous century, and he states to have seen it in Feb. 1952 near Point Blanche. Confusion of the two species may perhaps be the reason why *Ph. lepturus* was not mentioned for St. Martin until 1958.

PELECANIDAE

Pelecanus occidentalis occidentalis Linnaeus Brown Pelican

"Breeding resident. Breeding colony of 30-50 pairs on the small island Pelican Key."

We did not find any indication that this species breeds on the main island. VOOUS & KOELERS (1967) reported breeding on Pelican Key, where we saw a not yet fully grown fledgling on 1 May. On 29 Dec. 1974 this rocky island had numerous empty nests, several old eggs and fragments of them, together with dead, for the greater part large chicks (cf. Pl. XIII).

Pelicans were commonly seen, even along the busy Bushroad at the Fresh Pond, and elsewhere quite close to dwellings. However, during Dec. 1974-Jan. 1975 they were fairly scarce. When visiting Bay Rouge in early April 1975, H. H. and A. de H. thought that pelicans were breeding on some inaccessible rocks.

SULIDAE

Sula leucogaster leucogaster (Boddaert) Brown Booby

"Regular non-breeding visitor in irregular, but usually small numbers." - Perhaps known from sight records only.

Fairly regularly recorded, most often flying over sea, but also repeatedly resting on a large ship-buoy near Wathey-pier in Great Bay. On 14 April 10 were counted there, among which some beautiful adults. In Feb. and Dec. 1974 and in Jan. 1975 the species was less frequently observed; in most cases it concerned immature solitary birds.

PHALACROCORACIDAE

Phalacrocorax olivaceus olivaceus (Humboldt)

Neotropic Cormorant

Previously never recorded from St. Martin, but known from the northern Lesser Antilles.

In early April 1975 a single specimen was seen by H. H. and A. de H. along the rocky coast of Île Pinel, NE St. Martin; apparently a semi-adult bird, as neck and breast were lighter than the remaining part of its plumage.

FREGATIDAE

Fregata magnificens Mathews

Magnificent Frigatebird

"Regular non-breeding visitor in irregular, but usually small numbers." – Perhaps only known from sight records.

In April–May 1973 recorded almost daily along the coast and soaring above the island, single or a few at a time, most frequently females and birds in immature plumage.

As is the case with *Sula leucogaster*, Frigatebirds were recorded less frequently during Dec.–Jan. and in Feb., although on 7 Dec. 1974 about 25 were counted near a fishing boat in Simpson Bay Lagoon.

ARDEIDAE

Ardea herodias Linnaeus

Great Blue Heron

subsp. *herodias* – "Passage migrant and winter visitor in very small numbers. Recorded between 13 November and 5 April." – There is only one certain record from St. Martin: a female collected by DANFORTH in Dec. 1927.

Only once recorded in 1973: on 13 May a single individual in immature plumage along the Fish Pond near Orient Bay, one of

the most interesting places for birding (Pl. VIb). In Oct. 1973 a dead specimen was found by A. de H., and on 11 Nov. two were seen by him in the Fresh Pond.

In Feb. 1974 we saw the species on five occasions, once even four times on the same day, mostly semi-adults or adults in non-breeding plumage. On 7 Feb. a beautiful adult was seen in the Fish Pond, and one was observed three times in the Fresh Pond in the same month. In all cases it concerned solitary birds except once on 3 Dec. 1974 when there were two seen together.

***Egretta alba egretta* (Gmelin)**

Large Egret

Not known from St. Martin, but it is said to be a regular non-breeding visitor in small numbers in Aruba, Curaçao and Bonaire (Voous 1965).

In Feb. 1974 one Large Egret was observed almost daily by me at the Marigot Lagoon, but again in April in a small lagoon near Cole Bay and in Little Bay Lagoon (A. de H.). Perhaps there was only one bird, but certainly there could not have been more than two.

Because we know the species very well from Indonesia, we had no difficulty in identifying it. The bird was in non-breeding plumage with as most striking features its large size, the yellow bill and dark legs.

***Egretta thula thula* (Molina)**

Snowy Egret

"Regular non-breeding visitor in small numbers." – The only published record is of Voous (1955a), who saw one or two specimens in Feb. 1952.

Ten or more together on 9 and 10 April 1973 in the Marigot Lagoon. Fairly regularly observed in Feb. and Dec.–Jan. 1974/75, mainly in the Marigot Lagoon and in the Fish Pond, but also elsewhere. On five occasions 8–10 individuals together, twice 12, 15 and 20, once as many as 30 (Fish Pond, Jan. 1975).

We often assumed them to be birds in nuptial plumage. Most striking in the field are the yellow feet and lower tarsi, and when in breeding plumage the occipital crest and dorsal plumes.

Hydranassa tricolor (Hartert)

Tricoloured Heron

subsp. *ruficollis* (Gosse) – "Irregular non-breeding visitor. Few records." – Not known from St. Martin until 1955. According to BOND (1964, 1965) 2 specimens were recorded from Simpson Bay Lagoon, 28 Jan. 1964.

On 12 and 13 April 1973 a solitary bird was observed, and a third one on 11 Nov. (A. de H.). More often found by me in Feb. and Dec. 1974 and in Jan. 1975, when several were evidently in their nuptial plumage. On 19 and 30 Dec. there were at least 5, and on 8 and 9 Jan. 1975 three specimens. Almost all records are from the Fish Pond.

The striking differences in plumage in birds seen in Dec.–Jan. led me to suppose that perhaps there were two different subspecies (*ruficollis*, and *rufiventris*, known from Trinidad and Tobago).

Florida caerulea (Linnaeus)

Little Blue Heron

"Regular non-breeding visitor in rather small numbers." – Perhaps only known from sight records.

On 18 April 1973 a solitary individual in the white phase along the Fish Pond, and towards the end of May another one at Plum Bay beach (A. de H.). In Feb. and Dec. 1974 the species was recorded by me five times, in the Fish Pond and Marigot Lagoon; both birds in the light and in the dark phase were present.

Individuals in the white phase may be confused with *Egretta thula*; but the latter looks more like a very small *Egretta garzetta*, while the present species resembles somewhat the Asiatic Reef Heron *Demigretta sacra*.

Bubulcus ibis ibis (Linnaeus)

Cattle Egret

"Status unknown, but probably breeding resident." – Considering the present status of this Egret it is almost unbelievable that it remained unknown from St. Martin until 1962.

Cattle Egrets were regularly seen in many parts of the island and

in different habitats, but never along the coast. Usually several together, on 9 April 1973 at least 30 at a roost in low shrubs. Many were present every day on a refuse-dump in the Fresh Pond from where at dusk about 40 would retire to the surrounding hills to a night roost. Most of these birds were very dirty.

On 13 May the first breeding individuals were seen on a small group of *Rhizophora* trees amidst the Coconut Grove Lagoon near the village of Orléans, not far away from the Fish Pond. Two days later about 20 nests were counted in those parts we were able to overlook from the road, but we estimated there might have been 30 nests. Later visits proved the breeding to be successful (A. de H.).

In Feb. 1974 we got the impression that the birds were more widely distributed over the island. Some were regularly seen around grazing cattle along the Bushroad; even as many as 40 in the afternoon of 24 Feb.

According to A. de H. and H. H. breeding birds are to be found every month at Coconut Grove Lagoon. When we visited the breeding colony on 11 Jan. 1975 to film the birds, we estimated that about 300 birds and 50–75 nests were present (Pls. Xb, XI). There were many chicks varying in age from some days to large fledglings but there were only a few eggs. In those days too Cattle Egrets were all over the island, sometimes 30–50 near grazing cattle at Marigot. The breeding birds remained undisturbed: no eggs or young were taken by the surrounding human population.

On Flat Island (Tintamarre) a single Cattle Egret was observed on 17 April 1973.

***Butorides virescens* (Linnaeus)**

Green Heron

subsp. *maculatus* (Boddaert) – "Probably breeding resident, but breeding not yet proved. Rather common in St. Martin."

Very regularly seen, almost exclusively in or close to mangrove forests, but occasionally also along the coast where there is no *Rhizophora*. Most frequently single or a few birds together. On 9 April 1973 one was seen in nuptial plumage.

In Feb. 1974 again several were seen in nuptial dress, of which

one bird along the Marigot Lagoon was extremely fearless, which is uncommon in the species. Our Dec.-Jan. experiences agree with the previous ones, so that the population of this Heron seems fairly stable throughout the year.

Nyctanassa violacea bancrofti Huey

Yellow-crowned Night-Heron

"Probably breeding resident, but breeding not yet proved. Rather scarce."
- Probably only known from sight records.

In 1973 only one certain record of a solitary bird along Cupe Coy Bay. Many footprints on the sandy beach were noted.

In Feb. 1974 the species could not be recorded but in early May at least 10 were seen by A. de H., who also found on 17 Sep. 1974 a very young chick near Plum Bay. In Dec. 1974 solitary birds were observed by me in a remote corner of Simpson Bay Lagoon and in Pelican Key.

On 17 April 1973 one was flushed from low shrubs bordering the beach of Flat Island (Tintamarre), where many footprints were also found.

ANATIDAE

Anas discors discors Linnaeus

Blue-winged Teal

"Passage migrant and winter visitor in small numbers. Recorded between 1 October (1956) and 5 April (1965)."

On 18 April 1973 a solitary bird was seen by me in company of a small flock of *Anas bahamensis* in the Fish Pond. On 11 Nov. 1973 eight were recorded by A. de H. in the Fresh Pond, and 5 in a pool near Guana Bay, where again a single one was seen on 15 Oct. 1974. We have no records for Dec. 1974-Jan. 1975.

Anas bahamensis bahamensis Linnaeus

White-cheeked or Bahaman Pintail

"Irregular non-breeding visitor. Very few definite records." – Only sight records.

Regularly observed, but exclusively in the extensive Fish Pond. On 11, 12 and 18 April 1973 there were 3 of them, on the 14th fourteen, and on 13 May as many as 22, all extremely alert, keeping well out of the range of a shotgun. Because apparently paired birds were recorded, breeding may not be excluded. A. de H. reported that in the first days of June flocks were no longer seen, but single birds or those in pairs.

On 7 Feb. 1974 there were again 14 in the Fish Pond, on 23 Feb. 7. The species was not seen in Dec.–Jan. 1974/75.

Anas americana Gmelin

American Widgeon

Not yet recorded from St. Martin.

On 11 Nov. 1974 nine specimens were seen by A. de H., swimming in the Fresh Pond opposite his house.

PANDIONIDAE

Pandion haliaetus carolinensis (Gmelin)

Osprey

"Irregular non-breeding visitor in very small numbers. Recorded in February (1952, 1959), June (1959) and October (1965)."

In 1973 the Osprey was repeatedly observed by A. de H. in the northern part of the island, and in Nov. there was a single bird above the Fish Pond.

On 5 Feb. 1974 a single, calling bird with a small prey was seen by me above Plum Bay beach. There was no reaction on the bird's call when it disappeared in northern direction. Three weeks later H. H. and A. de H. saw an Osprey above Simpson Bay Lagoon, where also during June and July 1974 the species was occasionally

recorded, from which it is evident that it occurs here also during the summer.

In Dec.–Jan. 1974/75 the Osprey was seen by me on four different occasions, on 27 Dec. there were even two together – almost certainly a pair – above the lagoon where Cattle Egrets were breeding.

FALCONIDAE

Falco peregrinus anatum Bonaparte

Peregrine Falcon

“Irregular non-breeding visitor. No recent records”. – According to Voous & KOELERS (1967) there are two study skins in the Leiden Museum which were collected in St. Martin in 1866 and 1869. It seems not quite justifiable to call the species an “Irregular non-breeding visitor” on account of these two skins only.

In Dec. 1973 A. de H. saw two specimens along Paradise Hill and in the late afternoon of 25 Feb. 1974 we both observed a solitary bird flying from East to West over the Great Salt Pond, apparently descending near Fort William. Our efforts to trace the bird immediately afterwards were unsuccessful.

Falco columbarius columbarius Linnaeus

Merlin or Pigeon Hawk

“Passage migrant and winter visitor in very small numbers. Recorded in St. Martin on 19 August, but mainly between 10 November and 23 March (1965).”

The Merlin must be considered a rare visitor to St. Martin, because until now we have only one certain record. In the early part of April 1975 a single bird could be identified from close by at Cay Bay by A. de H. This was during a period when an increasing number of American Kestrels was also recorded.

Falco sparverius caribaeorum Gmelin

American Kestrel

"Breeding resident. Rather scarce".

In April–May 1973 almost daily recorded, most often solitary birds sitting on telephone-poles or wires close to human habitations. In Feb. and Dec.–Jan. 1974/75 the species was less frequently seen, although it was certainly not scarce. On 27 Dec. an Osprey was attacked by two Kestrels, and the next day a very tame one was observed near Marigot Lagoon preying on lizards. In April 1974 and 1975 A. de H. reported increasing numbers.

RALLIDAE

Porzana carolina (Linnaeus)

Sora

"Passage migrant or winter visitor. One record: 24 December 1927".

Never seen by me, but A. de H. and H. H. observed a single one in the Fresh Pond on 11 Nov. 1973 without obtaining certainty about its exact identity. According to Voous (in litt.) most probably *P. carolina* was concerned.

Gallinula chloropus (Linnaeus)

Moorhen

Not previously recorded from St. Martin. Voous (1965) considers the subspecies *cerceris* Bangs an irregular breeding visitor for Aruba and Curaçao. KRUYTHOFF (1939) mentions the species for St. Martin, but Voous (1955a) thought the evidence insufficient.

On 11 Nov. 1973 a solitary specimen was observed by A. de H. in the Fresh Pond. Some days prior to this another had been found in the Little Bay Pond.

During Feb. 1974 we saw a varying number of 3 to 6 birds almost daily among which 1 or 2 semi-adults in the Fresh Pond. On 2 Feb. a nest was found containing 4 eggs, two of which were taken and proved to be fresh. Although breeding continued for about a week,

the nest was deserted later on. Measurements of the eggs taken: 44.7×31.5 and 45.3×31.6 mm.

Although during Dec.–Jan. 1974/75 the Fresh Pond was filled, there was only one Moorhen observed; outside this locality the species was not recorded.

Fulica caribaea Ridgway

Caribbean Coot

KRUYTHOFF (1939) mentions this Coot for St. Martin, but Voous (1955a) thought this record not reliable enough to be included in his lists.

On 15 April 1973 and at some later occasions one single individual was seen roaming along a shallow pool of brackish water in the almost entirely dried-up Fresh Pond, in the company of some Sandpipers, Plovers and Cattle Egrets. When disturbed the bird fluttered to the surrounding narrow belt of vegetation unable to fully make use of one of its wings. On 11 Nov. A. de H. established 4 Coots, and in Feb. 1974, 9–11 Coots were seen by me at the same place. Apparently all birds were adults in good condition, partly in breeding plumage. Although some of them made the impression to be paired, no nests were found.

During Dec.–Jan. 1974/75 Coots were absent from the Fresh Pond, but one beautiful adult bird was regularly seen in Little Bay Lagoon, together with one Pied-billed Grebe, until the first days of January.

The almost pure white of the larger part of the bill and of the entire frontal shield were the main characters on which the birds were classified as *caribaea*, and not as *americana*. When dealing with the latter species BOND (1971) points to "a little white on wing noticeable in flight", a character, however, which is also present in *caribaea*.

HAEMATOPODIDAE

Haematopus palliatus Temminck American Oystercatcher

subsp. *prattii* Maynard – "Irregular non-breeding visitor. Two sight records."

We did not identify the Oystercatcher with certainty in St. Martin in 1973, but on 17 April 1974 one individual was seen along the coast of Flat Island. Most striking was the much lighter tinge of its upper parts when compared with the European species.

Our first record for St. Martin itself is of 2 Feb. 1974: a single bird at Oyster Pond. Its upperparts were considerably darker than in the specimen seen at Flat Island, and in birds seen in Bonaire, and therefore more resembling the European Oystercatchers.

The most valuable record comes from H. H. and A. de H. who saw six birds, apparently three pairs, along the rocky coast of Green Key, 20 April 1975.

CHARADRIIDAE

Arenaria interpres morinella (Linnaeus) Ruddy Turnstone

"Regular non-breeding visitor in rather large numbers. Scarce in summer."
– As published so far the Turnstone is known from St. Martin only by sight records.

In 1973 observed almost daily in suitable habitats, as late as 13 May. Along coral beaches as well as on sandy shores or in lagoons, but usually avoiding muddy places and pools. According to our fieldnotes we then never saw more than about ten individuals together, often mixed with other migrating waders.

Also in Feb. 1974 the species was regularly seen at different localities, e.g. about 20 at Plum Bay beach and in the Fish Pond, and several times 40–50 in the Little Bay Lagoon. Turnstones were also found along the beach of Anse Marcel and in the Marigot Lagoon.

They were less frequently seen in Dec.-Jan. 1974/75, when 14 birds was the maximum, at the Fresh Pond.

Pluvialis squatarola (Linnaeus) Grey or Black-bellied Plover

"Regular non-breeding visitor in rather small numbers. Not very scarce in summer". - Perhaps only known from sight records.

Fairly regularly recorded during 8-19 April 1973, usually single or a few together in the company of other waders and generally in lagoons; frequently along the Marigot Lagoon. Quite a number were observed on 13 April in the Fish Pond. Individuals showing distinct traces of their summer plumage were regularly observed in that period. Many were seen by A. de H. in Oct. 1973, Fish Pond.

In Feb. 1974 the species was found at least seven times at four different localities, frequently in the Fish Pond, 17 and about 50 at one time. In Feb. all birds were in full winter plumage.

In Dec.-Jan. 1974/75 we found this plover to be the most numerous wader, of which we once found 75, and a second time as many as 100 in the Fish Pond.

Pluvialis dominica dominica (P. L. S. Müller)
American Golden Plover

Not previously recorded in St. Martin.

On 20 Sep. 1974 A. de H. - who knows the species thoroughly from Europe - saw two Golden Plovers feeding on fallow land near Castle Rock.

Charadrius semipalmatus Bonaparte Semipalmated Plover

"Passage migrant and winter visitor in rather small numbers. No records from April and May." - Perhaps only known from sight records.

Regularly recorded in April-May 1973, but almost exclusively in the pond behind Long Bay, and in the lagoons between Cupe Coy

Bay and Plum Bay, and also on a fairly flat rock in the latter bay. Not more than a few birds together.

Only twice recorded in Feb. 1974: 15 on the same rocky plateau in Plum Bay, and a few along the Marigot Lagoon. In Dec.-Jan. 1974/75 the species was also less common, having been recorded only three times with a maximum of 5 together in the Fish Pond on 7 and 21 December.

Charadrius alexandrinus nivosus (Cassin)

Snowy Plover

"Breeding summer visitor. Rather scarce. Recorded between 2 March (1965) and 21 October (1965). Downy chicks recorded on 30 June 1958 and 6 June 1959."

In Nov. 1973 one individual was seen by A. de H. in the Fish Pond. At present this small plover, which was never recorded by me, may be considered to be rare in St. Martin.

Charadrius collaris Vieillot

Collared Plover

Previously unknown from St. Martin.

For the first time recorded by me on 10 and 19 April and 1 May 1973, only one (perhaps two) individuals on the limestone plateau along Plum Bay beach and in the nearby lagoon.

Almost certainly recorded again on 21 Dec. 1974 in the company of some *Charadrius semipalmatus* from which it may be discerned in being smaller, having a thinner bill and lacking the white nuchal collar. When flying there is no white in the wing, as is the case with *semipalmatus* and *alexandrinus*. When compared with the latter, the present species is distinctly darker.

Charadrius vociferus vociferus Linnaeus

Killdeer

"Passage migrant and winter visitor in very small numbers, probably not occurring each year." – Specimens collected by DANFORTH, 24 Dec. 1927, and by KOELERS, 18 Dec. 1965, belonged to the large, northern migrant race *vociferus* (VOOUS & KOELERS 1967).

In Nov. 1973 one specimen was seen and secured by A. de H. at Plum Bay beach. The species was repeatedly observed by us in Feb. 1974: on a small paddock bordering the Fresh Pond, and several times in the Marigot Lagoon, where small flocks, up to 10 individuals, were seen on dry paddocks bordering some small fresh-water pools. The birds were very shy and when flushed they often produced their typical call.

In Dec. 1974–Jan. 1975 Killdeer were again observed near the Marigot Lagoon, at exactly the same locality where we saw them in Feb. 1974, in flocks of 5 and 6 specimens.

Charadrius wilsonia Ord

Thick-billed Plover

subsp. *wilsonia* – "Breeding summer visitor. Rather common. Eggs found on 24 May 1958. Downy chicks recorded on 22 and 30 June 1958, and 6 and 8 June 1959."

Frequently observed in the lagoons previously mentioned, in April–May 1973. Two clutches were found in the beginning of April in Plum Bay Lagoon, followed by another set of three eggs on 1 May. On 15 May the first clutch had hatched of which one pullus was traced. One egg was deserted; it measured 36.2×25.9 mm. All eggs were deposited in shallow hollows amidst some low weeds (Pl. XII).

On 13 April at least 6 birds were seen in the Fish Pond, some of them courting. Only empty nestholes were found, mostly in bare sandy soil. Later too we did not succeed in finding eggs there, so we assumed that they had been taken. The birds were still there on 13 May.

The species was less frequently recorded in Feb. 1974. We have only three certain records, two of them from the Fish Pond, up to 8 birds. There were no paired or breeding individuals among those

observed. There are four records from Dec. 1974 and four from Jan. 1975, in these cases too there were no breeding birds.

SCOLOPACIDAE

Numenius phaeopus hudsonicus Latham

Whimbrel

"Passage migrant in very small numbers." – Up to now records were only known from between 29 August (1965) and 4 September (1957).

A single bird was recorded on 12 and 13 April 1973 in the Fish Pond. Although it flew well, one wing was damaged and could not be held in the normal way. During Sep. 1973 seventeen Whimbrels were regularly observed in the Fish Pond by A. de H., accompanied by, almost certainly, two Long-billed Curlews, *Numenius americanus*. Neither Whimbrels nor Curlews were seen by men in Feb. and Dec. 1974, and in Jan. 1975, but A. de H. saw one again in Sep. 1974.

Tringa melanoleuca (Gmelin)

Greater Yellowlegs

"Regular non-breeding visitor in rather small numbers. More numerous in early autumn and spring, but scarce in summer."

It is not quite clear to me where these particulars come from, because there is only one sight record by DANFORTH of 1927, and Voous (1955a) did not observe the species when he visited the island in 1952.

We have only one certain record from 1973, 18 April, of a solitary bird in the Fish Pond, in the company of some much smaller *Tringa flavipes*.

In Feb. 1974 however the species was much more common, and there are also ten records of Dec. 1974–Jan. 1975. Usually some individuals together, often accompanied by *Tringa flavipes*. Our experiences justify the assumption that the species is most numerous in St. Martin during winter.

Tringa flavipes (Gmelin)

Lesser Yellowlegs

"Regular non-breeding visitor in rather large numbers".

In April–May 1973 almost daily observed in suitable areas. Occasionally fairly numerous, generally mixed with other migrating waders, especially with *T. melanoleuca* and *Micropalama himantopus*. Recorded as late as 15 May. On 10 April one specimen was collected, that was presented to the Amsterdam museum.

In Feb. and Dec. 1974 and in Jan. 1975 definitely less common than in April–May 1973.

Tringa solitaria solitaria Wilson

Solitary Sandpiper

"Passage migrant and winter visitor in very small numbers. Few definite records."

Our only record of this rare wader is of 23 Dec. 1974, when a single bird was seen along the small lagoon near Anse Marcel, the northernmost part of the island. It resembled *Tringa flavipes*, but was considerably smaller, had olive-coloured legs and showed the white bars on the outer rectrices clearly, even with folded wings.

Tringa macularia (Linnaeus)

Spotted Sandpiper

"Regular non-breeding visitor in rather large numbers, particularly in winter. Scarce in summer." – Perhaps only known from sight records.

During our first visit only recorded on 9 and 18 April 1973; the birds distinctly showed signs of summer plumage. Recorded almost daily in Feb. and Dec. 1974, and in Jan. 1975, often 3–5 in the same area; twice (Marigot Lagoon) there were 8–10.

All these birds were single, and in full winter plumage – quite different from those we saw in 1973 – and therefore closely resembling the European Common Sandpiper.

Catotrophorus semipalmatus (Gmelin)

Willet

subsp. *semipalmatus* – "Irregular non-breeding visitor. One record: 13 May 1962 Mullet Pond (three, "behaviour strongly suggested breeding activity")".

In April–May 1973 very regularly recorded in various locations, usually just a few birds together, occasionally a few more, mostly in the company of other migrating waders. Frequent reports are from the Fish Pond and from the Marigot Lagoon; no records from any beaches. In the beginning of May numbers diminished. On 15 May a separated pair in the Fish Pond led us to believe that the species might be breeding there, and more so when A. de H., in the beginning of June, observed some of them at the same place, fairly shy. In Oct.–Nov. 1973 and May 1974 he again saw many Willets.

Strangely enough, not a single representative of this conspicuous species was observed in Feb. and Dec. 1974 and in Jan. 1975.

Limnodromus griseus griseus (Gmelin) Short-billed Dowitcher

"Passage migrant and winter visitor in very small numbers."

From April–May 1973 we have only one definite record of this fairly striking species: on 10 April a solitary bird was seen in Plum Bay Lagoon, wading in shallow water.

Not seen in Feb. 1974, but on 3 April observed by A. de H. in Little Bay Pond. On 7 Dec. five were seen by me, feeding in Plum Bay Lagoon.

Gallinago gallinago delicata (Ord)

Common Snipe

"Winter visitor. One record: 5–9 February 1952." – When visiting the island in Feb.–March 1952 Voous (1955a) found this Snipe not uncommon.

Not recorded in April–May 1973, but from Oct. 1973 A. de H. reported many specimens at various localities, and on 11 Nov. five were observed by him in the Fresh Pond area and in the course of the same month three more along Little Bay Lagoon.

On 16 Feb. 1974 two were flushed by me from shrubs bordering the Marigot Lagoon and one again on 23 Feb. from almost similar

surroundings along the Fresh Pond. There are 7 certain records from Dec. 1974–Jan. 1975, most of all from Marigot Lagoon.

Calidris alba (Pallas)

Sanderling

“Passage migrant in very small numbers.”

In April–May 1973 seen fairly regularly in the lagoons previously mentioned, generally a few together accompanied by other waders. Until now the latest record was of 1 April 1965, but we saw the species as late as 15 May. In those days we observed several courting birds (Fish Pond).

From Feb. 1974 there is only one record of two Sanderlings in the company of a small flock of *Pluvialis squatarola*, in the Fish Pond. In Dec. 1974 found only three times and on the 19th there were more together than on any previous occasion, *viz.* about 20 of which many were partly in “summer plumage” (Fish Pond). This was again so among the birds seen on 21 December.

Calidris pusilla (Linnaeus)

Semipalmated Sandpiper

“Regular non-breeding visitor in rather large numbers”.

We have quite a few records from April–May 1973. Generally small flocks, mixed with other waders, especially small Sandpipers from which the present species can be distinguished by its shorter but heavier bill and darker legs. Confusion with *C. mauri* and *C. minutilla* is easy, so probably more individuals would be present than recognized.

There are only three certain records from Feb. 1974; once a solitary bird, twice in a small flock together with other Sandpipers. Small Sandpipers were considerably less common than in Apr.–May 1973, as was the case in Dec. 1974–Jan. 1975, although the species was recorded on nine different occasions.

Calidris mauri (Cabanis)

Western Sandpiper

"Passage migrant and probably also winter visitor and non-breeding summer visitor in small numbers." – Up to at least 1955 not recorded for St. Martin.

During April–May 1973 definitely recorded only on four different occasions in the lagoons mentioned above, usually accompanied by other waders, especially *C. pusilla* and *C. minutilla*. Only one record from Feb. 1974: on the 5th some specimens in a small flock of other Sandpipers in the lagoon between Cupe Coy Bay and Plum Bay. Three records from Dec. 1974 and none from Jan. 1975.

The long and slender, slightly curved bill is the most striking characteristic, although not always easily recognizable when in the field. Colour differences in the plumage of birds in their winter habitats seem hardly reliable as field characters.

Calidris minutilla (Vieillot)

Least Sandpiper

"Passage migrant and probably also winter visitor in rather large numbers. No records from January, May and June." – Up to 1955 not recorded for St. Martin.

Fairly numerous at the same localities where the two preceding species were found, and without exception a few together or in small flocks in the company of other waders. On 13 April 1973, signs of courting were observed, and the species was still seen on 1, 13 and 15 May which are the first May records. Twice identified in Dec. 1974.

The somewhat more slender bill and especially its lighter legs, make the birds different from *C. pusilla*, whereas *C. mauri* has decidedly a longer bill.

Calidris fuscicollis (Vieillot)

White-rumped Sandpiper

"Passage migrant. One sight-record: 2 April 1965."

On 2 April 1973 a solitary bird was seen in the Fish Pond, ac-

accompanied by other migrating waders. On 4 Dec. 1974 one was found in Little Bay Lagoon, in the company of a *Tringa macularia*. This bird was not really shy, making observation from close by easy.

The large size, when compared with the preceding species, and the white rump, very distinct in the flying bird, were the characters on which this Sandpiper was identified.

***Calidris melanotos* (Vieillot)**

Pectoral Sandpiper

"Passage migrant in very small numbers, mainly in October." – At least until 1955 unknown for St. Martin and perhaps only known from sight records.

On 10 April 1973 one was seen in Plum Bay Lagoon, and on 18 April in the Fish Pond, in both cases single birds accompanied by other waders. On 27 Dec. 1974 a single bird was recorded in the company of some Grey Plovers in the Fish Pond.

This species is considerably larger than most of the other *Calidris* to be found in St. Martin. The birds strongly reminded me of *C. acuminata*, one of the most common migrating waders of western New Guinea.

***Micropalama himantopus* (Bonaparte)**

Stilt Sandpiper

"Passage migrant in small numbers. Recorded in autumn between 2 August (1965) and 5 October (1956); in spring between 24 March and 2 April (1965)." – Up to 1955 not recorded for St. Martin and perhaps it concerned only sight records.

In April–May 1973 regularly observed in the lagoons previously mentioned, but never numerous. On 9 and 18 April two birds were collected at the Fish Pond. In Feb. 1974 only five definite records, often of birds in the company of *Tringa flavipes*. Also in Dec. 1974 the species was seen only four times, and in Jan. 1975 once, with as a maximum 6 together in the Fish Pond. From these observations we conclude that the species also winters in St. Martin.

Tryngites subruficollis (Vieillot)**Buff-breasted Sandpiper**

Previously unknown from St. Martin and from any of the other Neth. Antillean Islands. BOND (1971) mentions the species as a migrant for Guadeloupe, Martinique and Barbados.

During a recent visit (1976) to the Antillean Islands – about which I hope to report in the near future – one specimen of this Sandpiper was seen in the Fish Pond. Although at that time there were already many other migrating waders, it behaved fairly aloof, keeping on the dry coral sand bordering the lagoon. The bird was not exactly shy and could be observed at length.

The species – at that time fully unknown to me – closely resembled the picture opposite p. 116 of “Birds of North America” by ROBBINS, BRUUN, ZIM & SINGER (1966). It also exactly agreed with the accompanying description and the one that was published by HERKLOTS (1969).

RECURVIROSTRIDAE**Himantopus himantopus mexicanus** (P. L. Statius Müller) **Stilt**

“Breeding resident. Rather scarce. Eggs have been found on 14 June 1959”. – Up to 1955 not recorded for St. Martin. According to BOND (1964, 1965) seven Stilts were recorded on 28 Jan. 1964, and again on 11 Jan. 1965 at Simpson Bay Lagoon.

Fairly regularly observed in April–May 1973, most frequently along Marigot Lagoon, but also in the Fish Pond. On 13 May two alarming birds were seen, but we did not succeed in finding a nest or pulli. In April–May 1974 there were many again, especially in the Fish Pond and Mullet Bay Lagoon, where they were still present in July, again without breeding being established (A. de H.). No specimens were seen in Feb. and Dec. 1974, and in Jan. 1975.

LARIDAE

Larus fuscus graellsii Brehm

Lesser Black-backed Gull

"Casual visitor. One record: 13 January 1966 Fresh Pond. This bird has been observed from 8 November 1965 onwards. It was mostly seen in company with two or three immature *Larus delawarensis*."

In Dec. 1973–Jan. 1974 the species was repeatedly observed by H. H. and A. de H. in the Fresh Pond and along the Great Bay. In Feb. 1974 this large gull was daily seen by me along the Fresh Pond, one apparently almost adult bird together with a young one. The semi-adult specimen had very dark upperwings, but still some greyish feathers on neck and breast. It was seen almost without exception in the company of one *L. delawarensis* and one or a few *L. atricilla* (Pl. IXa). There are no records at all from Dec. 1974–Jan. 1975.

Larus delawarensis Ord

Ring-billed Gull

"Casual visitor. Two records of birds in immature plumage". – Until 1965 not known from St. Martin.

On 9 April 1973, a solitary bird was seen in Marigot Lagoon showing intermediate plumage. On 1 May an adult one amidst a flock of *Larus atricilla* on a large buoy near the Wathey pier near Point Blanche. In the autumn of 1973 repeatedly seen by H. H. and A. de H. in the Fresh Pond and in Feb. 1974 I also saw it daily there, in company of *L. fuscus* and *L. atricilla* (Pl. IXa). On 2 Feb. an adult bird and a semi-adult one were seen; the adult one again on 19 Feb. None were recorded in Dec. 1974–Jan. 1975.

The species somewhat resembles the European *L. canus*, but it has a heavier bill with a dark band near the tip.

Larus atricilla Linnaeus

Laughing Gull

"Breeding summer visitor. Breeding colony of about 100 pairs on Pelican Key."

In April–May 1973 frequently seen in the lagoons and along the coast, in the Fresh Pond even when completely dried-up. Found daily in the Great Bay where many were seen resting on a large buoy near Point Blanche. Paired and alarming birds were seen on 13 May in the Fish Pond. None were found on Pelican Key where it is said the species breeds in summer.

In Feb. 1974 the situation was quite different as then the Fresh Pond was the only locality where only a few specimens of this Gull were found (Pl. IXa). Obviously all birds were adults in winter-plumage, with no black head, but in Sep. 1974 there were 7, of which two in juvenile plumage. In April 1975 many were seen in the Fresh Pond (A. de H.).

Because no Laughing Gulls were seen at all during Dec. 1974 and Jan. 1975, it seems evident that they are rare in St. Martin during the winter.

Sterna dougallii dougallii Montague

Roseate Tern

"Passage migrant. One record: a bird ringed at Ram Island, Mass. U.S.A. ... on 1 July 1952, was caught at Philipsburg on 13 September 1952."

No certain record until 13 May 1973 when about 20 birds in nuptial plumage were seen near Castle Rock (Baie de l'Embouchure), which was accessible on foot at low tide (Pl. VIIa). Although these birds loudly alarmed, we did not succeed in finding eggs. A week later about ten clutches were found, each containing one egg, deposited on the bare ground or on small pebbles amidst scattered grass. In the last ten days of May, and the early part of June several nests containing two eggs were found by A. de H. Two collected eggs measured 42.3×29.3 and 41.2×29.5 mm.

In the company of these Terns were some *S. albifrons* and one *S. anaethetus*. In Feb. and Dec. 1974 and in Jan. 1975 we did not see the species, but in June 1974 H. H. and A. de H. reported having

found at least 14 nests on some very small rocky islands near Green Key, some miles north of Castle Rock. Most of these nests contained one or two eggs, but a few also some freshly hatched chicks.

***Sterna anaethetus recognita* (Mathews)**

Bridled Tern

"Probably breeding summer visitor. Breeding suspected at Pelican Key, where specimens with enlarged gonads have been collected from a flock of about 150 birds on 9 June 1959. The record from Pelican Key of 3 August 1949 by Wagenaar Hummelinck (see Voous 1955, plate IIa) refers to this species and not to the Sooty Tern!"

As is evident from the above in the past some confusion existed concerning the occurrence on St. Martin of *Sterna fuscata* and the present species, although both Terns are known from this island.

Sterna fuscata was not found by me on St. Martin, and *S. anaethetus* not until 13 May 1973: one solitary bird in company of a flock of *Sterna dougallii* and some *S. albifrons* at Castle Rock. On 18 May two alarming birds were seen there of which one egg was found, on the bare ground among small pebbles; this egg measured 50×33 mm. In the same place again one single egg was found by A. de H. in June 1975, measuring 48×33 mm. There were two pairs of Bridled Terns and no *S. dougallii* at all. When we visited the place again in Feb. 1974 and in Dec.-Jan. 1974/5 none were seen.

Because of my experiences – though long ago – with both these Terns in Indonesia, I was certain that the birds seen were indeed *Sterna fuscata*; this later proved to be wrong. During a recent longer stay on the Antillian Islands (1976) I had the opportunity to look fairly thoroughly at both these species, spending many hours amidst a breeding colony of *S. fuscata*. These experiences and the comparison of the eggs made it evident that my initial identification was wrong and the birds seen on St. Martin must have been *S. anaethetus*.

***Sterna albifrons antillarum* (Lesson)**

Little or Least Tern

"Breeding summer visitor. Rather common. Recorded between 8 May (1962) and 25 September (1965)."

This Tern is perhaps not exclusively a summer visitor, for in April and May 1973 it was rather regularly observed in lagoons as well as along the coast, although never more than a few together. There were some alarming birds on 13 May. In the first days of June A. de H. succeeded in finding two pulli of about three days old in Friar's Bay Lagoon. In those days a small flock was regularly seen in the Great Salt Pond; breeding was supposed but not ascertained as we did not wish to disturb the birds. The species was not recorded in Feb. and Dec. 1974 and in Jan. 1975, but in April 1974 it was seen again by H. H. and A. de H. In April 1975 they found the Little Tern on an artificial sand plateau along Simpson Bay Lagoon, where in May eggs were found, two of which were measured: 31×22.8 and 30×22.8 mm (cf. Pl. IXb).

***Sterna maxima maxima* Boddaert**

Royal Tern

"Regular non-breeding visitor in rather small numbers. Breeding suspected."

Between 10 April and 18 May 1973 this very large Tern was regularly recorded, in the lagoons as well as along the coast, never more than a few together but rarely one alone. In Feb. 1974 it was less frequently seen, almost exclusively in the Fish Pond, once six together and on 7 Feb. as many as ten, among which were specimens in winter plumage with much white on forehead and occiput. In Dec. 1974 and Jan. 1975 the species was found more regularly again and almost without exception in the Fish Pond, up to 15 together. During that period this was the only Tern observed in St. Martin.

Confusion with *S. sandvicensis* is hardly possible, because of its much larger size, and considerably heavier bill which is red or orange-red instead of yellow or black with a yellow tip. Among the Laridae this is apparently the only species to be found on St. Martin throughout the year.

***Sterna sandvicensis acuflavida* Cabot**

Sandwich or Yellow-nibbed Tern

"Irregular non-breeding visitor in small numbers."

Although – following Voous – the Terns regularly seen during April–May 1973 have been considered to belong to the subspecies *acuflavida* on account of the yellow-tipped black bill, we also must have seen birds belonging to the subspecies *eurygnatha*, if individuals of *acuflavida* are not known with a completely yellow bill. Repeatedly such birds have been recorded, e.g. on 13 April along the coast "when en route to the Fish Pond again some yellow-billed Terns were seen, easily distinguishable from *S. maxima* on account of their pure yellow bill and smaller size." Also in the Fish Pond, one day earlier, the yellow colour of the entire bill was stressed in my diary. The species was never numerous; generally a few together were observed. There is only one record from Nov. 1973 (A. de H.), and another from Feb. 1974, again two birds with a yellow bill. No records from Dec. 1974 and Jan. 1975.

***Anous stolidus stolidus* (Linnaeus)**

Brown Noddy

"Breeding summer visitor."

Recorded on 29 April and 1 May 1973, when a few were seen along the rocks of Point Blanche, a locality mentioned by Voous & KOELERS as a breeding place. Again a few on Pelican Key, another known breeding locality. In winter the species apparently is not present in St. Martin, as none were seen in Feb. 1974. In June of that year the birds returned to the same places (H. H. and A. de H.), but were absent again when the island was visited by me in Dec. 1974–Jan. 1975.

COLUMBIDAE

Columba leucocephala Linnaeus

White-crowned Pigeon

"Breeding resident and irregular visitor. Very scarce, if still existent."

On 12 June 1973 a bird with a broken wing was secured by A. de H. on the small peninsula of Fort Amsterdam, near Philipsburg. Since efforts to cure the animal remained unsuccessful, a study-skin was made of it which is now in the Amsterdam Museum. It proved to be a male with moderately developed gonads (ca. 5 mm).

Although this single record is proof that the species still is found on the island, it may certainly be considered rare, and perhaps not always present.

Columba squamosa Bonnaterre

Red-necked Pigeon

"Breeding resident. Scarce."

In 1973 recorded only once on 9 April, several birds in the mangrove forest bordering Plum Bay Lagoon. Also only once recorded in 1974: on 4 Feb. a single bird was seen perching on a high tree along the slope of Paradise Hill. The species was not seen in Dec. 1974 and Jan. 1975.

These few records indeed point to the rarity of this Pigeon, although its shyness may erroneously cause one to draw this conclusion.

Zenaida aurita aurita (Temminck)

Zenaida Dove

"Breeding resident . . . scarce in St. Martin."

During the last decade conditions must have changed, because in April-May 1973 the species was seen almost daily at different localities. Often individuals were flushed from the roadside by our car. Generally single birds were found, often a few spread over the same area. Less frequently seen in Feb. and Dec. 1974 and in Jan. 1975.

The white in the wings and on the tips of the outer-tail feathers make the species easily recognizable. In Dec. 1973 H. H. found a stray dead specimen similar to the specimens described by Voous (1955a, p. 41–42), because of the distinct vinaceous abdomen and under-tail coverts (characters of the subsp. *zenaida*) instead of the whitish abdomen and creamy undertail coverts of true *aurita*. This skin was presented to the Amsterdam Museum, together with a normal *aurita* obtained on 16 April 1973 from about the same locality.

? *Zenaida auriculata* (Des Murs)

Violet-eared Dove

Not previously reported from St. Martin.

On 1 May 1973 two doves, perhaps belonging to this species were seen on Pelican Key. The birds resembled *Z. aurita*, but did not show any white in wings and tail, leading us to conclude that it was *auriculata*. The subsp. *vinaceorufa* is a rather common breeding-bird in Bonaire, Curaçao and Aruba, but is not known from the Windward Islands.

***Columbigalla passerina nigrirostris* Danforth**

Common Ground-Dove

"Breeding resident. Common".

The most common Dove and at the same time one of the most familiar birds of St. Martin. It can be recorded daily in many localities, also near dwellings and along highways. Never seen in flocks, but often several individuals spread over a small area. Almost exclusively terrestrial in habits.

CUCULIDAE

Coccyzus americanus americanus (Linnaeus)

Yellow-billed Cuckoo

Not previously recorded on St. Martin.

In Sep.–Oct. 1974 H. H. and A. de H. suddenly found this Cuckoo in many different localities, where also *C. minor* was abundantly present. Not earlier than in the course of Nov. the birds disappeared again; they were not observed by me in Dec. 1974–Jan. 1975. A similar invasion of *C. americanus* took place in St. Eustatius about the same time, however without *C. minor* having been recorded.

Coccyzus minor (Gmelin)

Mangrove Cuckoo

subsp. *rileyi* Ridgway – “Casual visitor. One record: 3 October 1956 Lowlands.”

In the last week of May 1973 a male with well-developed gonads was obtained by H. H. in a small lagoon near Anse Marcel. The stomach contained three skins of hawk-moth caterpillars, parts of beetles and some fruit remains. On 15 Nov. 1973 A. de H. saw one in the Lowlands.

In Sep.–Oct. 1974 H. H. and A. de H. found this Cuckoo numerous almost all over the island, together with many *C. americanus*. Supposedly these “invasions” had to do with an unusual abundance of caterpillars. Fairly suddenly the birds disappeared again about November. However, on 27 Dec. I saw a solitary bird in low trees bordering the Fish Pond; it was fairly tame and produced a grading call to which a second bird reacted that we failed to trace.

CAPRIMULGIDAE

Chordeiles minor (Forster)

Common Nighthawk

"Casual visitor. Two sight-records: 18 June 1960 Juliana Airport; 4 December 1965 Long Wall."

This species was recorded by A. de H. only and on several occasions. On 15 Nov. 1973 two individuals were seen in the Lowlands; only the white in the wings was clearly visible. In Oct. 1975 there was a more reliable record from the same territory, while another specimen was identified from the car when the bird alighted on the road. On that occasion the white on wings, throat and tail was distinctly discernible, as was the light superciliary stripe.

TROCHILIDAE

Sericotes holosericeus holosericeus (Linnaeus)

Emerald-throated Hummingbird

"Breeding resident. Rather scarce."

Not frequently observed: in the Fish Pond area on 10 and 11 April 1973; in Feb. and Dec. 1974, and Jan. 1975, in various parts of the island. The birds behave inconspicuously which might explain the fact that they were rarely seen.

Orthorhyncus cristatus exilis (Gmelin)

Antillean Crested Hummingbird

"Breeding resident. Common."

One of the most common birds of the island and fairly familiar with men, although not very conspicuous owing to its small size and restless habits. On 10 Jan. 1975 abundant on a flowering tree in a locality where it was otherwise seldom seen.

ALCEDINIDAE

Ceryle alcyon alcyon (Linnaeus)

Belted Kingfisher

"Passage migrant and winter visitor in rather small numbers. Recorded between 2 October (1956) and 27 March (1965)."

Recorded five times in April 1973, but not seen after the 19th, although A. de H. observed the species in May and again in September. In Feb. 1974 this Kingfisher was seen four times, and during Dec. 1974–Jan. 1975 six times in five different localities. Generally solitary birds, occasionally two together.

TYRANNIDAE

Tyrannus dominicensis (Gmelin)

Grey Kingbird

subsp. *dominicensis* – "Breeding resident. Common."

Common in almost all parts of the island and in different habitats. Remarkably there are few records from Dec.–Jan. 1974/5, so that the frequency in which it is found may vary. Often seen on telephone wires or in other exposed positions, resting or looking for prey. Generally found alone or in pairs, but on 16 and 20 Feb. 1974 at least ten individuals were seen together along the borders of Marigot Lagoon.

Elaenia martinica (Linnaeus)

Caribbean Elaenia

subsp. *riisii* Sclater – "Breeding resident. Rather common."

A common and familiar bird, although less strikingly present than the Kingbird, because of its fairly inconspicuous habits, keeping mostly to the dense foliage of shrubs and trees. The few records in Feb., Dec. 1974, and Jan. 1975 suggest that this species too may vary in numbers. In Jan. 1975 some were trapped in mist nets near the Fish Pond.

HIRUNDINIDAE

Progne dominicensis dominicensis (Gmelin) Caribbean Martin

"Breeding summer visitor. Rather scarce. Recorded between 12 February (1965) and 1 October (1965)." – Perhaps only sight records.

On 1 May, 1973 there were at least ten birds along the cliffs bordering Cupe Coy Bay, some of which disappeared into small crevices with nesting material, such as dried leaves (Pl. VIIb). In the last week of May and the beginning of June A. de H. assumed the presence of young. The species was also recorded in Jan. 1973 and 1974, and in Feb. 1974, proving that this Martin is not exclusively a summer visitor. A. de H. saw about 20 birds in early May 1974, and estimated the number of breeding pairs in June at 12. In Sep. all birds disappeared, and none were observed during Dec. 1974–Jan. 1975. No Martins were found far from their breeding places.

Hirundo rustica erythrogaster Boddaert

Barn Swallow

"Passage migrant in rather large numbers. Particularly numerous from the middle of November till the middle of December. Earliest record 3 September (1957). No spring records."

No records from April–May 1973, but in Feb. 1974 fairly regularly observed at various localities, above lagoons and meadows as well as around hill tops. Absent during summer, but in the course of August–September present again; many were observed in Nov. (A. de H.). They were also numerous in the beginning of Dec. 1974, but rarely recorded from the middle of Dec. and during Jan. 1975.

Most individuals were semi-adult or young, because they had white underparts. They closely resemble the European Barn Swallow.

MIMIDAE

Margarops fuscatus fuscatus (Vieillot) Pearly-eyed Thrasher

"Breeding resident. Common."

Our observations of Apr.–May 1973 do not exactly prove the common presence of this species, but because of its preference for well-leaved shrubs and trees, the number of sight records does not give a realistic idea of the population. Generally a few together, hardly ever alone. On 11 April 1973 a specimen was secured which was presented to the Amsterdam Museum. Our observations in Feb. and Dec. 1974 and of Jan. 1975 indicate that the number does not vary much throughout the year.

VIREONIDAE

Vireo altiloquus (Vieillot) Black-whiskered Vireo

subsp. *barbadensis* (Ridgway) – "One sight-record from St. Martin (15 September 1965)." – Until 1965 not known from St. Martin.

Only recorded on two successive days near the summit of Peter's Hill, in May 1973, when one, later some individuals were feeding on the fruits of a gumtree. A single specimen was seen by A. de H. in Oct. 1973, in the light forest near Guana Bay. The rather heavy bill, olive-coloured upper and light underparts reminded me of certain *Meliphaga* species of western New Guinea as did the bird's behaviour.

COEREBIDAE

Coereba flaveola bartholemica (Sparrman) Bananaquit

"Breeding resident, Very common."

One of the most common and familiar birds, regularly to be found close to human habitations and fairly conspicuous because of its

tame habits, vivid colours and frequent call. Generally alone, but also in pairs or family groups.

PARULIDAE

***Mniotilta varia* (Linnaeus)**

Black- and -white Warbler

"Passage migrant and winter visitor in very small numbers. Recorded between 3 October (1956, St. Martin) and 21 March (1955, Saba)".

Not seen in April–May 1973, but on 30 Sep. A. de H. observed one in low shrubs near Bay Rouge and in Dec. some individuals were seen by him in the forest of Paradise Hill. In the same locality at least two were spotted by me on 20 Feb. 1974. The birds kept in contact through high calls. They eagerly searched stems, branches and leaves, sometimes upside-down, reminiscent of the European Nuthatch.

The species was not identified during Dec. 1974–Jan. 1975, but on 8 Jan. one was trapped in a mist net in low shrubs bordering the Fish Pond, where it had previously not been recorded.

***Parula americana* (Linnaeus)**

Parula Warbler

"Passage migrant and winter visitor in rather small numbers. Recorded between 2 September (1957, St. Martin) and 23 March (1955, Saba)".

Only one definite record in 1973: a beautiful male in low shrubs along Plum Bay Lagoon, which could be closely approached. This was on 19 April, proving the bird's presence also after March. In Feb. 1974 the species was recorded three times, but during Dec. 1974–Jan. 1975 it appeared to be absent. Since Voous (1955a) found this Warbler not uncommon on St. Martin, numbers seem to vary.

Dendroica petechia (Linnaeus)

Golden Warbler

subsp. *bartholemica* Sundevall – "Breeding resident. Rather common, though usually less numerous in St. Martin".

Fairly regularly seen, occasionally at close range, on low shrubs, generally alone or two together. Striking appearance on account of its conspicuous vivid-yellow and greenish yellow plumage.

Dendroica coronata coronata (Linnaeus)

Myrtle Warbler

Not yet recorded from St. Martin.

Between 27 Dec. 1974 and 12 Jan. 1975 the species was noticed three times: 4-6 individuals feeding in company of some *D. discolor* amidst a tangle of cut-down trees along Marigot Lagoon. The birds were very active, but fairly tame. Though the clear yellow back in the flying birds, also visible in some sitting birds, was clearly visible the white on the undertail could not always be seen. Immediately after our return to Holland the field identification was checked against material in the Leiden and Amsterdam musea.

Dendroica striata (Forster)

Black-poll Warbler

"Passage migrant. Once recorded in small numbers 7-28 October 1965."

Not recorded until 30 Dec. 1974, when one bird was found in shrubs bordering the Fish Pond. Apparently rare in St. Martin. Fieldnotes were compared with material in the collections of Leiden and Amsterdam.

Dendroica discolor discolor (Vieillot)

Prairie Warbler

"Winter visitor in rather small numbers. Recorded between 3 October (1956, St. Martin) and 8 March (1952, Saba)."

Not recorded by us until 9 Jan. 1975 when some specimens were seen in low, partly cut down shrubbery along Marigot Lagoon.

These birds, evidently all of them females and juvenile males, were in the company of a small party of *D. coronata*, which also had not been seen before. This Warbler too is perhaps rare on St. Martin. Fieldnotes were compared with material in Leiden and Amsterdam.

Seiurus noveboracensis (Gmelin)

Northern Waterthrush

subsp. *noveboracensis* – "Passage migrant and winter visitor in small numbers. Recorded between 4 September (1957) and 9 February (1952)."

We failed to identify the species in April–May 1973, but saw it between 20 and 24 Feb. 1974 in open shrub forest on a sandy ridge between the coast and the small lagoon of Little Bay and again in quite similar surroundings at Anse Marcel. In both cases there were two birds quickly moving on and close above the ground, attracting our attention by a fairly penetrating high call. There are three records in Dec. 1974–Jan. 1975, in different localities, but in a habitat quite similar to the one described above.

Although our experiences prove that this species also visits the island after 9 Feb., it seems correct to assume that it leaves in early spring. Most probably it is not exactly rare during winter-time, only inconspicuous.

THRAUPIDAE

Piranga olivacea (Gmelin)

Scarlet Tanager

No previous records from St. Martin or the other Windward Islands; the species is only known from Aruba and Curaçao.

First recorded for St. Martin by A. de H. on 29 April 1973, when a single bird was seen near the summit of Peter's Hill. This observation was confirmed by me on 2 May, in the same three where *Vireo altiloquus* was found that same day. The chiefly scarlet-coloured bird with its contrasting black wings and tail repeatedly returned to a thinly-leaved gumtree, where it often did not move for

several minutes. Later visits to this place remained without success and also during Dec. 1974–Jan. 1975 the species was not seen.

ICTERIDAE

***Quiscalus lugubris guadeloupensis* Lawrence** Blackbird

Previously not recorded from the Netherlands Antilles.

Frequently observed in April–May 1973, leading us to believe that those were recently-arrived birds, as the species seems difficult to overlook on account of its conspicuous habits. As another indication for recent immigration may be the fact that almost all observations are from Marigot and surroundings. When the author visited the French part of the island for the first time, the striking Blackbird was repeatedly observed, and later on the presence of at least ten specimens was noted, spread over an area of not more than a square kilometer, among which there were also courting birds, often sitting on telephone wires along busy roads.

On 10 April 1973 a courting male, and a much lighter coloured female were seen close to a nest in the outer foliage of a tree in a garden at Marigot. The male had strongly developed (12 mm) gonads. The nest was a fairly loose, untidy, globular structure of which the contents remained unknown.

There were only a few sight records far away from Marigot: one Blackbird was seen on 11 April along the east coast of the island, and in May A. de H. saw one near Friar's Bay, north of Marigot.

Again in Feb. 1974 Blackbirds were recorded only around Marigot. On 2 Feb. two males and four females were seen on a tree and five males and one female again on 16 Feb. Four days later the total number around Marigot Lagoon was estimated at 12–15. There was always a majority of males, and generally the females were shyest. On several occasions courting birds were seen and on 23 Feb. a still empty nest was found. It was not until 5 May that a nest with four eggs was discovered (H. H. & A. de H.). Two eggs measured 28.2×19.0 and 25.6×18.8 mm. They are light green

with sharply delimited, nearly black spots, speckles and fairly heavy scribbles, most of these concentrated at the blunt end, and with some less-defined, secondary ash-grey markings.

Also in Dec.-Jan. 1974/75 Blackbirds were recorded during all visits paid to the Marigot Lagoon and surroundings. On 5 Dec. at least 10 were seen, many of them in splendid plumage and very noisy, giving nuptial performances. Only one observation was not from this locality: on 9 Jan. a Blackbird was seen near Friar's Bay Lagoon, some miles north of Marigot.

A female collected on 5 May 1974, together with the male on 10 April 1973, have been presented to the Amsterdam Museum. Sub-specific identification is virtually only possible when comparing female plumages. Dr. JAMES BOND kindly confirmed our tentative subspecific identification: *guadeloupensis* Lawrence. Birds of this race are known from Montserrat, Guadeloupe, Grenada and Barbados, and have been introduced on Barbuda, Antigua and St. Kitts (BOND 1971). The species had already been recorded from St. Martin by BOND (1972), referring to field observations by ROBERT W. GUTH near Marigot in 1970-1971. The possibility of these birds having been introduced in Marigot was not excluded by BOND. Whether or not introduced, the fact remains that this species which can hardly be overlooked, appears four years later still to be restricted to Marigot and its immediate surroundings.

FRINGILLIDAE

***Tiaris bicolor omissa* Jardine**

Black-faced Grassquit

"Breeding resident. Very common".

One of the most common and most familiar birds, rather indifferent to its surroundings. Generally two or a few together on low weeds and shrubs, also in the immediate neighbourhood of settlements, nesting along roadsides and in gardens. On 20 Dec. 1974 there were at least 75 individuals near Little Bay Lagoon.

Loxigalla noctis (Linnaeus)

Antillean Bullfinch

subsp. *ridgwayi* (Cory) – "Breeding resident. Rather common".

Although less strikingly present than the preceding species, this bird may also be considered one of the most common species of St. Martin. It is less familiar with human activities, and has more concealed habits. Generally a few together or in small flocks, and chiefly terrestrial in its habits. In Feb. and Dec. 1974 and Jan. 1975 less frequently recorded than in April–May 1973, and only solitary birds or pairs were seen.

SABA

VOOUS & KOELERS (1967) mention 38 species for this island including two known from sight records only. No more than 18 were seen by us during the few days we were there: 4–8 May 1973. It must be emphasized, however, that not so much attention was paid to birds due to transport difficulties.

In this case too almost all non-recorded species are indicated by VOOUS & KOELERS as scarce, only known from a single specimen or from long ago.

If the record of *Sterna fuscata* Linnaeus, seen 20 miles north of Saba, 20 Dec. 1927 (VOOUS & KOELERS 1967) remains the only one, it seems hardly justifiable to mention this tern for Saba, as is the case with *Oceanites oceanicus* (Kuhl) observed at sea in May 1962.

Strikingly absent are all migrating waders known from St. Martin, and all representatives of the Laridae, except *Sterna hirundo* Linnaeus one of which was caught off Saba in October 1952. Although there are hardly any suitable habitats for waders, the complete absence of these birds and of almost all terns in previous papers may suggest that too little attention had been paid to the shore-line.

On the other hand there are six species known from Saba which

remained unknown in St. Martin: *Geotrygon mystacea*, *Eulampis jugularis*, *Alenia fusca*, *Cinclocerthia ruficauda*, *Wilsonia citrina* and *Tanagra musica*, of which only the last two also seem to be absent in St. Eustatius. Perhaps these are birds which prefer the forest, and higher altitudes than those in St. Martin.

About *Phaeton lepturus catesbyi* Brandt, VOOUS & KOELERS reported having seen specimens at Fort Bay, where we did not find this species, but we saw "quite a few" along the cliffs near Flat Point. On 8 May several birds were seen chasing each other, suggesting nuptial performances. Some of these disappeared into rocky crevices where they were probably going to nest.

It seems worth – while to mention the presence on 4 and 8 May 1973 of many *Fregata magnificens* Mathews in the northeastern corner of the island, on some inhospitable rocks (Booby Hill Cliffs) covered by a scant herbaceous vegetation, and some scattered shrubs. A few of these birds were seen on those shrubs. However, it was not possible to verify whether there were nests or not.

Bubulcus ibis ibis (Linnaeus) was previously unknown from Saba, but on 4 May 1973 one was seen along the airstrip of Flat Point. In the morning of 6 May there were three near some grazing cattle close to The Bottom and in the late afternoon there were again three (perhaps the same) flying towards the hills, probably on their way to a night-roost. This also happened the following day.

About *Buteo jamaicensis jamaicensis* (Gmelin), Red-tailed Hawk, VOOUS & KOELERS remark: "Breeding resident in Saba. Very scarce." This agrees with our experiences, although we saw this large bird of prey daily, but always at a considerable distance. There were never more than two birds at the same time, mostly only one. On 7 May one bird was seen near The Bottom with in its claws a small prey, probably a lizard. It is risky to give an opinion about the total population, but our observations give us no reason to optimism, because we probably did not see more than 5 or 6 different birds. However, considering the fact that Saba is still fairly well afforested and thinly populated, it would not be unrealistic to assume that the species may very well survive here for a long time.

Seiurus noveboracensis (not *motacilla*) has been observed on Saba by GEORGE A. SEAMAN (BOND, 19th Suppl., 1974, p. 11).

Including *Bubulcus ibis*, the total number of species now known from Saba amounts to 40.

ST. EUSTATIUS

The total number of species for this island, mentioned by VOOUS & KOELERS (1967) is still smaller than that for Saba, *viz.* 35, among which none known from sight records only. In the two days we were there in 1973 – 8 and 9 May – during an extremely dry period, no more than 18 species were recorded. During one week in Feb. 1974, however, in the last part of the rainy season, 35 species were recorded among which 11 not found there before. Also during five days of Dec. 1974, when it rained every day or night, no more than 31 species were found among which again 3 not previously known from the island. The maximum number of species identified in one day was 20.

The following 9 species listed by VOOUS & KOELERS are not recorded by us: *Phaëthon lepturus*, *Florida caerulea*, *Sterna fuscata*, *Alenia fusca*, *Cinclocerthia ruficauda*, *Vireo altiloquus*, *Mniotilta varia*, *Parula americana* and *Setophaga ruticilla*. In this case too the unrecorded species were almost without exception those indicated as scarce, and included only on account of one specimen or of a very old record. Exceptions are perhaps *Vireo altiloquus* and *Setophaga ruticilla*.

Among the 50 species now known from St. Eustatius there are 17 not known to be found in Saba, and only five have not yet been recorded from St. Martin: *Geotrygon mystacea*, *Crotophaga ani*, *Eulampis jugularis*, *Alenia fusca* and *Cinclocerthia ruficauda*, of which only *Crotophaga* is not known from Saba either. The four remaining species, perhaps except *Eulampis*, may well be considered jungle-birds, which can not be expected on St. Martin, as there is no real jungle there.

Much stranger than in the case of Saba, is the lack in Voous &

KOELERS' check-list of all migrating waders and all representatives of the Laridae from St. Eustatius, except *Sterna fuscata*, as there are several parts of the coast suitable for these birds. And such a habitat is certainly also available for *Sula leucogaster*, *Butorides virescens* and *Pandion haliaetus*, which are also absent in the check-list of Statia. This was the main reason for us to visit this island again in Feb. and Dec. 1974, during which periods we recorded 14 species previously not known from this island; among these there were 6 migrating waders. An additional record of *Coccyzus americanus* brings the total of species now known from St. Eustatius to 50.

List of bird species previously not known from St. Eustatius,
including some additional data on species whose occurrence in this
island was known already.

Puffinus lherminieri lherminieri Lesson

Dusky-backed or Audubon's Shearwater

"Breeding resident. Scarce. Definite breeding records only from Saba. Breeding suspected ... at Tumble Down Dick Bay, St. Eustatius. Very infrequently seen at sea."

When making a trip by boat from St. Martin to St. Eustatius on 14 Dec. 1974, a solitary bird was seen by H. H. & A. de H. off the coast of Statia.

Phaethon aethereus mesonauta Peters Red-billed Tropicbird

"Breeding resident. Rather scarce. Nests have been recorded from ... St. Eustatius (Tumble Down Dick Bay, 18-19 February 1952)."

No definite records from May 1973. Observed from 8-15 Feb. 1974, daily in several parts of the island where cliffs drop away steeply towards the sea or are separated from it by narrow shingle beaches. On 10 Feb. at least 15 were seen, the following day as many as 25, generally in groups of two or three spread over a distance of some kilometers. Just a few birds were observed along Oran-

jestad Bay and around the White Wall. No doubt the birds breed at all these localities, because many were seen courting, regularly descending into holes or crevices in those steep rocks. Also in Dec. 1974 the species was regularly recorded at the localities mentioned above; as was the case in Feb., birds disappearing into holes and crevices were frequently seen. We got the impression that this species was a fairly common breeding bird here, confirming Voous' experiences of Feb. 1952.

Phaethon lepturus catesbyi Brandt White-tailed Tropicbird

"Probably breeding resident. Scarce."

We failed to identify this Tropicbird with certainty during all our three visits to this island in 1973 and 1974. The only evidence of its occurrence in St. Eustatius seems to be a bird collected by WINDSCH in 1890.

Sula leucogaster leucogaster (Boddaert) Brown Booby

Up till now not known from this island.

In the early morning of 10 Feb. 1974 one semi-adult specimen was seen by A. de H. along Oranjestad Bay. On 12 Dec. 1974 at first four, later two adult birds were recorded by me, flying low over a rough sea along the rocky cliffs of the south-eastern part of the island.

Bubulcus ibis ibis (Linnaeus) Cattle Egret

"First recorded from St. Eustatius 2 April 1962: two females with "enlarged follicles" shot from a group of six."

In May 1973 we failed to see a single specimen until the day of our departure, when we saw one bird feeding on paddocks bordering the airstrip. However, the situation was quite different in Feb. 1974, because then this Egret was a daily appearance, gener-

ally 4-6 but sometimes 8-10 were seen, and on 15 Feb. about 50 quite close to the airstrip. Much later a resident of the island, the teacher JAN SMID, told me that in those days he regularly saw 75-100 Cattle Egrets descending on low trees in the neighbourhood of the White Wall in the southern part of the island, where they used to spend the night. There were no birds in nuptial plumage and neither did their behaviour point to breeding activities. In Dec. 1974 Cattle Egrets were very rare again, and only two were seen on 15 December.

Butorides virescens (Linnaeus)

Green Heron

Not yet known from this island.

On 10 Feb. 1974 there was one solitary bird along the narrow sandy beach in the southern part of Zeelandia Bay. Not seen during Dec. 1974 and Jan. 1975.

Nyctanassa violacea (Linnaeus)

Yellow-crowned Night-Heron

subsp. *bancrofti* Huey. - "Probably breeding resident, but breeding not yet proved. Rather scarce."

Not seen 1973, but on 10 Feb. 1974 one was recorded by A. de H. along the beach of Oranjestad Bay where some days later many fresh footprints of the species were found by me. During all visits we paid to Zeelandia Bay the species was seen, once one bird and twice a couple, one of which we supposed to be courting. They were feeding in a thick layer of seaweed on the beach and could be approached fairly closely, and even filmed at a distance of some meters, which can rarely be done in this species. At almost exactly the same place a solitary bird was seen twice on 15 Dec. 1974. I am quite sure that the species breeds here.

Buteo jamaicensis jamaicensis (Gmelin) Red-tailed Hawk

"Recent sight-records from St. Eustatius: February 1952 and 30 December 1959."

On 15 Dec. a male and a female of this Hawk were seen in the Little Mountains, an almost uninhabited part of the island.

Falco sparverius caribaeorum Gmelin American Kestrel

"Breeding resident. Rather scarce. More common in St. Eustatius, at least up to 1952."

Regularly seen, most frequently in Feb. and Dec. 1974, almost without exception in pairs, once there were even 5 within a rather small area. This situation was quite different from the one we found in St. Martin. On 16 Dec. two birds were seen in the neighbourhood of two *Falco columbarius*.

In May 1973 I was shown an empty nest in a tree-hollow along the road to The Quill that some days before had contained two young birds. In Feb. 1974 there were two alarming birds at exactly the same place, but then ... there were two kittens (!) in the same hole.

Falco columbarius columbarius Linnaeus
Merlin or Pigeon Hawk

Previously unknown from Statia.

On 16 Dec. 1974 two Merlins were seen, of which one – an adult male with ash-grey wings and upper parts – perched on a high tree near the footpath to The Quill where two Kestrels were also seen.

Arenaria interpres morinella (Linnaeus) Ruddy Turnstone

Not known from Statia.

On 14 Feb. 1974 one specimen was observed along the sandy beach of Zeelandia Bay, in the company of one *Calidris pusilla*.

Pluvialis dominica dominica (P. L. Statius Müller)

American Golden Plover

Not known from the island before.

On 12 Dec. 1974 one was seen together with 20 *Charadrius vociferus* on dry paddocks bordering Zeelandia Bay. This bird was still shyer than the Killdeer, separating from the latter when frightened.

Charadrius vociferus vociferus Linnaeus

Killdeer

Not yet recorded for St. Eustatius.

On 10 Feb. 1974 there were 12 on the paddocks along Zeelandia Bay; the next day 13. On 12 Dec. 20 were present in the same locality, in the company of one *Calidris alba* and *Pluvialis dominica*. On 14 Dec. there was a solitary bird on a small lawn in the centre of Oranjestad.

Tringa macularia (Linnaeus)

Spotted Sandpiper

New for St. Eustatius.

Not seen in April 1973, but recorded daily in Feb. and Dec. 1974. In both months one bird was seen beside a small pool bordering Oranjestad beach, sometimes behaving very familiar to man. Also seen at Zeelandia Bay, two on 10 Feb. All birds were in full winter plumage.

Calidris alba (Pallas)

Sanderling

Previously not known from this island.

Not recorded in April 1973, but on 10 Feb. 1974 a solitary bird was seen in the company of a flock of Killdeer on dry meadows along Zeelandia Bay, and four days later, probably the same bird was seen along the beach. On 12 Dec. 1974 again one Sanderling was found in the company of 20 Killdeer.

Calidris pusilla (Linnaeus)

Semipalmated Sandpiper

Previously unknown from St. Eustatius.

Not observed in April 1973, but on 14 Feb. 1974 a solitary specimen was found in the company of one Ruddy Turnstone along Zeelandia Bay. The short and fairly heavy bill, dark feet, light upper parts and almost unstreaked under-parts caused me to identify the bird as *C. pusilla*.

Sterna maxima maxima Boddaert

Royal Tern

New for St. Eustatius.

Not recorded in 1973, but in Feb. and Dec. 1974 this large Tern was almost daily present along Oranjestad Bay, generally alone, sometimes two or three birds, but on 11 and 14 Dec. even ten. They were feeding, often settling on a floating raft. At least one bird, seen in Feb., showed a heavy crest and its plumage too suggested the approach of the breeding season.

Columba squamosa Bonnaterre

Red-necked Pidgeon

"Breeding resident. Scarce."

In April 1973 as well as in Feb. and Dec. 1974 fairly common in the well-forested crater of The Quill where this bird's call was frequently heard. Occasionally seen in the crowns of high trees. The birds were very shy and the dense vegetation made it difficult to obtain a clear view of them.

? Zenaida auriculata (Des Murs)

Eared Dove

No previous records.

On 9 May 1973, on our way to The Quill, we saw a Dove the size of *Zenaida aurita*. It had no white on wings and tail, the most important difference to distinguish the two species when they are ob-

served in the field. The species is included here in order to encourage future visitors to look for this Dove.

Geotrygon mystacea (Temminck)

Bridled Quail-dove

"Breeding resident. Very scarce in St. Eustatius, where restricted to the summit and the crater of the Quill."

Both in 1973 and in 1974 we thought we had repeatedly heard the booming call of this Dove, but we were not certain. On 13 Feb. 1974, however, one bird was seen on the bottom of the crater, walking on a dead tree-trunk.

Coccyzus americanus americanus (Linnaeus)

Yellow-billed Cuckoo

Previously unknown from this island.

Never yet recorded by us, but according to the Dutch teacher JAN SMID this Cuckoo was abundantly present during Sep.-Oct. 1974. He also showed us a series of good photographs from which the species can be easily identified (Pl. XVIb). This was in almost the same period that this Cuckoo was found in St. Martin, but in St. Eustatius the species was not accompanied by *C. minor*.

Crotophaga ani Linnaeus

Smooth-billed Ani

"Status unknown; but at all events a recent addition to the island's fauna. Two specimens collected on 28 April 1962."

Not seen in 1973, but almost daily in Feb. 1974, and less commonly in Dec.; generally several birds together, e.g. on 9 Feb. there were as many as 15 of which 6 flocked together on one low tree. The species was seen in different localities, but could be found daily on a dry meadow sparsely covered with shrubs between the airstrip and Zeelandia Bay. The birds produced a peculiar call, rather similar to that of a Curlew when heard from a distance. Because we did

not see a single one in April 1973, perhaps interinsular migrants are concerned, although the Ani is unknown from St. Martin.

Eulampis jugularis (Linnaeus)

Purple-throated Carib Hummingbird

"Breeding resident. Very scarce. At higher elevations."

Not seen in 1973, but when visiting The Quill on 9 Feb. 1974 H. H. and A. de H. saw a male bird low above the ground amidst a plot of bananas on the bottom of the crater. Quite a while this bird could be observed at very close range, but it disappeared when I approached. Two days later another one – also a male – was seen by me in a shrub-wilderness not far from the coast, which is proof that this Hummingbird is not restricted to the higher elevations. We failed to see one in Dec. 1974.

Progne dominicensis dominicensis (Gmelin)

Snowy-bellied Martin

"Breeding summer visitor. Rather scarce. Recorded (in St. Martin) between 12 February and 1 October." – Known from St. Eustatius from a collected specimen in 1890 and the sight record by Voous of two birds flying over the coast.

We failed to see one in 1973 and in Dec. 1974, but on 14 Feb. 1974 there were at least four along steep coastal rocks at Zeelandia Bay, apparently looking for suitable nesting sites. This date does not confirm the statement that this species is a *summer* visitor.

Hirundo rustica erythrogaster Boddaert

Barn Swallow

Up to now not known from St. Eustatius.

No certain records of April 1973, but in Feb. 1974 Barn Swallows were observed flying above and sitting on the airstrip. Rarely a bird was seen with no white on the underparts so that these were chiefly semi-adults. Only one was seen in Dec. 1974.

Dendroica coronata coronata (Linnaeus)

Myrtle Warbler

Previously unknown from St. Eustatius.

On 16 Dec. 1974 one single specimen – apparently a female – was seen in which the light, yellowish back was very distinct. The bird was found in low shrubs in the extensive plain West of The Quill. Comparison with study skins later in Holland confirmed the field identification as is the case with both the following species.

Dendroica striata (Forster)

Black-polled Warbler

Previously unknown from St. Eustatius.

On 12 Feb. 1974 a solitary bird of this species was seen on a low tree bordering the highway from Oranjestad to the airstrip. Evidently this bird was used to passing traffic and moving people, making observation rather easy.

Dendroica discolor discolor (Vieillot)

Prairie Warbler

“Winter visitor in rather small numbers. Recorded between 3 October (St. Martin) and 8 March (Saba)”. – The species was collected in St. Eustatius in 1891.

On 15 Feb. 1974 a male bird was seen by me on a small *Terminalia catappa* along Oranjestad Bay where the bird was easily identified on account of the peculiar pattern and colour of its plumage and its tameness.

REFERENCES

- BOND, JAMES, 1971. *Birds of the West Indies. A guide to the species of birds that inhabit the Greater Antilles, Lesser Antilles and Bahama Islands*. Collins, London, 256 pp., 9 col. pls., map.
- HARTOG, JOH., 1964. *Geschiedenis van de Nederlandse Antillen, I: De Bovenwindse Eilanden: Sint Maarten – Saba – Sint Eustatius*. De Wit N.V., Aruba, 747 pp., ill.
- HERKLOTS, G. A. C., 1969. *The birds of Trinidad & Tobago. A complete guide to over 400 species* . . . Collins, London, 287 pp., 16 col. pls.
- JUNGE, G. C. A. & MEES, G. F., 1958. The avifauna of Trinidad and Tobago. *Zool. Verhand. R.M.N.H. Leiden* 37, 172 pp., 2 maps.
- PINCHON, R., 1963. *Faune des Antilles françaises. Les oiseaux*. Fort-de-France, Martinique, 264 pp., 34 pls, map.
- VOOUS, K. H., 1955. *De vogels van de Nederlandse Antillen (Birds of the Netherlands Antilles)*. Uitg. Natuurwet. Werkgroep Ned. Ant., Curaçao, 5, 205 pp., 4 maps, 22 col. pls.
- VOOUS, K. H., 1955a. The birds of St. Martin, Saba and St. Eustatius. *Stud. fauna Curaçao* 6, p. 1–82, pl. 1–4 (1 of them col.).
- VOOUS, K. H., 1957. The birds of Aruba, Curaçao and Bonaire. *Stud. fauna Curaçao* 7, 260 pp., 13 pls. (3 of them col.).
- VOOUS, K. H., 1965. Check-list of the birds of Aruba, Curaçao and Bonaire. *Ardea* 53, p. 205–234.
- VOOUS, K. H. & KOELERS, H. J., 1967. Check-list of the birds of St. Martin, Saba, and St. Eustatius. *Ardea* 55, p. 115–137.

PLATE V



Va. Part of the extensive Simpson Bay Lagoon of St. MARTIN, seen from the Southeast. (April 1973)

Vb. Part of the Great Salt Pond near Philipsburg, St. MARTIN. (April 1973)

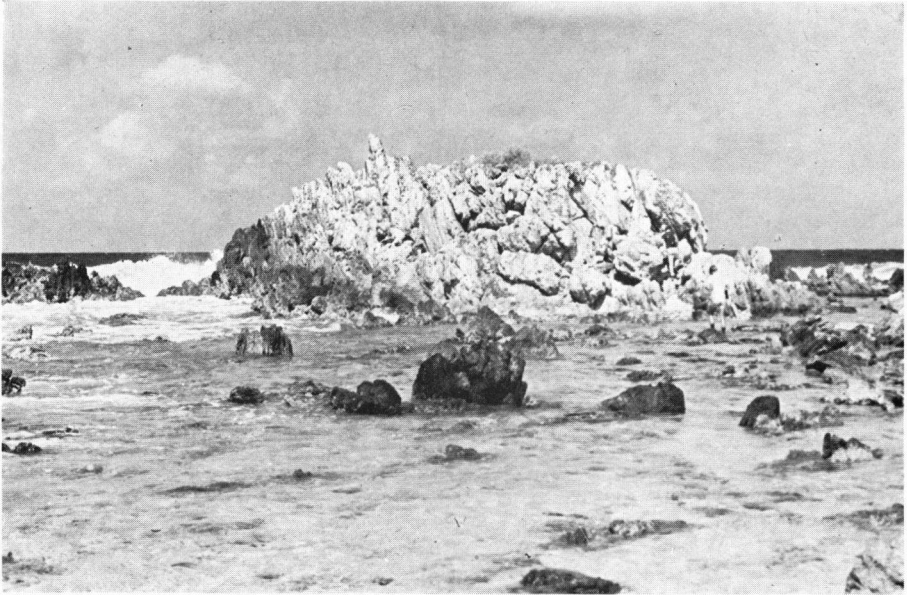
PLATE VI



Via. Part of the Fresh Pond with Sentry Hill in the background, ST. MARTIN.
(August 1976)

Vib. Part of the well-known Fish Pond Lagoon, ST. MARTIN. (April 1973)

PLATE VII



VIIa. Castle Rock near Flamingo Bay, St. MARTIN, where a breeding colony of *Sterna dougallii* was found. (May 1973)

VIIb. The steep limestone cliffs along Cupe Coy Bay, St. MARTIN, where *Phaëton lepturus* and *Progne dominicensis* were found breeding. (April 1973)

PLATE VIII



VIIIa. Nesting place of *Podilymbus podiceps* in the Fresh Pond, St. Martin
(Feb. 1974)

VIIIb. Nest of *Podilymbus podiceps*, close up of Pl. VIIIa. (Feb. 1974)

PLATE IX



IXa. Three species of gulls in the Fresh Pond: *Larus fuscus* (center), *L. delawarensis* (l) and *L. atricilla* (r). (Feb. 1974)

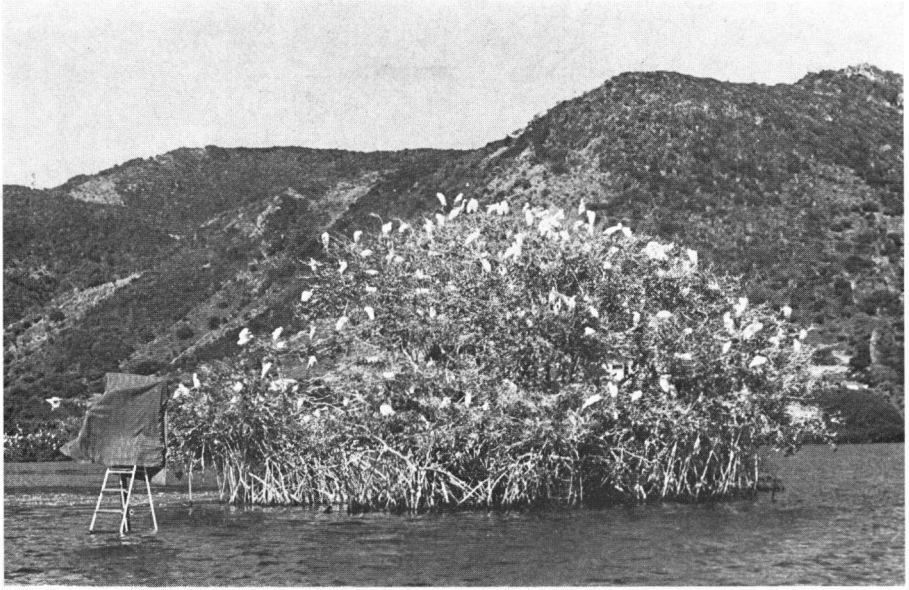
IXb. *Sterna albifrons* with small pulli, Simpson Bay Lagoon. (May 1976)

PLATE X



Xa. *Phaëton lepturus* captured on its nest containing one egg in a rock crevice at
Cupe Coy Bay. (April 1973)

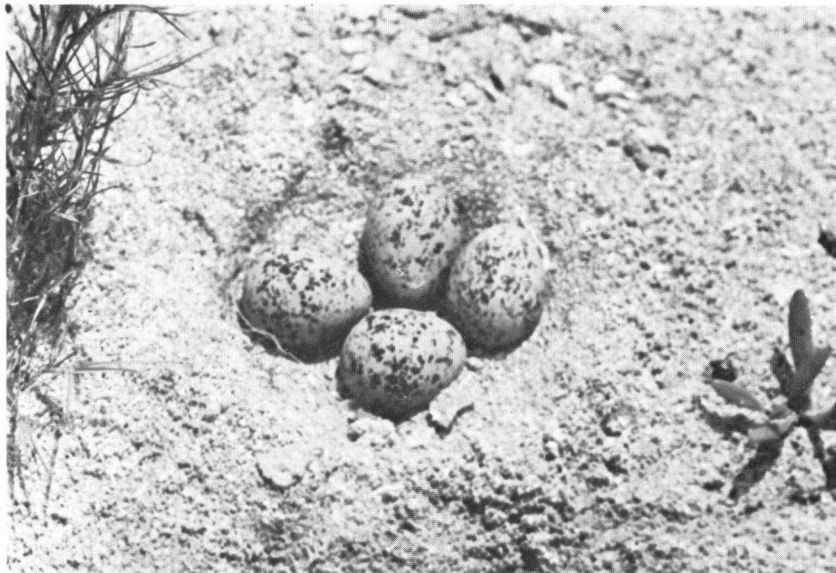
Xb. Clutch of *Bubulcus ibis*, phot. A. DE HAAN, St. Martin. (Jan. 1975)



XIa. Breeding colony of *Bubulcus ibis* in Coconut Grove Lagoon, St. Martin: the hide from which XIb was taken on the left, phot. A. DE HAAN. (Jan. 1975)

XIb. *Bubulcus ibis* near its nest, phot. A. DE HAAN, St. Martin. (Jan. 1975)

PLATE XII



XIIa. Breeding *Charadrius wilsonia* at Plum Bay Lagoon, St. Martin. (June 1976)

XIIb. Clutch of *Charadrius wilsonia*, Plum Bay Lagoon. (June 1976)

PLATE XIII



XIIIa. Large pulli of *Pelecanus occidentalis* on Pelican Key, St. Martin. (August 1976)

XIIIb. Clutch of *Pelecanus occidentalis* on Pelican Key. (August 1976)

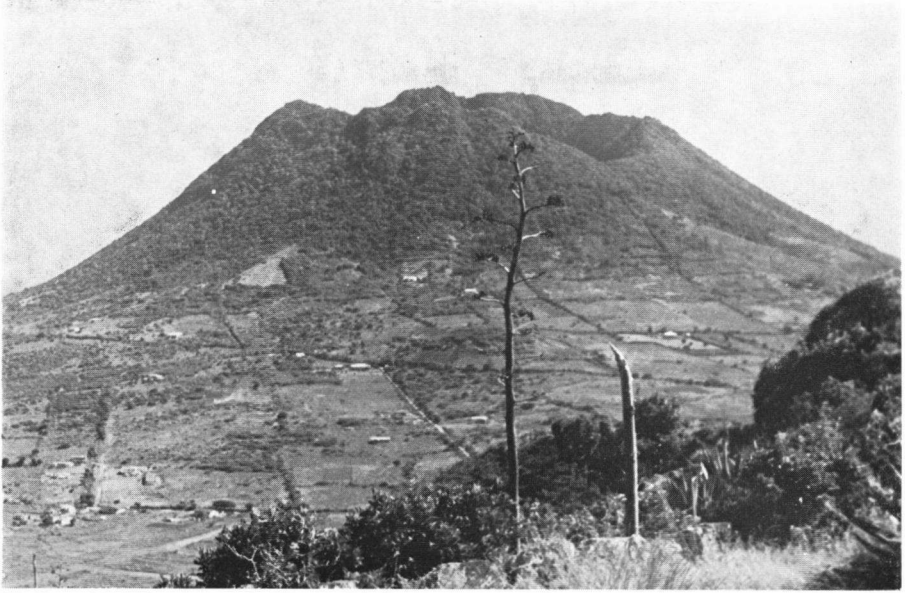
PLATE XIV



XIVa. Part of Pelican Key, St. MARTIN (August 1976)

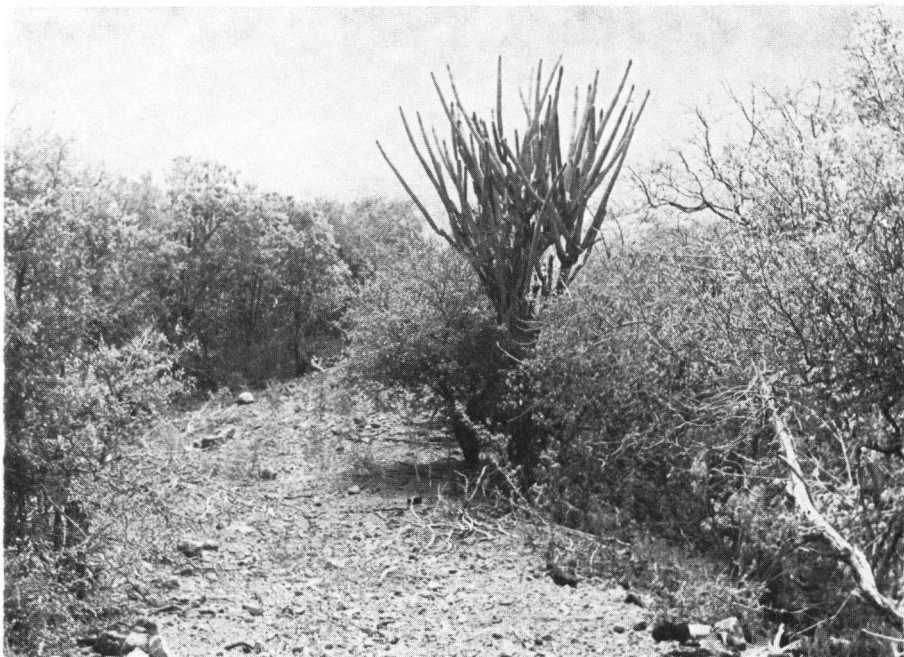
XIVb. One of the few beaches of St. EUSTATIUS, Oranjestad Bay. (Dec. 1974)

PLATE XV



XVa. The Quill, seen from the Little Mountains, ST. EUSTATIUS. (Dec. 1974)
XVb. North coast of ST. EUSTATIUS with the Little Mountains in the background.
(Feb. 1974)

PLATE XVI



XVIa. Thorny shrub and cactus vegetation in southeastern St. EUSTATIUS.
(Feb. 1974)

XVIb. *Coccothraustes americana* on St. Eustatius, phot. JAN SMID. (Oct. 1974)

PLATE XVII



XVIIa. Native gardens in northeastern SABA. (May 1973)

XVIIb. The main (concrete) road of SABA near The Bottom. (May 1973)

PLATE XVIII



XVIIIa. Tree (*Freziera undulata*?) loaded with epiphytes on the summit of The Mountain, SABA. (May 1973)

XVIIIb. Jungle bordering the stone steps leading to the summit of The Mountain, SABA. (May 1973)