

NIDIFICATION OF THE BIRDS OF DOMINICA, B. W. I.

BY JAMES BOND

ALTHOUGH Dominica is the largest and one of the least developed of the British Lesser Antilles, it is better known ornithologically than any other island of the group. Not only have a number of skilled collectors explored the island, including Ober, on behalf of the United States National Museum, and Beck, on behalf of the American Museum of Natural History, but, in addition, there resides at Roseau a man who is one of the most competent field naturalists now resident in the West Indies. I refer to Mr. Percival Agar. Although I have never had the good fortune to meet this gentleman, I have corresponded with him for a number of years and he has not only helped to complete the collection of Dominican birds in the Academy of Natural Sciences of Philadelphia, securing or being instrumental in securing those forms that I failed to find during my visit to the island in 1927, but he has also collected for me the nests and eggs of the majority of the resident birds.

In the present paper I refer repeatedly to two reports on the birds of Dominica that were published toward the end of the nineteenth century:—(a) 'Catalogue of the birds of Dominica from collections made for the Smithsonian Institution by Frederick A. Ober, together with his notes and observations' by George N. Lawrence (Proc. U. S. Nat. Mus., 1: 48–69, 1878); (b) 'Notes on the fauna of the Island of Dominica, British West Indies, with lists of the species obtained and observed by G. E. and A. H. Verrill' (Trans. Connecticut Acad. Arts and Sciences, 8: 315–350, 1892).

I see no reason to describe herewith the physical features of Dominica nor to discuss the abundance and distribution of its bird-life, since this has been adequately done in the above reports. It is sufficient to say that no bird, with the exception perhaps of the Diablotin (*Pterodroma*), is in any immediate danger of extinction. Even the two species of parrots should thrive for many years, if they are left unmolested in their wild terrain; but they should, of course, be rigidly protected.

The abundance of birds on Dominica, as compared with other Lesser Antillean islands, is very noticeable and, without wishing to detract from the accomplishments of Mr. Agar, is largely responsible for his phenomenal success. This is accounted for by the facts that the mongoose has not been introduced there and that the island has

remained in its primitive wild state, only a very small area being under cultivation, owing to the ruggedness and inaccessibility of its mountains.

Of the 54 species of birds supposed to nest on Dominica, Mr. Agar has forwarded to me at the Academy of Natural Sciences of Philadelphia sets of eggs of no less than 42, including the nests of all except the larger forms. The eggs of two other species have been taken on the island and, of the remainder, nine have been found nesting elsewhere in the West Indies. Three species, *Gallinula chloropus cerceris*, *Sterna hirundo hirundo* and *Holoquiscalus lugubris guadeloupensis*, are recorded from Dominica for the first time. The nomenclature here used is that of my 'Handbook of Birds of the West Indies', 1936.

ANNOTATED LIST OF BREEDING BIRDS

BLACK-CAPPED PETREL, *Pterodroma hasitata*.—Formerly nested in the mountains of Dominica and Guadeloupe and may still do so in greatly reduced numbers. The species was rediscovered in Dominica in 1932 by Dr. Daniel Thaly, chairman of the Victoria Museum (Roseau). Sydney Porter states (*Avic. Mag.*, (4) 8: 156, 1930) that "when making a journey through the forest in search of *Amazona imperialis* my guide . . . said that there were still some [*Pterodroma hasitata*] left upon the mountain, described them to me exactly, and finished up by saying that they had webbed feet and nested in holes in the rocks. He said that their haunts were almost inaccessible." Mr. Agar believes, however, that the Black-capped Petrel no longer nests in Dominica. (For a full account of this interesting petrel see Murphy's 'Oceanic Birds of South America,' 2: 692-697, 1936.)

YELLOW-BILLED TROPIC-BIRD, *Phaethon lepturus catesbyi*.—A small colony was found nesting on the cliffs near Petite Savanne on June 2, 1938. An egg taken measures 55.6×38.3 millimeters.

The Red-billed Tropic-bird, which evidently nests on Montserrat, Guadeloupe and Desirade, has not as yet been found at Dominica. Brown Pelicans, Frigate-birds and Boobies occur in the vicinity of Dominica but are not known to nest on the island.

AMERICAN EGRET, *Casmerodius albus egretta*.—Recorded by Verrill from Dominica and declared by him to be a rare and local resident of the island. Mr. Agar writes (1937) of a pair possibly nesting in the vicinity of the Hampstead River and he was informed that the species is found on the Indian River at Portsmouth.

SNOWY EGRET, *Egretta thula thula*.—Taken by Ober in Dominica. I know nothing of its status on the island. Mr. Agar considers this heron to be merely a casual visitant to Dominica.

LITTLE BLUE HERON, *Florida caerulea*.—A small colony, consisting of three pairs, was found nesting at the source of the Roseau River, below the fresh-water lake, on May 18, 1938. The nests were situated in trees twenty to twenty-five feet above the ground. Eggs of the one set taken measure 43.6×33 , 43.6×34 , 44.8×33.8 millimeters, respectively.

LITTLE GREEN HERON, *Butorides virescens maculatus*.—A nest and eggs of this common heron were found by Mr. Agar in a small tree on a river bank in April 1934. The three eggs measure 38.5×29.8 , 39×30 , 39.7×30.3 millimeters.

YELLOW-CROWNED NIGHT HERON, *Nyctanassa violacea violacea*.—Mr. Agar found, on April 13, 1936, a nest of this widespread species "in a tall tree overhanging a deep valley." The two eggs measure 52×38 , 52.2×38.6 millimeters.

BROAD-WINGED HAWK, *Buteo platypterus rivieri*.—A set of two heavily incubated eggs of this hawk was collected by Mr. Agar. The nest, "the usual structure of sticks and twigs," was placed in a tall silk-cotton tree between eighty and a hundred feet above the ground. The eggs are buffy white, blotched and clouded with rather dull chocolate-brown and measure 50.3×38.5 , 51.5×39.5 millimeters. Eggs from St. Lucia (two sets examined) are similar in coloration. It is interesting to note that a single egg of the southern Lesser Antillean race, *antillarum*, taken by me in St. Vincent, is an immaculate bluish white, and six sets, taken on Grenada by Grant Wells, are all said to be white, a most remarkable local variation if constant (Wilson Bull., nos. 76-77: 262, 1911). Mr. Agar informs me, however, that one of a set of three eggs, taken by him in Dominica, is almost immaculate.

The race *rivieri* is known from three of the Lesser Antilles,—Dominica, Martinique and St. Lucia.

SPARROW HAWK, *Falco sparverius caribaeorum*.—A nest of the Sparrow Hawk was located at the base of a frond of a tall coconut palm. Mr. Agar writes that it was "the usual hawk-like structure of sticks and twigs." The nest when found contained one egg, which was taken. A week later (April 10, 1937) two more eggs had been laid, indicating that three eggs constituted the set. After the taking of these eggs, the nest was torn down and another built on the other side of the same palm. This would seem to be an unusual situation, since the Sparrow Hawk habitually lays in cavities of trees elsewhere in the West Indies and Mr. Agar informs me that they sometimes do so in Dominica. However, the above nests are not the only ones that Mr. Agar has found situated in a palm in Dominica. Perhaps the scarcity of natural cavities in trees has induced these birds to alter their mode of nesting!

The three eggs are buffy white, heavily peppered with bright reddish brown, and also blotched with this color, in two eggs about the larger ends, in one egg at the smaller end. The markings on one egg, possibly the last laid, are decidedly duller. The eggs measure 38.2×28 , 36.5×28.8 , 35.6×29.2 millimeters.

PURPLE GALLINULE, *Porphyryla martinica*.—There is but one published record of the Purple Gallinule from Dominica and the bird is very likely a straggler to the island (Proc. U. S. Nat. Mus., 1: 197, 1878). Mr. Agar writes that an immature bird, brought to Dr. Daniel Thaly of Roseau some years ago, was the only individual of this species he has ever seen. Dr. Thaly informs me that he kept this bird in an aviary for several years.

FLORIDA GALLINULE, *Gallinula chloropus cerceris*. Mr. Agar found "several" of these birds on the fresh-water lake but failed to find a nest. Natives assured him that they had frequently seen young swimming on the lake.

COMMON TERN, *Sterna hirundo hirundo*.—Mr. Agar writes me that a fairly large colony of these terns was nesting in company with *Sterna anaethetus* and *Anoëus stolidus* on a promontory at Grand Bay at the southern end of the island (June 12, 1937). A set of two eggs was taken; these measured 41.8×31.4 , 42.5×30.4 millimeters, respectively. The eggs are handsomely marked and resemble eggs of this species, taken in North America, in the collection of the Academy of Natural Sciences. They differ strikingly from eggs of *Sterna dougalli* taken in Dominica by Agar in 1934.

This is apparently the first nesting record of the Common Tern from anywhere in the Antilles, although Hartert found the species breeding in Bonaire in the south Caribbean.

ROSEATE TERN, *Sterna dougalli dougalli*.—A set of eggs of this tern was taken by Mr. Agar on a little island off the windward coast of Dominica. A small colony was nesting there at the time (May 1934). The three eggs measure 40.5×30.3 , 42×30.4 , 42.7×30.5 millimeters. They are decidedly less handsomely marked than those of the Common Tern.

BRIDLED TERN, *Sterna anaethetus anaethetus*.—Writing from Ste. Marie on the windward coast of Dominica on April 20, Ober states: "This bird made its first appearance a week ago, coming from the open ocean, to breed upon a rock off this stormy shore. My Indian boys procured twenty eggs from the rock. The birds leave the island as soon as the young are fledged."

Mr. Agar found this species nesting at Grand Bay in June 1937. One heavily incubated egg was taken. This is dull white, spotted with blackish and dark chocolate-brown with underlying markings of lavender gray and measures 46.5×33.3 millimeters. It is much less heavily marked than the eggs of either of the preceding species. The Bridled Tern is not known to lay more than one egg in the West Indies.

The Least Tern and the Sooty Tern have been recorded from Dominica but are not known to breed here. When in Martinique, I was informed that seabirds, probably terns, nested in abundance on islets near the Presquile de la Caravelle, but none was there during my visit.

NODDY, *Anous stolidus stolidus*.—Mr. Agar writes me that "at least a dozen pairs" of these terns were present among the colony of terns at Grand Bay (1937). Although he did not succeed in finding a nest, he feels certain that the birds were breeding here at the time.

WHITE-CROWNED PIGEON, *Columba leucocephala*.—Recorded from Dominica by Verrill but as far as I am aware no specimens have been taken on the island. The species is migratory in many parts of its range and may be of casual occurrence on Dominica, south of which, in the Lesser Antilles, this pigeon has not been recorded. Mr. Agar has never seen this bird and says that it is unknown to most of the local hunters.

SCALY-NECKED PIGEON, *Columba squamosa*.—A nest of this pigeon was found on May 16, 1938, on the leeward side of a high ridge, 3000 feet above sea level. The nest was placed in the side of a 'wild pine' growing from a small tree. There were two slightly incubated eggs in the nest, one of which was knocked out of the nest by the parent bird on leaving. The remaining egg measures 36.5×26 millimeters. A second nest in process of construction was found a few days later. This was also situated in the side of a wild pine, but much higher,—between thirty and forty feet above the ground in a 'Gomier' tree. Natives claim that these pigeons always nest in Dominica on the summits of the highest ridges, where there is almost continual mist and rain.

ZENAIDA DOVE, *Zenaida aurita aurita*.—On April 20, 1936, a nest of this dove was found ten feet up on a ledge of a low, rocky cliff, a most unusual situation, since the species habitually builds in low trees. The two white eggs measure 30.7×23.2 , 31.3×23.5 millimeters.

GROUND DOVE, *Columbigallina passerina nigrirostris*.—A nest of the Ground Dove, found May 1935, was placed in a tree stump three feet above the ground. The two white eggs measure 21.7×17.3 , 23.3×17.8 millimeters.

Three skins from Dominica are decidedly smaller than Martinique birds (*trochila*), and are best referred to the recently described *nigrirostris* Danforth.

RUDDY QUAIL-DOVE, *Oreopeleia montana martinica*.—A nest of this quail-dove, found on May 11, 1936, was merely a bunch of "large dead leaves, placed loosely, one above the other, in a tree-fern four feet above the ground." The two eggs measure 28×21.5 , 30.3×22.1 millimeters.

A. H. Verrill's statement that this species sometimes nests on the ground I consider doubtful. I have taken its eggs both in St. Lucia and in St. Vincent.

MOUSTACHED QUAIL-DOVE, *Oreopeleia mystacea mystacea*.—Mr. Agar has sent me a nest and eggs of a quail-dove which were brought to him by an old woodsman, who claimed to have seen the incubating bird which "he described accurately." The nest was situated "at the end of a small branch about four feet above the ground." It is rather more solidly constructed than is the average nest of the Ruddy Quail-dove, being composed of sticks and dead leaves, with a rough lining of whitish plant fibers. The eggs are ochraceous cream in color, decidedly paler, less salmon-buff, than are those of the preceding species. They measure 28.5×22.4 , 30.5×22.6 millimeters. Both the nest and the eggs agree with Danforth's description of the nidification of this dove ("The Birds of St. Lucia," Monogr. Univ. Puerto Rico, pp. 45-46, 1935).

IMPERIAL PARROT, *Amazona imperialis*.

LESSER DOMINICAN PARROT, *Amazona arausiaca*.—Mr. Agar writes me as follows concerning the two Dominican parrots: "I have been told that the smaller *bouqueti* [= *arausiaca*] nests in holes in tall trees and in May this year (1935), when climbing Morne Diablotin, where both species are found more commonly than in any other part of the island, our guide, who has spent the greater part of his life hunting wild pig and agouti, assured me that he knew of one spur of the mountain where the Imperial Parrot nested yearly, as he had found eggshells on the ground beneath the trees. He also assured me that it was high enough on the mountain to be in the belt where the trees are stunted and he thought that the nests could be reached without much difficulty."

An egg of the Imperial Parrot in the Rothschild Collection at Tring, England, measures approximately 45.5×40 millimeters. It was laid by a captive bird.

LESSER ANTILLEAN BARN OWL, *Tyto insularis nigrescens*.—Ober states that the Barn Owl in Dominica nests "in a hollow tree or in the hollow of a large limb and lays eggs, elliptical in shape, white and granular." A set of three taken by him (September 19) measured " 1.6×1.22 inches" or approximately 41×31 millimeters.

MANGROVE CUCKOO, *Coccyzus minor dominicae*.—A nest of this cuckoo, found in May 1935, by Mr. Agar, is described as a rather frail platform of sticks, loosely put together. It was situated ten feet up in a mango tree. The two eggs are light bluish green in color and measure 32.7×26.2 , 33.8×25.7 millimeters. They are larger and somewhat darker and greener than a single egg of *Coccyzus minor nesiotae*, taken by me on Gonave Island, Haiti.

SMOOTH-BILLED ANI, *Crotophaga ani*.—A nest, found by Mr. Agar in February 1934, is described as "a large, untidy structure of twigs and small sticks, lined with a few dead leaves." It was situated in a 'poix-doux' tree, twelve feet above the ground. The eight eggs are thickly coated with the usual white calcareous deposit. These measure 33.2×26.6 , 33.9×27.3 , 34.2×27.2 , 34.5×27.5 , 35×26.1 , 35.3×27.7 , 35.3×25.8 , 35.8×28 millimeters.

BLACK SWIFT, *Nephoecetes niger niger*.—On July 27, 1938, a colony of these swifts was found nesting near Laudat, below the fresh-water lake. The rather bulky, cup-shaped nests of moss were situated on ledges or in holes on the sides of a small, damp and gloomy ravine not wider than five to ten feet and perhaps twenty to twenty-five feet high, in dense forest. Ten nests were found here, most of which were incomplete and unoccupied. Two contained one egg each, one of these measuring 26×17.7 millimeters.

According to Mr. Agar, this swift is not resident in Dominica, arriving early in March and departing to some unknown locality about the end of August or beginning of September. It is of interest to note that there is a record of this bird from the Merume Mountains, British Guiana. The Black Swift has previously been found nesting only in California (*N. n. borealis*).

LESSER ANTILLEAN SWIFT, *Chaetura martinica*.—Ober states that these little swifts "breed among the cliffs high up in the mountains and near the water-falls of the Roseau Valley." Agar writes: "I have never actually taken the nest of this bird but I know of two very high, completely unscalable cliffs, where I have observed them in the nesting season."

In the great ravine at Macouba, in extreme northern Martinique, I found this swift in great numbers and was assured by the natives that they nested on the precipitous slopes, where the nests are at times accessible without the use of a rope. I examined recently a set of three eggs of this swift in the collection of Mr. George D. Smooker, of Trinidad, who informs me that it was taken by Mr. Henessey du Pigny at Springhill, Dominica, for A. H. Verrill on April 30, 1893. The nest is said to have been situated "in an old oven!" There is no description of the nest, which doubtless resembles those of other species of the genus *Chaetura* (see my 'Birds of the West Indies,' p. 200). The three white eggs measure 19×14.3 , 18.3×14.2 , and 17.1×13.8 millimeters.

GARNET-THROATED HUMMINGBIRD, *Eulampis jugularis*.—On March 24, 1936, Mr. Agar found a nest of this hummingbird twenty feet above the ground in a bread-fruit tree. The nest was saddled on a limb and is composed chiefly of strips of tissue-like bark, decorated externally with lichen together with a little moss. The two eggs measure 15×10.6 , 16.2×10.4 millimeters.

EMERALD-THROATED HUMMINGBIRD, *Sericotes holosericeus holosericeus*.—A nest, found on March 31, was placed fifteen feet above the ground in a cocoa tree and is a compact cup of cotton, decorated externally with lichen. The two eggs measure 15.1×9.1 , 15.3×9.3 millimeters.

BLUE-HEADED HUMMINGBIRD, *Thalurania bicolor*.—A nest of this species, found on May 20, 1935, was situated eight feet above the ground, in a bush growing out of a bank beside a mountain stream at an elevation of 1600 feet. The nest is composed of the reddish-brown fiber of tree-fern, sparsely decorated externally with strips of palm fiber. The two eggs measure 13.4×8.6 , 13.5×8.6 millimeters.

ANTILLEAN CRESTED HUMMINGBIRD, *Orthorhyncus cristatus exilis*.—A nest of this hummingbird, the commonest of its family in Dominica as well as in all of the Lesser Antilles, was collected on March 17, 1936. It was situated in a small orange tree two and one-half feet above the ground. It is composed of tissue-like pieces of bark with a soft lining of white plant down. Externally it is sparsely decorated with lichen and moss. The two eggs measure 11.6×8 , 11.6×8.2 millimeters.

Nests of all the Dominican hummingbirds, and the eggs of all except those of *Eulampis*, were collected by Verrill.

RINGED KINGFISHER, *Megaceryle torquata stictipennis*.—On May 12, 1937, Mr. Agar discovered a nest of this kingfisher containing three slightly incubated eggs. The entrance to the burrow, which was in a bank twelve feet above the river bed, was remarkably small as was the passageway to the egg chamber. The chamber itself was "large and roomy," and was situated five feet from the entrance, the passageway veering to the right. There was no vestige of a nest proper, but the eggs were deposited on the soft, sandy earth. The eggs are white and visibly porous, some of the pores being blackish, probably attributable to dirt. They measure 39.6×33.5 , 38.1×33.5 , 38×31.8 millimeters. About a month later Mr. Agar found another nest containing young "on the bank of the river at Geneva near Grand Bay."

The known range of this form is Guadeloupe, Dominica, and Martinique.

GRAY KINGBIRD, *Tyrannus dominicensis vorax*.—Mr. Agar has sent up but a single egg of this well-known species. It was taken from a nest situated between sixty and seventy feet above the ground on the frond of a royal palm. The egg is a rich cream-buff, beautifully marked with reddish brown and underlying spots of violet-gray. It measures 27.9×19 millimeters. A set (?) of two eggs was also taken by Ober in Dominica; but the usual complement is three eggs throughout the West Indies.

SOUTHERN CRESTED FLYCATCHER, *Myiarchus tyrannulus oberi*.—A nest, containing three incubated eggs of this flycatcher, was found by Mr. Agar on May 18, 1936. He writes that the nest was situated "in a hole in a tree" and was "so loosely constructed that it almost crumbled to pieces on being removed." The nest is a rough mass of plant fibers, chicken feathers and plant down. The eggs are cream-buff, spotted and heavily scrawled with purplish brown and underlying markings of violet-gray, and measure 23.5×18.6 , 24×18.7 , 24.3×18.9 millimeters. They resemble eggs of this species from St. Vincent and Grenada (*Myiarchus tyrannulus nugator*).

LESSER ANTILLEAN PEWEE, *Blacicus latirostris brunneicapillus*.—On May 4, 1936, a nest of this little flycatcher was found saddled on a dead branch of a cocoa tree ten feet above the ground. It was "well shaded and protected by the leaves of a living branch." The nest is a compact cup of moss, rootlets and plant down, lined with fine rootlets, grass stems and pieces of leaves. The two eggs are cream-buff, heavily wreathed about the middle and widest part with reddish brown and underlying markings of violet-gray. There are also a few blackish specks. Elsewhere the eggs are sparsely marked. They closely resemble those of the Wood Pewee of North America. They are more richly colored than eggs from St. Lucia (*Blacicus latirostris latirostris*) and are more heavily marked than eggs from Haiti (*Blacicus c. hispaniolensis*).

A nest of the St. Lucian form is smaller, is not saddled on a limb and is differently constructed, being composed of rootlets and strips of tissue-like pieces of bark with a rather rough lining of fine black rootlets. The nest from Dominica measures 2.75×1.75 inches, the eggs 17.3×13.5 , 17.6×13.5 millimeters. Verrill describes a nest as being two inches in diameter by three-quarters of an inch high and gives egg measurements decidedly greater than the above. The eggs as illustrated do not resemble those before me and both Mr. Agar and myself doubt the validity of this record; the nest was probably that of a hummingbird and doubtless was brought to Mr. Verrill by a native!

CARIBBEAN ELAENIA, *Elaenia martinica martinica*.—Nests and eggs of this species taken on St. Croix (*Elaenia martinica riisii*) and on St. Vincent, resemble those

sent by Mr. Agar from Dominica. He took a nest of the Caribbean *Elaenia* on June 1, 1935. It was placed in the fork of a branch of a 'poix-doux' tree fifteen feet above the ground. The nest is composed entirely of rootlets with no soft lining. In color the single egg is cream-buff, with a decidedly roseate tinge at the larger end, and is spotted about the larger end with deep reddish brown and with underlying markings of violet-gray; it measures 22×16 millimeters.

Mr. Agar has also sent me a set of two eggs, the usual number for this species, to show variation. These eggs are creamy white, one being sparingly marked about the larger end with blackish and violet-gray, the other having a wreath of small brownish and violet-gray spots about the larger end. These eggs resemble those I have examined of *Elaenia martinica riisii*, whereas the single egg resembles those from St. Vincent. They measure 21.2×16.8 , 21.3×16.6 millimeters.

The nest and eggs described by Verrill under this flycatcher pertain to some other bird, probably the Golden Warbler (*D. p. ruficapilla*).

PURPLE MARTIN, *Progne subis dominicensis*.—The martin was found breeding on the coastal cliffs of Dominica. Three nests with young were located at Calibishie, at the northeast end of the island, on July 20, 1938, and a nest, containing two fresh eggs measuring 21.2×15.9 millimeters each, was taken at Grand Savanna on August 3, 1938. The nest was a "loosely constructed mass of straw and a few pieces of banana trash." These are remarkably late nesting dates. During my West Indian field-work, I found this species nesting in May (in the Greater Antilles) and Bartsch recorded a nesting colony in Haiti as early as April 4. It seems to me possible that martins found in Mexico ("*P. sinaloae*") in summer, with sexual organs enlarged, may have just returned or were about to leave for the West Indies. Although Mr. Robert T. Moore of the California Institute of Technology informs me that his collector found a "breeding colony" of "*sinaloae*" in Mexico, I should like to see, for my own satisfaction, a nest or eggs actually taken in this country.

SOUTHERN HOUSE WREN, *Troglodytes musculus rufescens*.—A nest of this wren, sent by Mr. Agar, was built on a rafter in a corner of a house, under the roof. It is composed of a mass of grass and twigs and is lined with a few feathers. The three eggs are white, thickly spotted with bright reddish brown and underlying markings of violet-gray. The markings are heaviest at the larger ends, where there is a tendency to form a wreath. They measure 17.6×13.5 , 18×13.6 , 19.5×13.5 millimeters. Mr. Agar states that the usual nesting site of this wren is in a hole in a tree or in a hollow log.

Verrill describes the eggs as not differing appreciably from those of a *Coereba* but this is erroneous. They are moreover larger, not smaller than eggs of that species, as he avers.

SCALY-BREADED THRASHER, *Allenia fusca*.—A nest of this thrasher was found by Mr. Agar on May 27, 1936, in a 'poix-doux' tree, twenty feet above the ground. It is a thin but well-constructed cup, composed of sticks and rootlets. The two eggs are a beautiful immaculate greenish blue and measure 28.6×20.7 , 29.5×21.1 millimeters. They are somewhat paler than eggs of this species from Saba.

PEARLY-EYED THRASHER, *Margarops fuscatus densirostris*.—A nest, said to belong to this species, was found on April 24, 1937, situated in a tree high above the ground. It is similarly constructed but is actually smaller than that of *Allenia*. In its construction it differs chiefly in being heavily lined with fine rootlets. The eggs resemble those of *Allenia* but are a trifle larger, measuring 31.8×20.6 , 31×21 , 30.6×21.3 millimeters. I consider the identification of this nest doubtful.

On St. Croix this species (*Margarops fuscatus fuscatus*) nests in a cavity in a tree, while it has been found nesting, on Desecheo Island and on Mayaguana Island, on the side of a cave. On Saba this thrasher is said to nest frequently on the side of a steep cliff, and Mr. Savage English, a long-time resident of Montserrat, informed me that on this island he has found the species (*Margarops fuscatus densirostris*) nesting among the roots of an upturned tree stump, bordering a ravine. A set of eggs that he collected on Montserrat, now in the British Museum, measures approximately 33.5×21 , 33×21 , 32.5×21.5 millimeters.

TREMBLER, *Cincloerthia ruficauda ruficauda*.—Mr. Agar sent me a nest of the Trembler which he states was "in an unusual situation, being situated in a fairly high coconut palm at the base of a frond, in the little hollow where it grew out of the trunk. Flower sheaths and overhanging fronds turned the site into a hole practically." The nest, which was taken on May 16, 1936, is cup-shaped and is composed of rootlets, lined with finer rootlets and dead leaves. The eggs resemble in color those of the two preceding species but are rather paler than eggs of the Trembleur from Saba (*Cincloerthia ruficauda pavida*). They measure 25×19.6 , 26×19.5 , 27×19.6 millimeters.

Although a nest, similarly situated, was found in St. Lucia (*Cincloerthia ruficauda macrorhyncha*), the usual nesting site of this species would seem to be in the cavity of a tree or in the hollow stump of a tree-fern.

EASTERN RED-LEGGED THRUSH, *Mimocichla ardosiaea albiventris*.—A nest of this thrush, sent by Mr. Agar, is a cup of rootlets, dead leaves and strips of palm-leaf with a few feathers in the lining. It was "placed on the trunk of a tree three feet above the ground, well hidden by new shoots springing from below where the tree had been felled." It was found on May 26, 1935. The two eggs, which were fresh, probably constitute an incomplete clutch, since another nest, containing three eggs, was discovered on the same day, placed "in a similar situation." The two eggs are whitish, heavily marked with rufous brown and grayish violet. They differ from Haitian eggs taken by me (*Mimocichla ardosiaea ardosiaea*), which have a decidedly green background, resembling eggs of *Turdus auranteus* of Jamaica, except that they are much smaller, measuring 28.4×20.3 , 29.2×20.8 millimeters. They agree, however, with Danforth's description of Puerto Rican eggs of this species.

FOREST THRUSH, *Cichlherminia p'herminieri dominicensis*.—A nest of this interesting thrush was found by Mr. Agar on May 12, 1936, in a small tree-fern only one foot above the ground. This nest is a very bulky cup of moss and plant fibers, heavily lined with rootlets. The three eggs resemble in color those of the Lesser Antillean 'thrashers' but two are decidedly greener. Incubation was well advanced when they were taken. They measure 31.5×23.6 , 33.5×23.6 , 34.7×23.8 millimeters.

Verrill collected a deserted nest of this species, containing a few fragments of greenish-blue eggshell. This nest was situated ten feet above the ground.

A nest, containing one addled egg, sent to me from St. Lucia and mentioned in my 'Birds of the West Indies' as said to be that of a Forest Thrush (*Cichlherminia p'herminieri sanctae-luciae*), probably is that of the White-breasted Thrasher (*Ramphocinclus*) of that island. Mr. Stanley John of Castries, who sent me this nest, now concurs in this belief. Semper stated that *Cichlherminia* lays but two eggs in St. Lucia.

A set (?) of eggs in the British Museum that I have examined was taken on Montserrat by Mr. Savage English and is labelled "*Cincloerthia ruficauda*" (= *Cin-*

cloacantha ruficauda pavida) but the eggs are almost certainly those of the Forest Thrush (*Cichlherminia l'herminieri lawrencii*); these measure 33.5×24 , and 32.5×24 millimeters, respectively. Unfortunately there are no data with these eggs that would establish their identity beyond question, as the nest of the Forest Thrush is utterly dissimilar to that of any other bird from either Dominica or Montserrat.

ANTILLEAN SOLITAIRE, *Myadestes genibarbis dominicanus*.—A nest and eggs of the Solitaire were collected on May 25, 1937. The nest was situated on the side of a rocky, perpendicular bank of a stream, eight feet above the stream bed. It is a rather bulky but compact cup of moss and rootlets, lined with rootlets and grass stems, and resembles that of a thrush. It is decidedly more bulky than nests of *Myadestes elisabeth elisabeth* that I have examined, although these latter were not taken in rain forest and contained no moss. The two eggs are pale bluish green, spotted with reddish brown, with underlying markings of violet-gray, being heavily spotted at the larger ends. They measure 24.3×17.1 , 24×17 millimeters.

Mr. Agar has found a number of nests of the Solitaire in Dominica, all similarly situated. It is possible, however, that this bird also nests occasionally in trees, as is the case with the closely related *Myadestes genibarbis solitarius* of Jamaica. Verrill's statement that the Dominican Solitaire builds, in a tree, a nest resembling that of a Chipping Sparrow, may be discredited. It is of interest to note that the Antillean Solitaire lays but two eggs, both in Dominica and in Jamaica, whereas the Cuban species lays three.

BLACK-WHISKERED VIREO, *Vireo calidris barbadensis*.—Ober stated that he thought "this bird is a summer visitor only, as I did not see it before March 19th and then only one." I have observed this bird, however, in one or other of the Lesser Antilles throughout the winter and have taken it in Dominica on February 2 and in Montserrat on January 3. It is remarkable that nearly all individuals of this species and of the Gray Kingbird found west of Hispaniola are migratory.

I have seen perhaps twenty nests of this vireo on various islands and all have been the typical pendant structure resembling that of the Red-eyed Vireo. Ober secured a nest, however, that, according to Lawrence, "does not appear to have been pensile." The identification of this I consider open to doubt. A nest found by Mr. Agar on May 20, 1935, is the usual pendant structure of plant fibers and dead leaves, with some grass stems in the lining. Externally the nest is reinforced by cobwebs. It was placed in a tree overhanging a steep cliff and contained two slightly incubated eggs. These are white, spotted chiefly about the larger ends with various shades of brown, violet-gray and blackish and measure 23×16.2 , 23.5×16.3 millimeters. In the Greater Antilles this species usually lays three eggs.

ANTILLEAN BANANAQUIT, *Coereba flaveola dominicana*.—A nest of this bananaquit, found on March 30, 1936, is the usual globular structure of rootlets, strips of bark and plant fibers. It was situated nine feet above the ground in an orange-tree and contained three fresh eggs which are white, heavily but indistinctly marked with grayish brown, these markings confluent at the larger ends. The eggs measure 16.1×12.3 , 16.6×12.7 , 17×13.4 millimeters.

GOLDEN WARBLER, *Dendroica petechia ruficapilla*.—A nest of this Golden Warbler was situated ten feet above the ground in a small bay-tree. It is composed of plant fibers and plant down, lined with grass stems, horsehair and feathers. The two slightly incubated eggs, collected on May 6, 1935, are handsomely spotted with brown and violet-gray, the markings heaviest about the larger ends; one egg has a few blackish spots and scrawls. They measure 17.9×13.4 , 18.3×13.3 milli-

meters. Both nest and eggs are typical of those of any of the Golden-Yellow-Man-grove Warbler *formenkreis*.

PLUMBEOUS WARBLER, *Dendroica plumbea*.—A nest of this interesting warbler, containing two fresh eggs, was taken on May 11, 1935, by Mr. Agar. It was situated in a bush six feet above the ground and was well hidden by vanilla vines. It is a loosely built cup, composed of dead leaves, held together by rootlets, and is lined with dry grass stems. One egg is white, lightly spotted with reddish brown, the markings confluent at the larger end. The other egg is white, indistinctly marked with grayish brown and lavender-gray (17.5×13.8 , 18.5×13.7 millimeters).

Comparison of the nest of this species with that of *Catharopeza bishopi* of St. Vincent may prove of significance by indicating relationship between the two species.

LESSER ANTILLEAN EUPHONIA, *Tanagra flavifrons*.—This species, according to Verrill, builds in a hole of a tree, the nest being constructed of "sticks." He further states that the eggs are white, "sometimes slightly spotted." I consider this, however, highly doubtful.

A nest, containing four eggs, said to be that of this euphonia, was taken on April 23, 1933, in St. Lucia by Mr. Stanley John, of Castries, and is now in the collection of The Academy of Natural Sciences of Philadelphia. This nest was situated about thirty feet above the ground, attached to a vine growing against the trunk of a forest palm. It is composed externally of moss and rootlets with an inner cup of dried grasses, shreds of bark and rootlets. The one egg that was saved is white, speckled with reddish brown, with a heavy wreath of this color about the larger end; it measures about 19.5×13.5 millimeters. I now feel convinced of the correct identification of this nest, particularly after examining eggs of this genus in the Smooker Collection in Trinidad.

LESSER ANTILLEAN GRACKLE, *Holoquiscalus lugubris guadeloupensis*.—Mr. Agar sent a nest and eggs of a grackle from Dominica but, as no member of the genus *Holoquiscalus* had ever been taken here, I had to ask him to send specimens for identification. This he has done, establishing the identity of Dominican birds as *guadeloupensis*. He states that grackles appeared in Dominica about 1916, possibly as a result of the hurricane of that year. He further states that these birds first became established at the 'Hillsborough Estate,' near the village of Layou, and are gradually spreading along the coast. This grackle, known to natives of Dominica as the 'Layou Bird,' has also extended its range in recent years to Montserrat and Antigua, being now known from Antigua, Montserrat, Guadeloupe, Marie Galante, Dominica and Martinique.

The nest is a bulky cup of plant fibers and rootlets, with a lining of grass stems. It was situated on a branch of a silk-cotton tree forty to fifty feet above the ground. On May 21, 1936, the nest contained three fresh eggs, in color pale greenish, washed here and there with violaceous pink and heavily scrawled with black and lavender-gray. They measure 27×19 , 27×19.1 , 27.3×19 millimeters.

ANTILLEAN SALTATOR, *Saltator albicollis*.—A nest of this saltator is a very roughly built cup of weed stems, strips of bark and dead leaves, lined with fine rootlets. It was situated in a small bay-tree nine feet above the ground. The two eggs, which were fresh when collected on May 17, 1935, are light greenish blue, spotted and scrawled at the larger ends with black; there are no markings elsewhere on the eggs, which measure 27.4×18.4 , 30.3×19.7 millimeters. Ober, who also took eggs of this species, stated that two to three eggs comprise the usual complement.

Bangs has noted that a large series of this species shows that birds of Guadeloupe and Dominica are darker than those from Martinique and St. Lucia. Individual specimens from Dominica ("*Saltator albicollis guadeloupensis*") are, however, as pale as or paler than many specimens from the more southern islands and for this reason I consider a northern race unworthy of recognition.

BLACK-FACED GRASSQUIT, *Tiaris bicolor omissa*.—A nest of this grassquit was found on May 16, 1936. It was situated in a tuft of long grass and contained three incubated eggs. The nest is the usual globular structure of grasses with the entrance at the side, near the top. The eggs are white, speckled and spotted with grayish brown and, to a lesser extent, with lavender-gray, the markings heaviest at the larger ends. They measure 17.2×13.3 , 17.2×13.6 , 17.7×12.9 millimeters.

LESSER ANTILLEAN BULLFINCH, *Loxigilla noctis dominicana*.—A nest of this species is a bulky, domed structure of rootlets, dead leaves and plant fibers with the entrance at the side. It was situated in a 'poix-doux' tree, twelve feet above the ground. The three eggs, which were fresh when taken on April 11, 1936, are white, spotted with chocolate-brown and underlying markings of violet-gray, these markings forming, more or less, a wreath about the larger ends. They measure 20.7×15 , 20.9×15.1 , 22×15.3 millimeters.

Academy of Natural Sciences
Philadelphia, Pennsylvania