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A Distributional Study of the Birds of British Honduras.

Stephen Mims Russell

Louisiana State University and Agricultural & Mechanical College

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BRITISH HONDURAS.

Louisiana State University, Ph.D., 1962
Zoology

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A DISTRIBUTIONAL STUDY OF THE BIRDS
OF BRITISH HONDURAS

A Dissertation

Submitted to the Graduate Faculty of the
Louisiana State University and
Agricultural and Mechanical College
in partial fulfillment of the
requirements for the degree of
Doctor of Philosophy

in

The Department of Zoology

by
Stephen Mims Russell
B.S., Virginia Polytechnic Institute, 1953
January, 1962

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ABSTRACT

This study is the first comprehensive report on the birds of British Honduras. It deals with the composition and distribution of the avifauna.

A preliminary examination of 4400 specimens collected over the last one hundred years in British Honduras and a review of all published and several unpublished reports made by collectors in British Honduras revealed localities requiring additional investigation. An itinerary was prepared in order to distribute wisely the additional necessary field work carried out by the author. Specimens selectively collected in 11 months in the field provided additional distributional records and supplemented existing specimens as a basis for taxonomic considerations. Published references, field notes compiled by the author, and records made by others were considered in preparing statements regarding each species.

All ornithological investigations in British Honduras are outlined. A gazetteer and map identify collecting localities. Accounts of each of the 463 species definitely recorded in British Honduras present

the critical data. Over 6100 specimens of 437 species are listed in the species accounts with the collecting locality, date of collection, and an indication of the present repository. Sex and weight are recorded for 1600 of the birds collected by the author or his field associates. Seasonal and geographic distribution, habitat preferences, and breeding season are briefly stated for each species. Data pertinent to other phases of natural history are given in cases where the information is not generally available. Specimens of polytypic species are identified to race. Nomenclatorial and taxonomic comments are included where significant.

Three hundred and eight species, some definitely, others presumably, nest in British Honduras. Transients and winter visitants that do not breed in British Honduras total 126 species. The largest element in the avifauna is neotropical in origin and occurs in the tall forests. The composition of this group varies little from the southern to the northern portion of British Honduras, although the precipitation declines by two-thirds from south to north. Only four species have named races endemic to British Honduras; one of these races is of doubtful validity and the other three are confined to the pinelands. The pinelands contain 24 species not also found in other habitats in British Honduras, most of which are characteristic of highlands in Guatemala and Honduras.

The islands, although numerous, are small and support only a depauperate fauna, consisting of water-dependent birds and species also found in coastal regions of the mainland.

Four of the seven species endemic to the Yucatán Peninsula range into northern British Honduras. Two other species occurring in British Honduras are present elsewhere only in the northeastern sector of the Yucatán Peninsula and in the West Indies.

Only four species resident on the upper slopes of the highest mountains (elevation 3700 feet) are not also widely distributed at lower elevations in British Honduras.

INTRODUCTION

British Honduras is a Crown Colony of about 8600 square miles situated at the southern base of the Yucatán Peninsula. The Colony lies between $15^{\circ} 54'$ and $18^{\circ} 29'$ north latitude and between $87^{\circ} 28'$ and $88^{\circ} 11'$ west longitude. It is bounded on the north by Mexico, on the west and south by Guatemala, and on the east by the Caribbean Sea. It includes numerous small keys. Tall tropical forests predominate on the mainland, which is low in comparison with most of Middle America. The only mountainous area has maximum elevations of 3700 feet. The Colony is entirely within the Neotropical Region.

About 75,000 people live in British Honduras. Most of them reside in the lowlands, particularly in the drainage of the Belize River. The northwestern and southwestern parts of the Colony are practically uninhabited. According to Anderson (1954), Negroes and individuals of Negro extraction form the largest proportion of the population, followed by Maya Indians and Hispano-Indians, Caribs, Europeans, and Asiatics. Forest and citrus products are the principal exports.

In comparison with other areas of Central America,

British Honduras has been relatively ignored by ornithologists. Collectors interested in obtaining skins for future sale in Europe or America bypassed the Colony in favor of nearby Guatemala and Honduras, where the more varied topography proffered a greater variety of birds. The more northern part of the Yucatán Peninsula received its share of collectors, who were interested in the endemic subspecies found there.

Only three papers (Salvin, 1864; Austin, 1929; Bond, 1954) have dealt with all the birds of a specific part of British Honduras. The only list of the birds of the Colony as a whole appeared in tabular form in 1904 as a part of Volume I of the Biologia Centrali-Americana: Aves. R. P. Devas (1953) informally described some of the birds he saw or heard about in a six weeks stay at Belize and Stann Creek.

W. E. Clyde Todd began to assemble material on the birds of British Honduras in 1910 with the intention of publishing a report on the entire avifauna. He was joined by J. Van Tyne on this project in 1932. The many other projects carried out by each of these ornithologists prevented completion of their work.

I began my study of the avifauna of British Honduras in 1954. Both Todd and Van Tyne encouraged me and made available to me many of the data they have accumulated in their preliminary study. Todd's notes were especially helpful, since they contained comments on specimens

in several museums, including the British Museum, that I personally have not been able to visit. Before I initiated my own field work, I obtained data on 4400 specimens from British Honduras, most of which I personally examined; otherwise I utilized notes made by Todd or Van Tyne. With knowledge of these specimens and the areas from which they came, I planned my work in the Colony to supplement the existing material. My 11 months study in the Colony was carried out in 1955, 1956, 1958, and 1959. Other personnel of the Louisiana State University Museum of Zoology conducted field studies in British Honduras. They collected a number of specimens, usually as an incidental part of their own work. Nearly 1700 specimens were obtained by the various field parties from this institution. Field notes of many persons who collected in British Honduras in this century were also available to me.

This study is the first to assemble all available data on the birds of British Honduras. I base this report on the birds of British Honduras on information in the literature, on over 6100 specimens, on the unpublished notes of many individuals, and on my own experiences in the Colony.

RÉSUMÉ OF ORNITHOLOGICAL INVESTIGATIONS IN BRITISH HONDURAS

The first birds to be taken in British Honduras were obtained by David Dyson in 1845. Presumably the object of his trip was to capture living birds for the menagerie of the Earl of Derby. Dyson did prepare some skins, which went to the British Museum and the Derby Museum, now a part of the Liverpool Museums. In 1856, Thomas J. Leyland, a dealer in skins from Liverpool, collected a few birds near Belize. Some of Leyland's specimens from British Honduras were included in a report by Moore (1859). However, Forbes and Robinson (1889: 63) expressed the opinion that localities on labels of specimens taken by Leyland were unreliable.

Osbert Salvin passed through British Honduras in December 1887, April 1860, August 1861, and May 1862. The report (Salvin, 1864) of his trip among the keys in May 1862 contains a greater wealth of unique information than any other paper in the past. Salvin obtained many specimens and eggs on the keys but only a few specimens on other stops in British Honduras.

Dr. Carl H. Berendt arrived in Belize in December 1865 en route to the Peten and southern Mexico. Christopher Wood accompanied Berendt. About 50 specimens that they collected near Belize are now either in

the Museum of Comparative Zoölogy or the United States National Museum.

Col. N. S. Goss of Kansas collected a few birds near Belize in February 1886 and near Cayo in February 1887. Specimens collected by Goss are included in a report by Lantz (1899).

Many specimens were sent to Salvin and Godman by F. Blancaneaux, a Frenchman who collected in the vicinities of Belize, Cayo, and the Mountain Pine Ridge in the period of 1870 to 1890. Blancaneaux, a chicle and mahogany contractor, was an amateur naturalist.

George F. Gaumer collected extensively in the Yucatán Peninsula. Presumably he collected a few birds in British Honduras about 1887, since Salvin and Godman (1874-1904) list specimens from Orange Walk with Gaumer credited as the collector.

Several hundred specimens were obtained in the vicinities of Toledo Settlement, Ycacos Lagoon, and Manatee Lagoon by Morton E. Peck from November 1900 to July 1901, and from June 1905 to June 1907. Peck also collected birds along the Sibun, Mullens, Sittee, Monkey, Moho, and Temash Rivers. Specimens that he collected are now widely distributed among collections in this country, notably those at the Museum of Comparative Zoölogy, Carnegie Museum, and Willamette University. Peck was a trained biologist and published three ornithological papers (1908, 1910, 1921) and was

co-author of another (Bangs and Peck, 1908). I have been fortunate in having access to many of his unpublished notes on the birds of British Honduras, and I have referred to them often in the species accounts. J. D. Johnson was with Peck in parts of 1905 and 1906 and collected a few birds, many of which were deposited at Pomona College. Gerald B. Thomas spent two months with Peck in the spring of 1906. About 30 of his specimens are now in the Museum of Comparative Zoölogy. B. H. Bailey joined Peck in May, June, and July, 1905. Specimens obtained by Bailey were deposited at Coe College. A number of other specimens collected from November 1906 to May 1907 and labeled "Berry" were also deposited at Coe College. Many of the specimens that were at Coe College are no longer extant.

James L. Peters collected only one bird (Ciccaba virgata) in British Honduras, although in 1912 he worked several weeks on the Mexican side of the Rio Hondo, which is a part of the northern border of British Honduras. Early in 1923, Karl P. Schmidt collected about 20 birds in the vicinity of Middlesex. The specimens are in the Chicago Natural History Museum. In late March of 1923, Harry Malleis obtained about 40 specimens at Cayo, which were deposited in the United States National Museum. Ludlow Griscom passed through British Honduras en route to Quintana Roo and Yucatán in January 1926. He did not collect in the Colony, but

he did record some of his observations (Griscom, 1926).

On behalf of the Carnegie Museum, Ernest G. Holt collected from March 10 to April 20 and April 29 to May 5, 1926, in British Honduras. The period of March 14 to 24 was spent on Half Moon Cay where he obtained materials for a habitat group of the booby colony. In late March, April, and May, Holt worked near Cayo, Duck Run, and the Belize River. His specimens were accompanied by notes.

Oliver O. Austin, Jr., was in the Colony from March 15 to about May 1, 1928, and collected near Cayo, Camp 6, Mountain Cow, and Augustine. The results of his work constitute one of the major papers on British Honduran birds (Austin, 1929). The nearly 300 specimens that he collected are in the Museum of Comparative Zoölogy.

An expedition of the University of Michigan Museum of Zoology, consisting of H. H. Bartlett as botanist, Adolf Murie as mammalogist, and Josselyn Van Tyne as ornithologist, arrived in Belize on January 26, 1931. Their destination was Uaxactun, Peten, Guatemala, but because of delays, they collected in British Honduras before they reached Guatemala. From January 27 to February 8 they worked near Belize, from February 14 to March 9 they were in the Mountain Pine Ridge, and from March 10 to 24 they operated near Cayo. Van Tyne collected most of the birds, but Murie did obtain a few

bird specimens. Mammals collected on this expedition were reported upon (Murie, 1935), as were the birds taken in the Petén (Van Tyne, 1935).

Percy W. Shufeldt collected 649 specimens in the vicinity of Belize, most of them between November 6, 1930 and April 10, 1931, although he obtained a few later in 1931 and in 1932. Many of Shufeldt's notes were lost in the hurricane of September 1931, but some of his notes on specimens that he collected in British Honduras remain intact and have been considered in my study. The specimens are now a part of the bird collection of the University of Michigan Museum of Zoology.

Emmet R. Blake and Charles T. Agostini collected 801 birds in British Honduras for the Carnegie Museum in 1935. From March 8 to April 1 they worked in the Cockscomb Mountains. There they collected up to an elevation of 1850 feet. All Pines was their base of operations in the period April 9 to 27. On April 30 they moved a few miles to Freetown, where they collected until May 24. Blake and Agostini visited South West Cay, May 29 to June 1. I have utilized the field notes of Agostini.

The Turneffe Islands and Northern Two Cays were visited by James Bond in the period of January 20 to 24, 1954. He collected about a dozen specimens. The report (Bond, 1954) on this trip includes several important

sight records.

Field parties of the Louisiana State University Museum of Zoology began work in British Honduras in 1955. Douglas A. Lancaster and I collected at Hill Bank, Gallon Jug, Augustine, and Ballerina Camp from February 18 to May 5. The following year I was accompanied by Dan Dennett, Jr., who was primarily interested in trapping mammals but did obtain many birds. From February 16 to June 8 we collected at many localities. Most important were Hill Bank, Calabash Cay, the Mountain Pine Ridge, the North Stann Creek valley, and the vicinity of San Pedro Columbia. From October 21 to December 18, 1956, I worked at Hill Bank, Gallon Jug, and Augustine.

Lancaster and Edwin O. Willis arrived at Gallon Jug on February 15, 1957. Lancaster remained only until June but Willis stayed until August 1. Willis then spent the first week in August at Hill Bank. Both investigators were primarily interested in life history studies (Lancaster, 1960; Willis, 1958, 1960a, b, c, and 1961), but they did collect some birds of special significance, and their field notes have been of great importance. Willis took careful notes on all nests that he found and recorded daily counts of the number of individuals of each species that he saw.

In the period of February to June 1958, Lancaster resumed his studies at Gallon Jug. Jared Verner, also

from the Louisiana State University Museum of Zoology, studied the nesting activities of the boobies on Half Moon Cay from February 14 to May 9, 1958. Verner collected a number of specimens, and his records of transients on the key are extremely valuable. At the conclusion of his work on Half Moon Cay, Verner made a short trip among the keys in the barrier reef in an effort to record nesting gulls and terns. In the period of April 24 to May 9, I worked in the upper drainage of South Stann Creek, and on the southern slope of the Cockscomb Mountains. On this trip I reached an elevation of about 2700 feet on the summit of a minor peak to the east of Victoria Peak. In 1959, I made a second trip into the Cockscomb Mountains in the period of May 23 to June 3, and collected up to an elevation of 3400 feet on Victoria Peak.

Douglas M. Lay shot a few birds of species previously unrecorded in the Colony between August 11 and 26, 1960, at Corozal and Belize. The specimens are in the Louisiana State University Museum of Zoology.

Although he collected few specimens, Gerrard F. van Tets kept useful records of the birds that he saw from December 21, 1960, to January 3, 1961, at Belize and Half Moon Cay.

In the period of August 15 to September 2, 1961, Michael J. Fogarty obtained 39 specimens at Augustine and in the North Stann Creek valley. His specimens are

also in the museum at Louisiana State University.

In April 1961, L. Irby Davis and Bill Guion made three breeding bird censuses in British Honduras: one in the Mountain Pine Ridge, another about 35 miles west of Belize, and the third in forest along the Hummingbird Highway. Their reports (Davis and Guion, 1961) were published too late to be included in my study.

TOPOGRAPHY AND GEOLOGY

British Honduras occupies a rectangular mainland area measuring about 170 miles from north to south and about 60 miles from east to west. The northern boundary with Quintana Roo, Mexico, is formed by the Rio Hondo, a rather sluggish river of moderate size. The boundary with Guatemala on the west is approximately a north-south line. The southern end of the Colony borders Guatemala at the Sarstoon River. The Caribbean Sea lies to the east of the mainland.

Most of the northern half of the Colony is low and rather flat, although a few hills near the western boundary exceed 500 feet. The rocks of this half of the Colony are Cretaceous to Eocene limestones overlaid in many places with white marls of Miocene age (Dixon, 1956). Most of the large streams in this area flow north or north-northeast into the Bahía de Chetumal.

Flat lowlands form a narrow strip about ten miles wide along the coast from the center of the Colony south to the Guatemalan border. Many swamps and coastal lagoons abound in this area. A considerable portion of the lowland is formed of rather typical alluvial deposits of the sort associated with river valleys. Alluvial deposits are also found in much of

the lowlands of the Belize River in the central part of the Colony. At many points a terrace at about 40 to 50 feet elevation marks the inland limit of the coastal swamps.

Inland from the coastal lowlands and south of the Belize River are the Maya Mountains, a crescentic shaped range with the highest elevations only about twenty miles from the coast. The northern and southern ends of this range extend westward. In parts of these mountains, ridges and peaks reach elevations slightly in excess of 3000 feet. Victoria Peak, the highest point in the Colony, is nearly 3700 feet elevation and is a part of a conspicuous ridge called the Cockscomb Mountains. The eastern, northern, and southern slopes of the Maya Mountains are steep, and the rivers draining these slopes are straight and usually flow through narrow, steep valleys. The western slope of the Maya Mountains is very gradual and forms a considerable area above an elevation of 1600 feet. The drainage is into tributaries of the Belize River, except for a small stream that flows into the Río de la Paison in Guatemala. The rocks of the higher ridges of the Maya Mountains are Paleozoic and include granite, quartzites, slates, and shales. These old rocks dip beneath more recent limestones toward the west. The Mountain Pine Ridge, covering about 125 square miles, is a part of the northwestern portion of the Maya Mountains.

A barrier reef extends the length of British Honduras. In most places it is about 15 miles from the coast. Many tiny mangrove-covered keys dot the reef. A number of coral reefs lie outside of the barrier reef. Among these are Lighthouse Reef, Glover's Reef, and the Turneffe Islands. The latter is often shown on maps as a single land mass, but Turneffe actually consists of many small islands.

CLIMATE AND VEGETATION

Rather uniform year round temperatures and seasonal rainfall characterize the climate of British Honduras. Easterly breezes from the Caribbean blow throughout much of the year. Winter storms or "northers," which bring cooler temperatures in winter and early spring, are usually weak by the time they reach the Colony. Hurricanes, which approach from the east, are a constant threat from June to the end of October, but severe ones strike only every few years.

The annual mean shade temperature (Fahrenheit) in Belize is about 79 degrees, the mean daily maximum is about 86 degrees, and the mean daily minimum is about 71 degrees. The lowest temperature ever recorded at Belize was 49 degrees; and the maximum was 96 degrees. Temperatures vary little throughout the lowlands. No data are available on temperatures at high elevations in the Mountain Pine Ridge or the Cockscomb Mountains, but I suspect the winter months there are slightly cooler. Frost is unknown in the Colony.

Rainfall varies considerably from one part of the Colony to another. It is greatest in the south, where Punta Gorda normally receives over 175 inches per year.

Precipitation declines toward the north. As illustration, annual rainfall at Belize averages 73 inches; at Orange Walk, 61 inches; and at Corozal, 51 inches. At the inland localities of Augustine (in the Mountain Pine Ridge at an elevation of 1600 feet) and Cayo, the annual mean is about 65 inches. Gallon Jug, in the midst of a tall, luxuriant forest, receives only about 59 inches per year. Reputedly, but without accurately determined meteorological data for support, the southern portions of the Maya Mountains receive 200 inches of rain per year.

The seasonal distribution of the rainfall is rather uniform throughout British Honduras. February, March, April, and May are the "dry" months; the remaining months are the "wet" months. At Belize, Augustine, and Gallon Jug, the four driest months receive only about 10 per cent of the annual rainfall; data for this comparison are not available for other localities.

The life zones of British Honduras are best described in terms of the classification scheme of Holdridge (1947). Slud (1961) has applied this system to zoogeography and compared its usefulness with other methods of classifying vegetation. Holdridge limits the use of the term "tropical" to land areas bounded by the isotherm of mean annual temperature of 24 degrees Centigrade (75.2 degrees Fahrenheit). The tropical region includes all sea level land masses bounded by

this isotherm. Other regions toward the poles are defined by specific isotherms, e.g., warm temperate region by the 12 degree isotherm, cool temperate region by the 6 degree isotherm, etc. In regions where mountains are present, the same respective isotherms delimit belts. The lowest belt in the tropics is the tropical belt and at greater elevations are found the subtropical belt, lower montane belt, montane belt, etc. Rainfall is the criterion used by Holdridge to define the life zones present within the respective belts.

Most of the southern half of British Honduras is within the Tropical Moist Forest Life Zone of the Holdridge scheme. This life zone is defined as having an annual mean rainfall of 2000 to 4000 mm. and as lying within the 24 degree isotherm, both in respect to latitude and altitude. Northern British Honduras is situated within the Tropical Dry Forest Life Zone, bounded by the same isotherms but by definition receiving only 1000 to 2000 mm. rainfall annually. The local areas in the Colony that receive rainfall in excess of 4000 mm. are within the Tropical Wet Forest Life Zone. According to the Holdridge system, Tropical Rain Forest occurs only in those areas in the tropical belt that receive over 8000 mm. precipitation annually, and no areas in British Honduras do so.

Because British Honduras lacks high mountains, the forest types are rather undiversified. Mangroves,

savannas, pinelands, and "rain forests" are the principal forest categories in the Colony. The "rain forest" is not true rain forest, if judged by the Holdridge system, or by many of the strict definitions of rain forest. Since the expression "rain forest" does convey the impression of a tall canopied forest with scattered emergent trees, numerous epiphytes, lianas, and buttressed trunks (which are characteristics of tall forests in the Colony), I have used the term in describing general habitat preferences of birds. British Honduran forests are subjected to a long (4 months) dry season, and some trees are deciduous (e.g., mahogany), as is not usually the case with true rain forest. In this study, rain forest, tall humid forest, or tall moist forest are intended to imply the general impression of a luxurious tropical growth of large trees.

Tall forests of the sort occurring in the Colony have been subdivided by various authors, including Standley and Record (1936), Bartlett (1935), and Lundell (1940). In the limestone-capped area to the west of the Maya Mountains, there are numerous terraces faced with rough limestone blocks. The terraces are remnants of an extensive Mayan civilization, and one in which agricultural practices were well developed. Most archaeologists and botanists believe that the Mayan peoples have at one time or another had all British Honduras under cultivation. Presumably the forests

have been undisturbed for at least the last 500 years, with the exception of recent forestry and agricultural practices. The milpa system of planting crops, a system presumably less advanced than terrace agriculture, is the most common procedure in the Colony today. Many square miles of forest have disappeared in the vicinity of San Pedro Columbia and San Antonio in the southern section of the Colony, and the original tall forest has shown no signs of returning. In other areas the forest has rapidly replaced the milpas. Since forest products are the main exports, much of the accessible region of the Colony has been logged. Mahogany (Swietenia macrophylla) is the species most sought, but only one tree of useful size is usually found per acre. The tractor trails formed to extract these trees grow over rapidly, so that logging operations rarely cause lasting damage to the forests. The most common forest trees (though not all may occur in the same forest association) are mahogany (Swietenia macrophylla), santa maria (Calophyllum brasiliense), nargusta (Terminalia obovata), timber sweet (Nectandra globosa), mamey cerilla (Lucuma campechiana), negrito (Simaruba glauca), yemeri (Vochysia hondurensis), polewood (Xylopia frutescens), waika chewstick (Symphonia globulifera), mylady (Aspidosperma megalocarpon), sapodilla (Achras zapota), cohune palm (Orbigyna cohune), and ironwood (Dialium guianense).

Second-growth successions pose considerable

difficulty to the phytogeographer in British Honduras, as in other tropical areas. Technically, all of the Colony — even where the tallest forests are present — is covered by second growth, because Indian agriculture at one time or another presumably has included all of the arable mainland. Since a milpa is used for agricultural purposes only for one or two growing seasons and then abandoned, much of the Colony is covered with second growth. I have made a rather artificial distinction between second growth (or huamil) and tall forest. Second growth in the sense that I employ it, includes those stages of forest regeneration that succeed a milpa (or other artificial clearing) until the growth reaches 40 to 50 feet. Above these limits I utilize the term forest, modified by the adjectives tall or low as the case may be. The following trees are characteristic of tall second growth in most regions of the Colony (Standley and Record, 1936): trumpet (Cecropia mexicana), moho (Belotia campbellii), salmwood (Cordia alliodora), cottonwood (Ceiba pentandra), polak (Ochroma bicolor), and quamwood (Schizolobium parahybum).

Pinelands are characteristic of the sandy soils between rivers in much of the lowlands and of a considerable area in the Maya Mountains known as the Mountain Pine Ridge. I shall describe lowland pine areas first. The most extensive pinelands (locally

called "pine ridges," although they may be flat) lie between the Rio Hondo and the New River, between the New and Belize Rivers, between the Belize and Sibun Rivers, and in coastal areas south to Deep River. The pine is Pinus caribaea and the lowland pine areas resemble regions in the southeastern United States where the closely related slash pine predominates. The pinelands may be either wet or dry. Clusters of palmettos (Acoelorrhaphe Wrightii) are frequent in wetter areas. Oaks (Quercus oleoides and others), yaha (Curatella americana), and craboo (Byrsonima crassifolia) are characteristic of better drained areas. Other typical plants are sedges (Rhynchospora barbata and R. intermixta), sundew (Drosera), and species of the genera Polygala, Utricularia, Panicum, and Paspalum.

"Broken pine ridge" is a term applied to the scrubby marginal growth that borders the lowland pine ridges. Again the word ridge is a misnomer, for no noticeable slope is apparent. The "broken pine ridge" is characterized by low forest, including many thorny species, and dense undergrowth. The common small trees and shrubs that I collected in this habitat near Hill Bank included Acacia riparioides, Parathesis obovata, Eugenia winzerlingii (?), Miconia pteropoda, Calliandra houstoniana, and Xylosoma anisophylla. Other conspicuous flowering plants were Metastelma pedunculare,

Scleria bractea, and Bauhinia tormentosa. The "broken pine ridge" is a marginal growth and is not identical to "broken ridge," which may be a tall mahogany-sapodilla forest.

The pine forests of the Mountain Pine Ridge form one of the most beautiful areas in the Colony. Lundell (1940: 36-54) has described the botany of this area in some detail. Pinelands cover the areas of the Mountain Pine Ridge where the limestones have been eroded away and exposed the underlying granites. Where limestones remain, tall rain forest is often present. The topography of the Mountain Pine Ridge is highly irregular. Its elevations range from 1000 to 3000 feet, and numerous creeks arise in its uplands. Fires frequently sweep through the pinelands and prevent the accumulation of undergrowth. Thus the rolling pinelands are open and grassy. Pines are by far the most characteristic trees, but oaks (Quercus barbeyana and Q. hondurensis), and such trees as Clethra hondurensis, Leucothoe mexicana, nanze or craboo (Byrsonima crassifolia) also occur. Vegetation in the ravines and creek valleys is dense and often forms a forest limited in extent and variety of trees. Where the headwaters of a stream are in a broad flat valley, marshes often occur.

Brackish and fresh-water savannas cover only about 3 per cent of the Colony. Brackish savannas occur above the tidal limits and are characterized by

sedges of the genera Fuirena and Mariscus (Standley and Record, 1936:19). Fresh-water savannas are often burned or flooded. They are characterized by the grass Panicum barbinode, which forms conspicuous tussocks. Red Mangrove (Rhizophora mangle) dominates the vegetation on most of the keys, the coastal areas, tidal lagoons, and brackish canals.

Small areas in various parts of the Colony support distinctive habitats not included in the preceding general descriptions. Many of the keys rise a few feet above sea level and are sandy. Often the higher portions of the sandy keys are planted with coconut palms (Cocos nucifera). The larger "coconut walks" are kept cleared of undergrowth, since the harvesting of the fruit is a major occupation on the keys. Several broad-leaved trees occur in the booby colony on Half Moon Cay. The principal tree utilized as a nest support by the boobies is Cordia sebestena, but Bursera simaruba and Bumelia retusa are also of general occurrence (Verner, 1959). Many of the larger keys support a limited woodland dominated by sapodilla (sp.?) trees.

The upper slopes of the Cockscomb Mountain support a distinctive habitat, but it is one extremely limited in extent. The highest slopes are steep — precipitous in many places. Rainfall is probably greater there than in the lowlands, and the mountains are frequently enveloped in clouds. The resulting formations are

similar to those called "Palm Brake" and "Elfin Woodland" by Beard (1944: 146). On the windswept uppermost slopes, the dominant tree is a species (Clusia sp.?) about 20 feet tall with slightly stilted roots. Practically every twig, limb, and tree trunk is covered with a mass of mosses and ferns. The spaces between the stilt roots are filled with moss, humus, and other vegetative material, to the extent that they are concealed. Surface rocks are covered with sphagnum moss, ferns, selaginellas, lycopodiums, and lichens. This habitat has a vertical distribution of a few hundred feet near the summit of Victoria Peak. On one of the lower peaks to the east, the habitat is present as low as 2600 feet.

Below this moss covered area, palms become more abundant and the slopes less steep. A vertical range of perhaps 300 feet is dominated by palms. Fallen palm leaves litter the ground. Unfortunately, the plant specimens that I collected in the Cockscombs were lost and no plants were identified.

I have used the term "semi-open" in the manner first applied by Darlington (1931) and later extensively employed by Slud (1961). Semi-open should imply cleared areas with scattered trees (such as pastures, and fields) and clearings containing small patches of woodland.

PLAN OF THE SPECIES ACCOUNTS

The sequence of families, genera, and species follows Eisenmann's The Species of Middle American Birds. His arrangement was derived primarily from Hellmayr's volumes of the Catalogue of Birds of the Americas, Peter's Check-list of Birds of the World, and Friedmann's volumes of Birds of North and Middle America. Eisenmann's (1955) work includes all species found in British Honduras except Oporornis agilis. No other list is nearly so complete.

Each species account is introduced by the scientific name of the species. The names of birds of doubtful occurrence in British Honduras are placed within brackets. The common name, which follows the scientific name in the heading of each species account, is the English name that I prefer to use. In keeping with the current trend to standardize vernacular names, I have not created any new names. If the species is included in the 5th edition of the Check-list of North American Birds (1957), I have used the name that appears there. Otherwise, I have drawn heavily upon the common names recommended by Eisenmann in his Species of Middle American Birds. In a few instances I have selected

names that I feel are more satisfactory than those used by Eisenmann. But in all cases, I have employed names that have been previously used in various publications. In instances where the local English names are unique, I have included them in the text in quotation marks. Since the majority of the inhabitants of British Honduras are English speaking people, I have not provided special Spanish or Indian names.

At the beginning of each species account (under the heading SPECIMEN or SPECIMENS) I have summarized information regarding specimens collected in British Honduras. In most cases this section consists of three parts. The first part includes specimens in the LSUMZ (Louisiana State University Museum of Zoology). A summary of specimens in OTHER MUSEUMS follows.

CRITICAL PUBLISHED REFERENCES to specimens constitute the final part. The year in which specimens were collected is given when fewer than five specimens have been taken in British Honduras. Within all three parts specimens are listed by localities arranged in order from north to south.

All specimens from British Honduras in the LSUMZ (except Mycteria americana and Anous tenuirostris) were obtained by personnel of the museum since the beginning of my study. Data for each specimen include locality, sex, weight in grams, and day and month of collection. In cases where several specimens of the species were collected on

the same day, the sex and weights respectively are provided. Personnel of the LSUMZ weighed specimens upon return from the field each day, using an Ohaus Triple-beam Balance with a sensitivity of 0.1 gram. Weights would be more useful if supplemented by some indication of the size of the specimen (such as a wing measurement) and an evaluation of the extent of fat deposition in the bird. However, I feel the weights may be useful even without the additional data. All interrogation points in the specimen section indicate unsexed specimens.

Specimens in museums other than the LSUMZ are listed collectively and follow the abbreviations of their repositories. Although I have personally examined the majority of the specimens listed, I am grateful to W. E. Clyde Todd for permission to include his notes on specimens in the British Museum, Coe College, Pomona College, and Willamette University. I am indebted to the late J. Van Tyne for information regarding 20 specimens from British Honduras in the Chicago Natural History Museum. The months of collection are stated whenever given on the specimen labels. Abbreviations employed for the various collections are as follows: BM - British Museum (Natural History); CC - Coe College; CM - Carnegie Museum; CNHM - Chicago Natural History Museum; LSUMZ - Louisiana State University Museum of Zoology; MCZ - Museum of Comparative Zoölogy;

PANS - Philadelphia Academy Natural Sciences; PC - Pomona College; UMMZ - University of Michigan Museum of Zoology; USNM - United States National Museum; WU - Willamette University.

CRITICAL PUBLISHED RECORDS include references to specimens taken at localities not represented in either of the first two headings.

The first paragraph of each species account includes a summary statement of the distribution and seasonal occurrence of the species within British Honduras. A brief description of the major habitat preferences is provided. Data concerning the reproductive season were obtained from examination of the gonads of the birds collected and from observation of nests. Remarks on other phases of natural history are included when they represent observations supplementary or contradictory to general information published by other authors. In the case of polytypic species, specimens are referred to subspecies in the final part of each species account. If the nature of the geographic variation requires discussion, this information is also included at the end of the account. Citations of all the original descriptions of each subspecies are included in Appendix A and are identified by the superscript number following the first appearance of the trinomial in the text. The majority of the primary citations were compared with the original source. I have not included primary citations of

monotypic species. Unless otherwise stated, wing measurements are of the chord, and bill measurements are of the exposed culmen. The standard deviation is preceded by a plus and minus sign following the mean in each group of measurements. Capitalized names of colors are used only in a few cases in which specimens have been compared with a well preserved copy of the color key of Ridgway (1912). Terms expressing true relative abundance are especially difficult to standardize when used to describe birds of the tropics. A shy, inconspicuous species residing in the canopy of tall forest may be actually abundant but rarely noted by the ornithologist. My evaluation of the numerical occurrence of a species is an estimate of its abundance in its preferred general habitat. I would consider a species seen every day in the field to be common, or if many individuals were normally noted every day, then abundant. Species called moderately common are ones noted nearly every day, sometimes in numbers, whereas uncommon species are those recorded only at intervals of one or more weeks. When a species has been recorded only a few times, all records are cited.

Unpublished notes made by Peck, Holt, Van Tyne, Agostini, Lancaster, Willis, Verner, Lay, and van Tets have been available to me in this study. The absence of a bibliographic reference, when the observations of these ornithologists are cited in a species account,

indicates that the information was obtained from the unpublished data.

ACCOUNTS OF THE SPECIES

Family TINAMIDAE

Tinamus major (Gmelin)

Great Tinamou

SPECIMENS. LSUMZ: Gallon Jug - ♂, ♀ (1171, 1175 g.), Jan. 28; ♂ (1148), Mar. 3; ♂ (824.0), Mar. 18; ♂ (874.1), Mar. 20; ♀ (1337), May 2; ♀ (917.0), May 3; ♂ (937.2), May 10; ♂ (1025), May 24; ♀ (1113), May 26. Twenty-two mi. SW Stann Creek on South Stann Creek - ♀, Apr. 24. OTHER MUSEUMS (CC, CM, MCZ, PC): Fifteen specimens from the Manatee Lagoon area, E slope Cockscomb Mts. (600-750'), Toledo Settlement. CRITICAL PUBLISHED RECORDS: Belize, Cayo District (Hellmayr and Conover, 1942: 12).

The Great Tinamou is a common resident of the floor of tall rain forests, and I recorded it wherever I found suitable habitat in the Colony. In many areas, especially where the forest is undisturbed, the species is the most numerous tinamou. The Cockscomb Basin is such an area, and there in April and May I frequently noted 12 or more individuals daily, although I did not find it above 2500 feet elevation. The gonads of most specimens collected in the period from late January through May were enlarged, but the peak of reproductive activity occurs in April and May. Of the ten specimens for which weights are listed, the three heaviest males and three heaviest females were in breeding condition. British Hondurans have named this tinamou "blue-footed partridge."

Specimens from the base of the Yucatán Peninsula are generally paler, grayer, and less olive than birds from other localities in southern Mexico and Guatemala. Van Tyne (1935: 8-9) named the peninsular birds T. m. percautus^{1/}. His type series consisted of eight specimens from Uaxactun, Petén, Guatemala. I refer specimens from British Honduras to T. m. percautus, but the specimens from the Colony are not typical of the race and, they differ from the type series in an interesting manner. I have examined 19 specimens from British Honduras, ten of them from Gallon Jug, a locality situated only 40 miles east of Uaxactun. Some specimens from Gallon Jug are rather gray and are practically identical to the type of T. m. percautus. Other Gallon Jug birds are comparatively olive-brown and are unlike any specimens in the Uaxactun series. Between the extreme brown and gray birds are various intermediates. Most striking are birds exhibiting patches of gray on the breast, sides of breast, wing coverts, or back. In some cases the gray is bilaterally distributed; in other specimens only asymmetrical patches of gray occur. Individual feathers may be partially gray, the remainder of the feather olive-brown. The Uaxactun series is a homogeneous group and does not include any specimens having gray splotches.

A critical examination of the molts and plumages of specimens referable to T. m. percautus indicates the characteristic paleness and grayness of that race is not

acquired until the bird is a year or more old. A half-grown specimen taken at Manatee Lagoon on July 12, 1905, is in what I presume is the juvenal plumage. It is decidedly dark brown above, has a dark gray pileum, and has much light buffy spotting on the edges of the grayish secondaries and their coverts. The primaries are uniformly dark slate. A specimen collected in December was in the process of replacing most, if not all, of the juvenal plumage. The new primaries are not different in appearance from the juvenal primaries. The new secondaries have deep rich chestnut outer webs with some rather inconspicuous light buffy marks toward the outer edges. Ragged black marks cross the chestnut vanes. The coverts and rectrices are also new, the latter chestnut. The greater coverts are slightly chestnut and the median and minor coverts are more olive. The upper parts are dominantly brown. Many feathers of the pileum are tipped faintly with rufous. Neither of the two individuals described here have the grayness characteristic of T. m. percautus. Grayness is acquired in subsequent molts, but I have been unable to determine which molts are involved. Since the sequence of molt has not been followed further, the possibility exists that color phases are involved. This hypothesis is supported by the observation that some breeding birds are gray like T. m. percautus, while other breeding individuals are predominantly brown or olive-brown. However, I have a suspicion that the brown breeding birds are "young adults" that will eventually become gray.

Crypturellus soui (Hermann)

Little Tinamou

SPECIMENS. LSUMZ: Gallon Jug - ♂, Feb. 26; ♀ (268.0 g.), Mar. 1; ♂, ♀ (165.4, 235.2), Mar. 5; ♀ (239.5), Mar. 7; ♀ (225.5), Mar. 18; ♂, ♀ (178.7, 212.8), Mar. 21; ♀ (227.4), Apr. 9; ♂ (204.0), Apr. 10; ? (212.0), May 15. Ballerina Camp - ♂ (244.2), Apr. 23. Two mi. W San Pedro Columbia - ♂ (194.4), May 4; ♀ (238.5), May 7; ♂ (199.8), May 19. OTHER MUSEUMS (CM, MCZ): Five specimens from the Manatee Lagoon area; Mar., Apr., Aug., Oct.

This small tinamou, locally known as "bawley," is a moderately common resident in British Honduras. Moderately tall and tall second growth is its preferred habitat, but the Little Tinamou also frequents the forest edge and brushy areas within the forest. I found the species in the forested ravines in the Mountain Pine Ridge but not in the Cockscomb Mountains. Three-fourths of the specimens collected from late February to mid-May were in breeding condition.

British Honduran specimens of the Little Tinamou are referable to C. s. meserythrus.^{2/}

Crypturellus boucardi (Sclater)

Boucard's Tinamou

SPECIMENS. LSUMZ: Hill Bank - ♀ (430.1 g.), Gallon Jug - ♀ (413.3), Jan. 30; ♂ (414.5), Feb. 7; ♂ (435.0), Feb. 8; ♂ (406.5), Mar. 7; ♀ (433.2), Mar. 9; 2 ♂'s (409.3, 423.8), Mar. 22; 2 ♂'s (415.0, 432.2), Mar. 23; ♂ (429.9), Mar. 29; ♂ (392.0), Apr. 6; ♀ (508.4), Apr. 10; 2 ♂'s, ♀ (429.3, 436.5, 510.0), Apr. 11; 3 ♂'s, 2 ♀'s (414.0, 426.0, 434.0, 374.0, 452.0), May 2; ? chick, ♂ (26.0, 435.0), May 4; ♀ (460.7), May 5; ♂ (400.0), May 6; ♂ (429.0), May 7; 2 ♂'s (374.9, 390.4), May 9; ♀ (438.9), May 10; ♂, ♀ (425.0, 417.4), May 15; ♂, 3 ♀'s (---, 460.2, 508.4, 526.0), May 20; ♂, 3 ♀'s, imm. ♀ (463.6, 466.2, 491.8, 497.4, 155.4),

May 21; ♂ (386.7), May 23. Ballerina Camp - ♀ (525.7), Apr. 23; ♀ (503.4), Apr. 28. Two mi. NE Millionario - ♀ (398.1), Mar. 13. Two mi. W San Pedro Columbia - ♀ (394.9), May 9. OTHER MUSEUMS (CM, MCZ, UMMZ): Three specimens from 12 mi. S Cayo, Camp VI, E slope Cockscomb Mts. (600'); Feb., Mar.

Boucard's Tinamou is a moderately common resident of tall second growth and rain forest in most parts of mainland British Honduras. The "red-footed partridge," as it is called by the people of the Colony, is difficult to observe, and the fine series in the LSUMZ is to the credit of Lancaster, who collected most of the specimens. He spent several seasons at Gallon Jug engaged in a study of the life history of this tinamou (Lancaster, 1960). Breeding specimens were collected from early February to late May. Each of the three adult females taken on May 21 contained eggs with shells.

I refer the specimens from British Honduras to C. b. boucardi.^{3/}

Crypturellus cinnamomeus (Lesson)

Rufescent Tinamou

SPECIMENS. LSUMZ: Hill Bank - ♂ (434.4 g.), Apr. 2, 1955. Gallon Jug - ♂ (448.3), Feb. 27, 1958.

The Rufescent Tinamou is a moderately common resident at Hill Bank, where it frequents the dense second growth surrounding the village. It is rare at Gallon Jug but has been recorded there several times in woodlands also occupied by Boucard's Tinamou. The Rufescent

Tinamou has not been recorded at any other localities in British Honduras. The testes of the male collected February 27 at Gallon Jug were fully enlarged.

The two specimens are dissimilar and are also unlike all specimens in an extensive series from Mexico, Guatemala, and Honduras. I am unable to refer them to any of the races occurring in northern Central America. Individual variation is exceptionally pronounced in the species, especially in the males, and the two birds under consideration must approach the extremes in the population.

Van Tyne (1935: 10) collected two Rufescent Tinamou at Uaxactun, Petén, and referred them to C. c. goldmani^{4/}. I have examined his two specimens and agree with his identification. Paynter (1955: 18) assigns specimens from southern Quintana Roo to this race also. On a geographical basis, the British Honduran birds would be expected to resemble C. c. goldmani of the Yucatán Peninsula. In comparison with four topotypical specimens of this race from Chichén Itzá, Yucatán, the Hill Bank bird is much deeper red-brown above, its pileum is darker, and its nape is redder. Its under parts are also more red-brown, especially on the upper breast. The upper parts of the Gallon Jug individual are unbarred and uniformly dark brown from the nape to the upper tail coverts. Its tail and wings are barred in the same manner as females of C. boucardi, quite

unlike C. cinnamomeus. The upper breast of the Gallon Jug bird is dark slate, but the lower breast is reddish as in the Chichén Itzá specimens. The sides of the neck are darker than in any C. cinnamomeus examined. Additional specimens from the Colony are required for adequate study of the geographic variation involved.

Family PODICIPEDIDAE

Podiceps dominicus (Linnaeus)

Least Grebe

SPECIMENS. LSUMZ: Ballerina Camp - ♀ (104.4 g.), Apr. 24, 1955; ♂, Apr. 26, 1956. OTHER MUSEUM (BM): Upper Makal [= Eastern Branch Belize River], undated.

The Least Grebe is local and uncommon in British Honduras, where it is called "diving dabbler." Presumably pairs nested on two small ponds near Gallon Jug where they were seen in several years from February to late July. I saw them occasionally at Hill Bank in spring and daily at Ballerina Camp in late April. Peck saw the species only once, near Ycacos Lagoon on March 6. There are no additional records from the Colony. There are no records from August to January, inclusive, but the species is normally resident in its range.

I refer the two specimens from Ballerina Camp to P. d. brachypterus.^{5/}

Podilymbus podiceps (Linnaeus)

Pied-billed Grebe

SPECIMENS. LSUMZ: Hill Bank - ♂, Mar. 22, 1955.
 OTHER MUSEUM (MCZ): Ycacos Lagoon - ♀, Mar. 6,
 1907.

The species is a moderately common winter visitant and possibly a rare breeding bird in British Honduras. From October to mid-March Pied-billed Grebes can be seen in small numbers (1-6) on ponds, lagoons, and streams. On May 15, 1907, Peck saw one bird near Ycacos Lagoon; and on May 26, 1956, I saw a pair on the New River. The lateness of the last two dates is the only indication this grebe may breed in the Colony.

The wing of the specimen from Hill Bank measures 135 mm. This measurement is well within the range of P. p. podiceps^{6/}. I have not identified the specimen collected at Ycacos Lagoon to subspecies.

Family PELECANIDAE

Pelecanus erythrorhynchus Gmelin

White Pelican

Peck's notes include a record of two White Pelicans that he observed on the beach near the mouth of the Manatee River on April 1, 1901. The species is rare so far south, but I have no reason to question Peck's identification.

Pelecanus occidentalis Linnaeus

Brown Pelican

SPECIMENS. LSUMZ: Hill Bank - ♀ (2077 g.), Feb. 21. Calabash Cay - ♀ (2130), Apr. 11. OTHER MUSEUM (CC): Six specimens from the Manatee Lagoon area; June, Dec. CRITICAL PUBLISHED RECORD: Glover's Reef (Ogilvie-Grant, 1898: 478).

Small numbers of Brown Pelicans are resident along the coast and among the islands of British Honduras. Daily counts exceeding 20 individuals are unusual except in the Belize harbor or in the vicinity of a nesting colony. The species rarely occurs inland, although I have recorded it twice at Hill Bank (February 21, November 29). About 15 pelican nests were present in the mangroves on Man-of-war Cay at the time of my visit on April 12, 1956. Some nests contained eggs and others held young birds. It is probable that the Brown Pelican nests on other keys in British Honduras.

The specimen collected on Calabash Cay on April 11, 1956, contained ova as large as 18 mm. The wing of this bird measures 465, the tail 127, and the culmen 252 mm., and on the basis of these measurements I refer it to the small West Indian race, P. o. occidentalis.^{7/} Pelicans definitely known to be incubating have not been collected in British Honduras, but it appears highly probable that this female would have nested in the area where it was collected, possibly on Man-of-war Cay,

which is only five miles from Calabash Cay. P. o. occidentalis has not previously been recorded as breeding in Central America. The Check-list of North American Birds (1957: 30) includes the coasts of the Gulf of Mexico, Cuba, and Panamá, as a part of the breeding range of P. o. carolinensis.⁸ The bird shot at Hill Bank is large and I assign it to P. o. carolinensis.

Family SULIDAE

Sula dactylatra Lesson

Blue-faced Booby

I saw two Blue-faced Boobies several miles east of Belize on February 15, 1955. This observation constitutes the only record of the species in British Honduras. Red-footed Boobies are not uncommon in the coastal waters of the Colony, and it is probable that Blue-faced Boobies are often overlooked.

Sula sula Linnaeus

Red-footed Booby

SPECIMENS. LSUMZ: Half Moon Cay - 2 ♂'s (696.0, 735.0 g.), Apr. 25; downy young ♂ (540.0), Feb. 24. OTHER MUSEUMS (CM, UMMZ): About twenty-five specimens (most mounted) from Half Moon Cay; Jan., Mar.

A colony of Red-footed Boobies has been established on Half Moon Cay for over a hundred years, and individuals

of this species are often seen among the keys and occasionally along the coast of British Honduras. The number of birds in the colony has undoubtedly varied considerably. Salvin (1864: 379) thought there were "several thousands" in May 1862. A study of this booby on Half Moon Cay in 1958 (Verner, 1959) revealed 1389 nests and an estimated 3500 individuals exclusive of nestlings. The hurricane in September 1931 reportedly killed many boobies and it may be assumed the powerful hurricane of late October 1961 also reduced the size of the colony. Nesting activity on Half Moon Cay begins in November and continues for nearly eleven months. In late December 1960, van Tets found most birds were courting, but about 20 per cent of the birds were incubating. January is probably the month in which most pairs lay (fide van Tets, Verner). Flight and nesting behavior of the Red-footed Booby has been described by Verner (1959, 1961).

I assign the specimens from Half Moon Cay to S. s. sula.^{9/}

Sula leucogaster Linnaeus

Brown Booby

SPECIMENS. CC, MCZ, UMMZ: Belize - ?, Dec., 1928. Manatee Bar - ?, Jan., 1907. Mouth of Rio Grande - ♂, Mar. 5, 1907.

A few Brown Boobies are present among the keys and off the coast of British Honduras throughout the

year, but the species is not known to breed in the Colony. Salvin (1864: 385) published a secondhand report that the species bred on Mauger Cay, but no boobies were nesting there at the time of my visit in April 1956. Brown Boobies sometimes roost at the edge of the Red-footed Booby colony on Half Moon Cay (maximum 15, Verner notes).

I refer the specimens from British Honduras to S. l. leucogaster.^{10/}

Family PHALACROCOPACIDAE

Phalacrocorax auritus (Lesson)

Double-crested Cormorant

SPECIMENS. CRITICAL PUBLISHED RECORD: Man-of-war Cay (Salvin, 1864: 374):

Salvin (1864: 374) collected specimens and eggs of the Double-crested Cormorant on May 8, 1862, on Man-of-war Cay. The species has not been recorded again in British Honduras. Olivaceous Cormorants are not uncommon on fresh water of the mainland, and it is possible that some cormorants not identified to species may have been Double-crested Cormorants. However, I know of no cormorants recorded off the coast of British Honduras except those described and collected by Salvin. I visited Man-of-war Cay in mid-April 1956, and the only nesting birds were Brown Pelicans and

Magnificent Frigatebirds. The pelicans were not present on this tiny key at the time of Salvin's visit, but cormorants and Snowy Egrets shared the mangroves with Magnificent Frigatebirds.

At least two British Honduran specimens are in the British Museum. I have not critically examined these specimens but it is probable they are referable to P. a. floridanus,^{11/} the race breeding in the southeastern United States, the Bahamas, and Cuba.

Phalacrocorax olivaceus (Humboldt)

Olivaceous Cormorant

SPECIMENS. LSUMZ: Hill Bank Lagoon - ♂ (1179 g.), Feb. 25, 1956; ♂, March 24, 1955; 2 ♀'s (987.5, 1031), Nov. 24, 1956.

Olivaceous Cormorants are common throughout the year on the New River and on Hill Bank Lagoon. I also noted several individuals daily at Ballerina Camp in late April and twice on the Columbia River near San Pedro Columbia in late May. Holt saw one bird on the Belize River in March 1926, and Peck saw about six on a small pond near Ycaeos Lagoon on March 6, 1907. The species has not been recorded elsewhere in British Honduras. The male collected in November and the two females taken in February were in breeding condition. Olivaceous Cormorants undoubtedly breed in the vicinity of the New River and probably also in other fresh water areas of the Colony.

I refer the specimens from British Honduras to
P. o. mexicanus.^{12/}

Family ANHINGIDAE

Anhinga anhinga (Linnaeus)

Anhinga

SPECIMEN. PC: Near Manatee Lagoon - ♀, Mar. 28,
1906.

The Anhinga is a rarely recorded resident of freshwater ponds and streams. One or two, and once six, individuals have been recorded on 12 dates on the New River, Manatee Lagoon, Stann Creek, Monkey River, Ycacos Lagoon, and Deep River (Peck, Russell, Willis). On May 15, 1907, Peck found a nest holding two or three downy young in a tree overhanging a pond near Ycacos Lagoon.

Anhingas from the southeastern United States, Mexico, Central America, and Colombia are referred to
A. a. leucogaster.^{13/} by most authorities.

Family FREGATIDAE

Fregata magnificens Mathews

Magnificent Frigatebird

SPECIMENS. LSUMZ: Calabash Cay - ♀ (1419 g.), Apr. 8; ♂ (1061), Apr. 9. OTHER MUSEUMS (CC, CM): Ten specimens from the Manatee Lagoon area; June, Dec. CRITICAL PUBLISHED RECORDS: Belize "coast," Man-of-war Cay (Salvin, 1864: 372, 374).

Several "man-o'-war birds" can be seen daily at almost any coastal or insular locality in British Honduras. Nesting colonies have been in existence on Half Moon and Man-of-war Cays at least since Salvin's visit to them in 1862. On Half Moon Cay in late December 1960, van Tets noted about 20 pairs courting and nest building. Verner saw an average of 25 individuals daily during his three months on the island in the spring of 1958. On April 12, 1956, I found 60 occupied nests on Man-of-war Cay.

I refer the British Honduran specimens to F. m.
rothschildi.^{14/}

Family ARDEIDAE

Ardea herodias Linnaeus

Great Blue Heron

I have seen Great Blue Herons in small numbers from November to late May at many insular localities and on

ponds and lagoons on the mainland. No evidence suggests that the species breeds in British Honduras, and it is unrecorded from June to November.

Great Blue Herons collected in the Colony have not been preserved as specimens. Four individuals banded as young birds in Illinois, Wisconsin, and Michigan have been recovered in British Honduras (Cooke, 1938b: 184; 1946: 254). The birds were banded in the range of A. h. herodias^{15/}.

Butorides virescens (Linnaeus)

Green Heron

SPECIMENS. LSUMZ: Hill Bank - ♂ (196.1 g.), Feb. 26; ♀ (171.3), Nov. 22; ♀, Nov. 24; ♂ (194.8), Nov. 28; ♂ (184.6), Nov. 29. OTHER MUSEUMS (CM, UMMZ): Seven specimens from Belize, Manatee Lagoon, Cayo; Feb., Mar., Aug., Oct., Dec.

June and July are the only months in which this species, the "poor Joe" to local residents, has not been recorded in British Honduras. Observations of Green Herons in late May and early August indicate that some individuals are probably resident. The species is not uncommon near rivers and lagoons and on the keys. I have counted as many as 40 in a few hours near Hill Bank in late March, but six was the maximum in the same area in late November.

The wing of the female collected November 22 at Hill Bank measures 167 mm., and that of another female

taken December 19 at Manatee Lagoon measures 166 mm.; consequently, I refer these specimens to the small race, B. v. maculatus^{16/}. All other specimens from the Colony^{17/} are larger and within the size range of B. v. virescens. There are no definite breeding records of the species from British Honduras; although I presume that it does nest there. Without specimens of birds known to breed in British Honduras, it is not possible to determine which race is the breeding form. Two specimens collected by Paynter (1955: 31) in May at Laguna Chacanbacab, Quintana Roo, were in full breeding condition and were typical of the nominate race. Van Tyne (1935: 15) listed a specimen of B. v. maculatus that was collected at Pacomón, Petén, Guatemala, in June.

Florida caerulea (Linnaeus)

Little Blue Heron

SPECIMENS. LSUMZ: Gallon Jug - ♀ (308.2 g.), Mar. 5. Hunting Cay - ♀ (210.7), Apr. 27. OTHER MUSEUMS (CC, CM, PC, UMMZ, USNM): Ten specimens from Belize, Manatee Lagoon area; Mar., Sept., Nov., Dec.

Little Blue Herons are common transients and winter visitants at many insular and mainland localities in British Honduras and have been recorded throughout the year, with the exception of a few weeks in early summer (May 15-July 19). Most northbound migrants pass through the Colony between March 20 and April 15. Birds banded

in South Carolina and Mississippi have been recovered in British Honduras (Cooke, 1938a: 83). I do not believe the species nests in the Colony.

I am unable to detect any difference between specimens from British Honduras and those from the United States, and, consequently, I refer specimens from the Colony to F. c. caerulea.^{18/} The race F. c. caerulea.^{19/} caerulescens, which is supposed to breed from Mexico or Central America to South America according to some authors, may not be valid. In that case, the species is monotypic.

Dichromanassa rufescens (Gmelin)

Reddish Egret

On August 7, 1957, Willis saw a Reddish Egret in the vicinity of mud flats and mangroves near the mouth of the Belize River. Although the species is not uncommon at many coastal and insular localities in Quintana Roo, there are no other records from British Honduras.

Casmerodias albus (Linnaeus)

Common Egret

SPECIMENS. LSUMZ: Hill Bank - ♀ (810.1 g.), Nov. 23. OTHER MUSEUMS (CM, PC, UMMZ): Four specimens from Belize, Manatee Lagoon area; Mar., Sept., Nov.

The species is moderately common near rivers, lagoons, ponds, and the coast and is less numerous at

insular localities. Common Egrets have not been recorded in the Colony in June or July, and they have not been found breeding there. Salvin (1864: 387) attributed old nests found near Grassy Cay about May 20, 1862, to this species, but the record does not appear positive enough to provide definite evidence of breeding. Individuals from the United States migrate to or through British Honduras, as two birds banded in Mississippi were shot in the Colony (Lincoln, 1936: 141; Cooke, 1938b: 184).

C. a. egretta^{20/} is the race occurring in the Western Hemisphere.

Leucophoyx thula (Molina)

Snowy Egret

SPECIMENS. UMMZ, USNM: Five specimens from Belize, Sibun River; Apr.

Snowy Egrets are moderately common in the Colony during most of the year, but like many other species of herons they have not been recorded in June and July. The species inhabits river, pond, and lagoon borders, mangrove swamps, and, to a lesser extent, beaches. Salvin (1864: 374) records this egret nesting on Man-of-war Cay on May 8, 1862, but I did not find it there in 1956, and there are no additional breeding records. According to Peck's notes, all egrets were rare in British Honduras early in this century, presumably as a result of excessive killing by plume hunters.

I refer specimens of the Snowy Egret from the Colony to L. t. thula.^{21/}

Bubulcus ibis (Linnaeus)

Cattle Egret

SPECIMENS. LSUMZ: Gallon Jug - ♀ (226.6 g.), Oct. 25, 1956. Stann Creek - ♂ (351.0 g.), Mar. 24, 1956.

I saw a maximum of four Cattle Egrets in a pasture at Stann Creek during the last week of March 1956, and one individual at Gallon Jug on October 25 of the same year. Lancaster's observation of one in a pasture at Gallon Jug on May 1, 1958, is the only other record of the species in the Colony. This egret is spreading rapidly through the New World and will undoubtedly become established as a breeding species in British Honduras.

I assign the two specimens to B. i. ibis.^{22/}

Hydranassa tricolor (Müller)

Louisiana Heron

SPECIMENS. CC: Morgan Cay - ♂, Apr. 20, 1907. Manatee Lagoon - ?, Nov. 30, 1906. CRITICAL PUBLISHED RECORD: Turneffe (Sharpe, 1898: 130).

The species is uncommon in the Colony but has been observed in all months except January, June, July, and September. A young bird banded in July in North Carolina was recovered four months later near Belize (Cooke,

1938a: 82); consequently many of the Louisiana Herons recorded in British Honduras could be transients or winter visitants. No breeding record from the Colony is known to me. This heron occurs in suitable wet places on both the islands and mainland.

The British Honduran specimens are referable to H. t. ruficollis.^{23/}

Agamia agami (Gmelin)

Agami Heron

SPECIMENS. LSUMZ: Gallon Jug - ♂ (759.3 g.), Mar. 28, 1955. OTHER MUSEUMS (CM, MCZ, PC): near Manatee Lagoon - ♀, Dec. 2, 1905; ♂, ♀, Dec. 11, 1905. Toledo Settlement - ♀, Jan. 23, 1907.

The specimen collected at Gallon Jug was found by a local hunter on a small stream in the forest. The species was not recorded in British Honduras by any field parties of the LSUMZ, and I consider it now a local or rare resident. Peck, who was in British Honduras from 1900 to 1907, found the Agami Heron in "considerable numbers," and in "great abundance" near the Manatee and Ycacos Lagoons and Toledo Settlement. Peck's notes also indicate this heron frequents streams and ponds in heavy forest, and usually it is solitary or occurs in twos. Peck found many Agami Herons about a small pond in the vicinity of Ycacos Lagoon on May 15, 1907. On the basis of the birds' behavior, Peck assumed "that the nesting season was at hand." But he found no nests.

Nycticorax nycticorax (Linnaeus)

Black-crowned Night Heron

SPECIMEN. LSUMZ: Hill Bank - ♂ (827.2 g.), Nov. 21, 1956.

Peck collected a Black-crowned Night Heron at Toledo Settlement in April 1907, but did not preserve the specimen. A bird shot at Belize in October 1943 had been banded as a young bird four months previously in Illinois (Cooke, 1950: 12). At Hill Bank I saw two Black-crowned Night Herons on November 21, 1956, and one on November 29, 1956. I believe that this species is both a rare transient and rare winter visitant in the Colony, but there are no additional records to substantiate this assumption.

I refer the specimen to N. n. hoactli.^{24/}

Nyctanassa violacea (Linnaeus)

Yellow-crowned Night Heron

SPECIMENS. LSUMZ: Six mi. NNE Hill Bank - ♂ (552.5 g.), Mar. 31. OTHER MUSEUMS (CC, CM, MCZ): Six specimens from Belize, Manatee Lagoon area; Oct., Nov., Dec.

Yellow-crowned Night Herons are common at many insular and mainland localities as transients and winter visitants, and they also nest locally in small numbers on the mainland near fresh water. Verner saw one to five individuals on 14 dates from March 2 to April 16 on Half Moon Cay in 1958 but no night herons

before or after these dates. The birds recorded by Verner were probably migrants. Peck found young birds just leaving the nest near Ycacos Lagoon on May 22, 1907.

The specimens collected in British Honduras are referable to N. v. violacea.^{25/}

Heterocnus mexicanus (Swainson)

Bare-throated Tiger Heron

SPECIMENS. LSUMZ: Cockscomb Br. of South Stann Creek - ♂, May 4. OTHER MUSEUMS (BM, MCZ): Four specimens from Makal [= Eastern Branch Belize River], Ycacos Lagoon, Deep River; Mar., May. CRITICAL PUBLISHED RECORD: Belize (Sharpe, 1898: 200).

The species is an uncommon and secretive resident along smaller watercourses in forested areas of the mainland. Peck found it in mangroves and the pine ridges near the coast, as well as in the forest. There are sight records of the Bare-throated Tiger Heron from Hill Bank, the Rio Grande, Toledo Settlement, and the Temash River. The gonads of the male that I collected on May 4 were slightly enlarged.

I refer the specimens to H. m. mexicanus.^{26/}

Ixobrychus exilis (Gmelin)

Least Bittern

SPECIMEN. LSUMZ: Half Moon Cay - ♂ (55.4 g.), Apr. 17, 1958.

I flushed a Least Bittern from the marsh at Hill Bank on November 22, 1956. This observation and the specimen collected by Verner on Half Moon Cay constitute the only known occurrence of the species in the Colony. The specimen undoubtedly represents a transient, and the bird that I saw at Hill Bank was probably a winter visitant, although this bittern does breed locally in Central America.

I refer the specimen to I. e. exilis.^{27/}

Botaurus lentiginosus (Rackett)

American Bittern

On March 22, 1955, and November 23, 1956, I noted single American Bitterns in the marsh near Hill Bank. I checked the identification of these bitterns carefully, as Paynter (1955: 40) had found Botaurus pinna-
tus in a marsh in southern Quintana Roo, less than 60 miles from Hill Bank.

Family COCHLEARIIDAE

Cochlearius cochlearius (Linnaeus)

Boat-billed Heron

SPECIMENS. LSUMZ: Six mi. NNE Hill Bank - ♂, Mar. 24.
OTHER MUSEUMS (CM, PC, UMMZ): Six specimens from the
Manatee Lagoon area, Cayo; Mar., Nov. CRITICAL PUBLISHED
RECORD: Grassy Cay (Salvin, 1864: 387).

In regions undisturbed by man on the mainland and keys, Boat-billed Herons are moderately common local residents of wooded areas in the vicinity of water. Additional points of record are the Sibun River, Ycacos Lagoon, and Soldier Cay. The "cooper," as the species is best known to the residents of the Colony, is shy and nocturnal, and is responsible for many of the wierd sounds that may be heard in swamps at night. Peck noted nests on April 29 near Ycacos Lagoon; some nests contained eggs and others large young. A female collected by Murie near Cayo on March 17, 1931, weighed 577.5 grams.

I refer Boat-billed Herons from British Honduras to C. c. zeledoni.^{28/}

Family CICONIIDAE

Mycteria americana Linnaeus

Wood Ibis

SPECIMEN. LSUMZ: near Manatee Lagoon - imm., June 1905.

I have seen small flocks (10 - 32 birds) of Wood Ibis on two dates (February 16, 1955; May 26, 1956) soaring over the New River, and on March 14, 1958, Lancaster noted three individuals perched in a treetop in his study area in the rain forest at Gallon Jug

immediately before a storm. Peck saw Wood Ibis occasionally near Manatee Lagoon and Toledo Settlement in 1906 and 1907, but he did not record dates.

Jabiru mycteria (Lichtenstein)

Jabiru

SPECIMENS. LSUMZ: Hill Bank - ♂ (6400 g.), Feb. 27, 1956. OTHER MUSEUM (UMMZ): Sibun River near Belize - ♂, Feb. 5, 1931.

The Jabiru is an uncommon resident in the Colony. Single birds, or more rarely pairs, regularly feed near marshes and ponds in the pinelands from Manatee Lagoon to Hill Bank. Both "turk" and "fillymingo" are used by local people as names for the species. Individuals are conspicuous because of their great size, white appearance, and tendency to forage in open situations, but they are shy and are easily alarmed. My observations of the species at Hill Bank indicate that it has regular roosting and feeding areas several miles apart. A nest found by Peck on May 23, 1906, was situated in a pine tree 50 feet above the ground in a remote section of the pine ridge. Coarse marsh grasses, palmetto leaves, and large sticks were incorporated into the platform-type nest measuring 6 by 8 feet. Peck noted that the nest material had been recently collected and surmised that the nest was in use for the first time. The three-foot thickness of the nest prevented him from seeing its contents.

Dennett and I collected the specimen at Hill Bank early in the morning as it flew toward its feeding area. The bird was initially injured and attempted to protect itself by biting motions with its sharp, serrated bill. Jabbing movements were not employed. Its crop was empty, but its large gizzard contained some vegetable matter, bivalves, and a coleopteran exoskeleton. The testes were enlarged.

Family THRESKIORNITHIDAE

Eudocimus albus (Linnaeus)

White Ibis

SPECIMENS. CRITICAL PUBLISHED RECORD: Grassy Cay, Turneffe Islands, May 20, 1862 (Sharpe, 1898: 41).

There are no recent records of the White Ibis in British Honduras. Salvin (Salvin and Sclater, 1860: 402) found two birds on Golden Stream Cays in April 1860. In 1862 Salvin (1864: 387) found empty nests, which he attributed to this species, on a key adjacent to Grassy Cay. Peck saw a few individuals near Manatee Lagoon in January 1901 and at Ycacos Lagoon on March 2, 1907.

Ajaia ajaja (Linnaeus)

Roseate Spoonbill

SPECIMEN. UMMZ: Sibun River near Belize - ♀, Apr. 2, 1932.

The specimen listed above and the one individual that Dennett and I saw on the dock at Punta Gorda constitute the only records of the species from British Honduras.

Family ANATIDAE

Dendrocygna autumnalis (Linnaeus)

Black-bellied Tree Duck

SPECIMENS. BM, CC: Spanish Creek - two unsexed specimens, June 4, 1887. Manatee Lagoon - ♀, Mar., 1907.

The species is rare in British Honduras and is known there only from the specimens listed above and two observations made by the H. A. J. Evanses and by A. P. Bellhouse in the ricefields near Boom. Possibly this duck is becoming more numerous in the Colony.

The specimens have not been critically examined.

^{29/}
D. a. fulgens is the race recognized in the Check-list of North American Birds (1957: 69) as occurring from southern Texas to Panamá.

Cairina moschata (Linnaeus)

Muscovy

SPECIMENS. CRITICAL PUBLISHED RECORD: Belize (Salvin and Godman, Biologia, iii, 1902: 198).

The Muscovy is an uncommon resident of lagoons, ponds, and streams in British Honduras. It is most often found in uninhabited or sparsely populated regions. Undoubtedly extensive hunting has driven it from inhabited areas, for it is much desired as game. The species is exceedingly wary and flushes readily. The Muscovy probably breeds in the Colony, but no nests have been found.

Anas carolinensis Gmelin

Green-winged Teal

The inclusion of British Honduras in the winter range of this species in the Check-list of North American Birds (1957: 76) is apparently based on a record published by Goss (1891: 62). Goss reported that he encountered a small flock of Green-winged Teal on March 23, 1887, on the Belize River near Orange Walk. Presumably no specimens were collected.

Anas acuta Linnaeus

Pintail

SPECIMEN. CRITICAL PUBLISHED RECORD: Belize (Salvin and Godman, Biologia, iii, 1902: 214).

The Pintail is a rare winter visitant on lagoons in British Honduras. I saw half a dozen individuals on two dates at Hill Bank in November 1956. A male banded in Oregon in September 1927 was recovered near Belize in December of the same year (Lincoln, 1928: 359).

Anas discors Linnaeus

Blue-winged Teal

SPECIMENS. LSUMZ: Gallon Jug - ♀ (263.0 g.), Oct. 22, 1956. Belize - ♂ (349.8), Apr. 6, 1956.

North American ducks do not winter in British Honduras in great numbers. Flocks of Blue-winged Teal consisting of fewer than two dozen individuals are widely distributed on the ponds and lagoons of the mainland of the Colony from September into April. In comparison with other ducks, this teal is the most common species. August 7 is the date of the earliest record of a visitant from the north and May 19 is the latest date in spring on which they have been observed.

I refer the British Honduran specimens to the nominate race, A. d. discors.^{30/}

Aythya affinis (Eyton)

Lesser Scaup

SPECIMENS. LSUMZ: Hill Bank - ♀ (626.0 g.), Feb. 22, 1956; ♂ (433.7), Feb. 24, 1956. OTHER MUSEUM (CM): Manatee Lagoon - ♂, Dec. 11, 1905.

Lesser Scaup are present in the Colony from November into April in small numbers, usually on lagoons or ponds. On Half Moon Cay in 1958, Verner saw one individual on April 4 and 5, the only record not from the mainland.

[Oxyura jamaicensis (Gmelin)]

Ruddy Duck

Eisenmann (1955a: 19) specifically includes British Honduras within the range of the species. I can find no basis for this inclusion. Mr. Eisenmann (in litt) does not have the source of this record; consequently, the species should not be included on the list of British Honduran birds.

Family CATHARTIDAE

Sarcorampus papa Linnaeus

King Vulture

SPECIMENS. LSUMZ: Nine mi. N Gallon Jug - ?, Mar. 22. OTHER MUSEUMS (CC, MCZ): Four specimens from the Manatee Lagoon area, Toledo Settlement; Feb., Nov.

King Vultures, or "King John Crows" as they are called locally, are distributed over all regions of the mainland of British Honduras, except along the coast. They are generally uncommon and are most often

seen feeding on carrion or soaring over or near rain forest. I have seen individuals soaring high over Victoria Peak, as well as over many lowland localities. The species is more wary than other vultures in the Colony and rarely approaches villages or towns.

Coragyps atratus (Bechstein)

Black Vulture

This vulture is abundant in the vicinity of human settlements on the mainland of British Honduras and often roosts in trees in towns. In spite of its ubiquitousness, it has been shunned by collectors and no specimens have been taken in the Colony. The number of Black Vultures roosting at Gallon Jug declined in March, April, and May, possibly because some birds left the village in order to nest. The species is well known to residents of British Honduras as the "John Crow."

Cathartes burrovianus Cassin

Yellow-headed vulture

SPECIMEN. LSUMZ: One mi. S Belize - ?, Aug. 24, 1960.

Lay saw several individuals of this species in the lowlands near Belize in August 1960. Undoubtedly Yellow-headed Vultures are often incorrectly identified in the field as Turkey Vultures. There are no other records of the species from the Colony.

Cathartes aura (Linnaeus)

Turkey Vulture

SPECIMENS. LSUMZ: Gallon Jug - ♀, Feb. 13, 1957.

The species is common in the Colony but it is more numerous than the Black Vulture only in the Mountain Pine Ridge. Turkey Vultures are widespread residents in the open regions of the mainland but are seldom found in settlements. I have no data indicating the presence of transients in British Honduras. Both the Turkey Vulture and Black Vulture are called "John crow" by British Hondurans, but the Turkey Vulture is sometimes distinguished from other vultures as "doctor John crow."

I am unable to identify the only specimen of this species to race. Resident birds of Central America are referable to C. a. aura.^{31/}

Family ACCIPITRIDAE

Elanus caeruleus (Desfontaines)

White-tailed Kite

SPECIMENS. CM, MCZ: All Pines - ♀, Apr. 24, 1935.
Toledo Settlement - ♂, Nov. 27, 1906.

The species is uncommon in British Honduras. One or two individuals at a time have been noted by many observers in the lowland pinelands and semi-open in

all months except May and June. On the basis of the distribution of these records, I suspect the species is resident in the Colony. The ovary of the bird collected April 24 by Blake and Agostini was much enlarged.

I refer the two specimens to E. c. majusculus.^{32/}

Elanoides forficatus (Linnaeus)

Swallow-tailed Kite

SPECIMENS. LSUMZ: Gallon Jug - ♂, July 2. OTHER MUSEUMS (CM, MCZ): Freetown - ♂, May 14, 1935; ♀, May 23, 1935. Sittee River - ♂, Apr. 27, 1907. CRITICAL PUBLISHED RECORD: Belize (Salvin and Godman, Biologia, iii, 1901: 96).

This kite is an uncommon breeding bird and rare transient in British Honduras and has been recorded only from mid-February to late July. Almost all individuals that I have seen were soaring over tall rain forest. It is virtually impossible to see soaring species from within the forest, and since the Swallow-tailed Kite rarely flies through the canopy, it may be more common than my records indicate. Peck found an unoccupied nest in a tree on the bank of the Rio Grande on May 7, 1907. I have never seen more than six birds at once, but Peck noted a flock of about 200 individuals near Manatee Lagoon on April 16, 1907, which he thought was probably migrating. "Scissor-tailed hawk" is the name applied to this species by the residents of the Colony.

The specimen from Gallon Jug is referable to E. f. yetapa^{33/}, the breeding race ranging from Mexico to Argentina.

Leptodon cayanensis(Latham)

Gray-headed Kite

SPECIMENS. CC, CM, PC, UMMZ: Vicinity of Manatee Lagoon - ♀, Jan. 30, 1906; ♀, Sept. 11, 1905; ♂, Dec. 2, 1906. Cayo - ♀ (475 g.), Mar. 10, 1931. CRITICAL PUBLISHED RECORD: Orange Walk (Salvin and Godman, Biologia, iii, 1901: 101).

The five specimens constitute the only records of this species from British Honduras. No data pertaining to the breeding condition of the birds were recorded by the collectors.

Chondrohierax uncinatus(Temminck)

Hook-billed Kite

SPECIMEN. BM: One specimen, undated and without a specific locality.

Mr. Todd examined the specimen in the British Museum several years ago. Lancaster observed one Hook-billed Kite at Gallon Jug on March 6, 1957, and Willis saw single individuals there on July 12 and 21, 1957. There are no additional records from the Colony.

The specimen has not been critically examined, and consequently cannot be referred to race. It is probably C. u. uncinatus^{34/} or C. u. aquilonis^{35/}.

Ictinia plumbea (Gmelin)

Plumbeous Kite

SPECIMENS. LSUMZ: Gallon Jug - ♂ (282.4 g.), Mar. 1; ♂, ♀ (250.5, 301.5), Mar. 29. Ballerina Camp - ♂ (260.8), Apr. 25. OTHER MUSEUMS (BM, CM, MCZ, PC, UMMZ): Twenty-one specimens from the Manatee Lagoon area, Duck Run, vicinity of Cayo, 12 mi. S Cayo, Augustine, Mountain Cow, Freetown, Toledo Settlement; Feb. - Aug.

The Plumbeous Kite is moderately common in the Colony from late February into August. It prefers the forest border and the semi-open tall forest, but it frequently enters pinelands. Breeding, as indicated by the condition of the gonads of collected specimens or by presence of occupied nests, begins in early March and continues into June. I have not seen this kite in the period of August to February; however, Peck noted that some individuals were present at all seasons at Toledo Settlement. He did not record it at more northerly localities in winter. The data do not indicate whether the breeding birds in the extreme southern portion of the Colony are resident there or whether they migrate and are replaced in winter by birds from the north. Some individuals observed in spring are doubtless transients, and Peck further noted that in autumn he often saw this kite in "immense flocks."

Rostrhamus sociabilis(Vieillot)

Snail Kite

SPECIMENS. LSUMZ: Hill Bank - ♀, Mar. 23, 1955.
Gallon Jug - ♀ (437.5 g.), June 4, 1956.

Marshes along the New River and the Hill Bank Lagoon provide the only areas where this resident species is common. It is present locally in small numbers south from Hill Bank to Stann Creek. Both specimens are in juvenal plumage, but the bird collected in June had a slightly enlarged ovary.

The exposed culmens of the two specimens measure 28.7 and 30.7 mm. and the tails 196 and 200 mm. On the basis of their large size, I refer the specimens to R. s. major.^{36/}

Accipiter bicolor (Vieillot)

Bicolored Hawk

SPECIMENS. BM, CM: Near Manatee Lagoon - ♂, Aug. 3, 1905. Cayo - ?, undated.

The specimen from the vicinity of Manatee Lagoon was collected by Peck in tall rain forest. At Gallon Jug in 1957 Willis saw this rare hawk on two occasions. On April 25 he noted an immature bird in the undergrowth of tall forest and on July 21 he saw an adult perched in a tree in a cutover area. The specimen from Cayo constitutes the only additional record from the Colony.

I refer the specimen from Manatee Lagoon, which I have examined, to A. b. bicolor^{37/}. The specimen in the British Museum has not been critically examined in the course of this study, but is presumably referable to this race also.

Buteo albicaudatus Vieillot

White-tailed Hawk

SPECIMEN. MCZ: Ycacos Lagoon - ♂, Mar. 8, 1907.

This hawk is uncommon in British Honduras. There are about a dozen sight records of the species, all made in March, April, and early May except for the observation of a single individual on August 25. Most birds were in pinelands, savanna, or the semi-open when observed, but on two occasions White-tailed Hawks were noted in tall forest. It is possible that some, if not all, individuals of this species recorded from the Colony were transients, since there is no direct evidence that it breeds there.

The race ranging from the United States to Venezuela is B. a. hypospodius^{38/}.

Buteo jamaicensis (Gmelin)

Red-tailed Hawk

SPECIMEN. BM: Southern [= Mountain] Pine Ridge - ♂, Jan. 10, 1888.

I have seen Red-tailed Hawks in the Mountain Pine Ridge on several dates in March and April. Mr. J. H. Fleming critically examined the specimen in the British Museum about 1930 at the request of Mr. Todd and found it referable to B. j. costaricensis,^{39/} the resident race in much of Central America. Possibly the species is resident in British Honduras.

Buteo platypterus (Vieillot)

Broad-winged Hawk

SPECIMEN. CM: Toledo Settlement - ♀, Oct. 22, 1906.

Peck collected the specimen, which represents the only record of the species from the Colony.

The specimen is referable to the nominate race,^{40/}
B. p. platypterus.

Buteo magnirostris (Gmelin)

Roadside Hawk

SPECIMENS. LSUMZ: Hill Bank - ♀ (303.3 g.), Feb. 20; ♂, Mar. 22; ♀ (284.4), Apr. 1; ♂ (244.9), Nov. 25. Gallon Jug - ♂ (248.5), Feb. 21; ♀ (293.5), Mar. 2. Belize - ♂, Aug. 31. OTHER MUSEUMS (CC, CM, CNHM, MCZ, PC, UMMZ): Forty specimens from Belize, Manatee Lagoon area, Duck Run, Cayo, Middlesex, Freetown, All Pines, Toledo Settlement; all months except Oct. Nov. CRITICAL PUBLISHED RECORD: Orange Walk (Salvin and Godman, Biologia, iii, 1900: 77).

The species is the commonest hawk in most parts of the mainland of British Honduras, occurring in pinelands, low woodlands, and the semi-open. It frequents exposed

perches, flies reluctantly, and moves sluggishly. Stomach contents have included grasshoppers, beetles, scorpions, spiders, and lizards. Roadside Hawks in breeding condition have been collected in March, April, and May; and Peck found a nest holding a half-grown young bird on May 17, 1906. Other adult birds collected in spring were not in breeding condition.

Specimens from Cayo, Belize, and the area to the north of these two localities exhibit characteristics of B. m. conspectus^{41/} and B. m. direptor^{42/}. The latter race is dark plumaged and has a considerable amount of rufous in the basal half of the rectrices; whereas, B. m. conspectus is paler and generally lacks rufous in the tail. Some specimens from this region are decidedly nearer one race or the other, but most specimens show a combination of racial characters. The population of this species in northern British Honduras is similar taxonomically in this respect to the population in southern Quintana Roo described by Paynter (1955: 60). I refer specimens from Manatee Lagoon and localities in the southern two-thirds of the Colony to B. m. conspectus. No size differences are demonstrable in the specimens from different areas of British Honduras.

Buteo brachyurus Vieillot

Short-tailed Hawk

SPECIMEN. CM: Manatee Lagoon - ♂, Aug. 6, 1905.

Peck collected the only specimen, a melanistic adult, from the Colony. Single individuals were seen in 1957 by Willis at Hill Bank on August 7 and between Belize and Cayo on August 9.

In a recent study of this species, Rand (1960: 448 - 459) referred North and Central American populations to B. b. fuliginosus.^{43/}

Buteo nitidus (Latham)

Gray Hawk

SPECIMENS. USNM: Gallon Jug - ♂ (387.6 g.), Mar. 21, 1955; ♀ (649.0), Mar. 31, 1955. OTHER MUSEUM (CM): Toledo Settlement - ♂, June 21, 1907.

The Gray Hawk is an uncommon to moderately common resident of the semi-open and has been recorded at many localities in the Colony. The species occupies much the same habitat as B. magnirostris but is more often found in the border between tall forest and clearings. The male collected March 21 was not in breeding condition, and no data concerning the reproductive condition of the other two specimens were recorded.

I follow Hellmayr and Conover (1949: 157) in referring all Gray Hawks north of Costa Rica to B. n. plagiatus.^{44/}

Leucopternis albicollis (Latham)

White Hawk

SPECIMENS. LSUMZ: Gallon Jug - ? (708.7 g.), Apr. 4, 1955. OTHER MUSEUM (MCZ): Toledo Settlement - ♂, Sept. 12, 1906; ♀, Dec. 15, 1906. CRITICAL PUBLISHED RECORD: Cayo (Salvin and Godman, Biologia, iii, 1900: 83).

Tall rain forest is the customary habitat of this uncommon resident, but occasionally it is found in tall second growth and the semi-open. Peck saw the species in the vicinity of Manatee Lagoon and of the Moho River, the only additional points of record. No data are available to indicate the breeding season of the White Hawk in British Honduras.

I refer the specimen from Gallon Jug to L. a. ghiesbreghti^{45/}. Peters (1929: 418) noted that one of the two Toledo Settlement specimens was referable to L. a. ghiesbreghti but the other approached L. a. costaricensis^{46/} in "having the secondaries and inner primaries invaded with black."

Busarellus nigricollis (Latham)

Fishing Hawk

SPECIMENS. LSUMZ: Hill Bank - ♀ (1157 g.), Nov. 26, 1956. Two mi. W Gallon Jug - ♀ (1195), Mar. 2, 1956. OTHER MUSEUM (MCZ): Sibun River - ♀, May 1, 1906. Manatee River - ♂, ♀, May 12, 1906.

I have seen this uncommon resident at Stann Creek, at several localities on the New River, and near Hill

Bank and Gallon Jug. Lagoons, rivers, and small ponds provide it with a suitable habitat. Landlocked ponds containing many small fish exposed in shallow water in the spring dry season are especially favored by the Fishing Hawk. The species often soars in wide circles over its feeding area. The female that I collected near Gallon Jug contained an ovum 14 mm. in diameter. Peck noted a nest about 40 feet above the ground in a pine tree near the Sibun River in April 1906. He did not determine the contents.

I refer British Honduran specimens to B. n. nigri-
47/
collis, which ranges from Mexico to southern Brazil.

Buteogallus anthracinus (W. Deppe)

Common Black Hawk

SPECIMENS. LSUMZ: Half Moon Cay - ♀ (686.7 g.), May 7. OTHER MUSEUMS (CC, CM, PC, UMMZ): Thirteen specimens from the Manatee Lagoon area, E slope Cockscomb Mts. (750'), Freetown; Feb., Mar., May, July, Sept., Dec.

The Common Black Hawk is common locally in coastal British Honduras but is uncommon inland, although it has been recorded several times at Gallon Jug. Habitats occupied by this species include the coastal beaches, mangrove swamps, pinelands, and less often, forests. The specimen from Half Moon Cay constitutes the only insular record. Nests are usually placed in pine trees and the eggs laid in mid-April (Peck; Thomas, 1908: 116-118).

I refer the specimens to B. a. anthracinus.
48/

Buteogallus urubitinga (Gmelin)

Great Black Hawk

SPECIMENS. LSUMZ: Gallon Jug - ? (1197 g.), Mar. 7; ♂, ♀ (996.0, 1156), Nov. 7. OTHER MUSEUMS (CC, CM, MCZ, UMMZ): Five specimens from the Manatee Lagoon area, 12 mi. S Cayo, Toledo Settlement; Feb., Mar., May, Oct. CRITICAL PUBLISHED RECORD: Cayo (Salvin and Godman, Biologia, iii, 1900: 80).

The species is an uncommon resident in British Honduras; only a few observations from Gallon Jug and one from Kendal supplement the specimen record. The pair of adult Great Black Hawks collected at Gallon Jug in November were taken in the edge of tall rain forest at a plantation clearing. Two collected by Van Tyne south of Cayo were on pine ridges.

B. u. ^{49/}ridgwayi, to which I refer the British Honduran specimens, ranges from Mexico to Panamá.

Harpia harpyja (Linnaeus)

Harpy Eagle

Lancaster saw one individual of this rare species in tall rain forest at Gallon Jug on March 11, 1958. The bird dropped to the ground, seized a snake, and flew to a low limb of a tree, where it proceeded to devour its prey.

Spizastur melanoleucus (Vieillot)

Black and White Eagle-Hawk

SPECIMENS. UMMZ: Cayo - ♂, Mar. 21, 1931. Twelve mi. S Cayo - ♂, Mar. 4, 1931.

The specimen from Cayo, a male in breeding condition, held an adult Pteroglossus torquatus in its claws when it was shot by a native. Van Tyne examined the toucan and established that it had been killed by the hawk and not by the shot. South of Cayo, Murie collected a nonbreeding adult in the pine ridge. He found the remains of an adult Columba speciosa in its stomach. There are no other records of this hawk from British Honduras.

Spizaetus ornatus (Daudin)

Crested Eagle-Hawk

SPECIMENS. LSUMZ: Eighteen mi. NW Gallon Jug - ♂ (840.5 g.), Mar. 24, 1955. Ballerina Camp - ♀ (1542), Apr. 21, 1955. Two mi. W San Pedro Columbia - ♀ (1760), May 6, 1956. OTHER MUSEUMS (BM, CM): Manatee Lagoon - ♀, July 5, 1905. Upper Makal [= Eastern Branch Belize River] - undated specimen. CRITICAL PUBLISHED RECORD: Belize (Salvin and Godman, Biologia, iii, 1901: 92).

The Crested Eagle-Hawk is an uncommon resident in British Honduras. It normally occurs in tall rain forest but at least occasionally leaves the forest to forage in pinelands. Near the Cockscomb Branch of South Stann Creek on May 6, 1958, I heard a female Crax rubra clucking a few yards away. I located the bird and shot

it after it flew into a Trumpet Tree. As I picked up the fallen curassow, two large birds dropped from another tree 30 feet away. One was a S. ornatus and the other a male C. rubra. The hawk had seized the curassow in the tree, and it retained possession on the ground until my investigation caused it to release its prey. The curassow fled, but the hawk flew to a low branch and remained there until I approached to within 25 feet. The local name, "curassow hawk," appears to be well founded, if the activity I witnessed is typical of the hawk. However, the crest of the eagle-hawk may be the reason for its name. The eagle-hawk from Ballerina Camp was collected as it attempted to catch a snake in the water of the Eastern Branch of the Belize River. None of the three birds now in the LSUMZ was in breeding condition. In April 1907 Peck found a pair of S. ornatus in possession of a nest that had been occupied only a few days earlier by Buteogallus urubitinga. The nest was situated 60 feet above the ground in a tall tree in the vicinity of Toledo Settlement.

Specimens from Central America and northwestern South America are referable to S. o. vicarius.^{50/} The type of this race was collected by Peck in the pine ridge near Manatee Lagoon.

Spizaetus tyrannus (Wied)

Tyrant Eagle-Hawk

SPECIMEN. CNHM: Middlesex - ?, Feb. 9, 1923.

The specimen collected by Schmidt and Walters represents the only record of the species from the Colony.

Friedmann (1950b: 3) examined the Tyrant Eagle-Hawk from British Honduras and referred it to S. t.
^{51/}
serus.

Circus cyaneus (Linnaeus)

Marsh Hawk

I saw a female Marsh Hawk gliding over the mangroves on the outskirts of Belize on March 14, 1956. This observation of the species is the only one in British Honduras.

Geranospiza nigra (DuBus)

Blackish Crane Hawk

SPECIMEN. CRITICAL PUBLISHED RECORD: Orange Walk (Salvin and Godman, Biologia, iii, 1899: 53).

The published reference to a specimen collected by Gaumer is the only record from British Honduras.

^{52/}
G. n. nigra, which ranges from Mexico to Panamá, is undoubtedly the race to which the specimen is referable.

The only other race occurring north of Panamá is known only from Sonora, Mexico.

Family PANDIONIDAE

Pandion haliaetus (Linnaeus)

Osprey

SPECIMENS. LSUMZ: Calabash Cay - ♂ (1340 g.), Apr. 10, 1956. OTHER MUSEUM (CM): Manatee Lagoon - ♂, Oct. 20, 1905. CRITICAL PUBLISHED RECORDS: Belize, Half Moon Cay, Middle Cay of Glover's Reef (Hellmayr and Conover, 1949: 236, 237).

Ospreys, or "billy hawks" as British Hondurans called them, are present in small numbers throughout the year at many coastal and insular localities and occur sparingly on rivers and inland lagoons in fall and winter. Griscom (1926: 13) found a pair of Ospreys with a nest containing eggs on Hick's Cay in January 1926, and Bond (1954: 4) saw a nest that he believed to be occupied on one of the Turneffe Islands in January 1954.

The specimen from Calabash Cay is referable to P. h. ^{53/}ridgwayi and is representative of the resident breeding race. Specimens of P. h. ^{54/}carolinensis have been collected in October at Manatee Lagoon and at Belize in December. All the individuals that I have observed on rivers have been dark-headed and referable to the latter race. Thus, P. h. carolinensis occurs

at inland, coastal, and insular localities, whereas the breeding race is perhaps restricted to coastal and insular areas.

Family FALCONIDAE

Herpetotheres cachinnans (Linnaeus)

Laughing Falcon

SPECIMENS. LSUMZ: Gallon Jug - ♂ (589.0 g.), Mar. 2; ♀ (732.0), Nov. 7; ♀ (702.7), Nov. 18. Stann Creek - ♂ (582.7), Mar. 28. OTHER MUSEUMS (CC, CM, PC, MCZ): Eight specimens from the Manatee Lagoon area, Freetown, and Toledo Settlement; Jan., May, June, Sept., Oct., Nov. CRITICAL PUBLISHED RECORD: Western [= Cayo] District (Salvin and Godman, Biologia, iii, 1901: 112).

The species is a moderately common resident of the semi-open throughout most parts of the mainland of British Honduras. Tall, isolated trees in pastures or second growth provide suitable perches for this noisy falcon. Its sustained calling, most frequently heard in early morning and late afternoon, may be distinguished at distances exceeding one-half mile. None of the four specimens that I collected was in breeding condition, and the size of the gonads was not recorded by the other collectors of Laughing Falcons.

The three specimens from Gallon Jug were obtained a few miles south of the type locality of H. c. chapmani^{55/}. However, there is considerable individual variation among specimens from Mexico, British Honduras, and other parts

of Central America that I have examined, and I refer the British Honduran birds to H. c. cachinnans.^{56/}

Micrastur semitorquatus (Vieillot)

Collared Forest Falcon

SPECIMENS. LSUMZ: Gallon Jug - ♂ (646.1), Nov. 12; ♂ (479.0), Nov. 19. OTHER MUSEUMS (CM, MCZ): Four specimens from Manatee Lagoon, Freetown, Toledo Settlement, Moho River; May, Sept., Oct., Nov.

Four observations of this species at Gallon Jug in May and July by Lancaster and Willis supplement the specimen data. The lack of additional records suggests that the species is rare, but it is a shy species and frequents tall second growth and forest edges, where it is difficult to observe. It may also occur in the heart of rain forest, though I have not seen it there. The specimens taken at Gallon Jug were not in breeding condition, and there is no information indicating the reproductive condition of the gonads of the remaining specimens.

The only race recognized north of Panamá is M. s.^{57/}
naso.

Micrastur ruficollis (Vieillot)

Barred Forest Falcon

SPECIMENS. LSUMZ: Ballerina Camp - ♂ (174.0 g.), Apr. 30. Two mi. NE Millionario - ♀ (235.9), Mar. 15. OTHER MUSEUMS (BM, CM, MCZ): Four specimens from Manatee Lagoon, Duck Run, Cayo; Apr., Oct.

The Barred Forest Falcon is an uncommon inhabitant of the lower level of tall rain forest and has been recorded only at Gallon Jug and at the collecting localities. On several occasions this small hawk abruptly approached me as I attempted to imitate the high-pitched alarm call of a small bird. The female collected March 15 had a slightly enlarged ovary.

I refer specimens from British Honduras to M. r.
^{58/}
guerilla.

Falco peregrinus Tunstall

Peregrine Falcon

SPECIMENS. LSUMZ: Half Moon Cay - ♀ (973.5 g.), Mar. 25, 1958. OTHER MUSEUM (PC): Manatee Bar - ?, Nov. 10, 1905.

The Peregrine Falcon is an uncommon winter visitant and transient in British Honduras. Willis saw one individual at Gallon Jug on May 5, 1957; of 13 sight records, this is the only one that is not from an insular locality. On Half Moon Cay during the spring of 1958, Verner observed 12 birds on eight dates from March 20 to April 19, including four individuals on April 16.

I refer the British Honduran specimens to F. p.
^{59/}
anatum.

Falco albigularis Daudin

Bat Falcon

SPECIMENS. LSUMZ: Gallon Jug - ♂ (128.9 g.), Feb. 28; ♂ (141.2), Mar. 15; ♀ (195.0), Apr. 5. OTHER MUSEUMS (BM, CC, CM, PC, UMMZ): Fifteen specimens from the Belize River near Belize, Manatee Lagoon area, Cayo, 12 mi. S Cayo, Freetown, All Pines; all months except June, Oct., Dec.

The Bat Falcon is a common resident of the pine ridges and of clearings in the vicinity of woodlands in most regions of the mainland of the Colony. The species has not been recorded south of Ycacos Lagoon, although it is to be expected there. Insects and small birds make up a considerable part of the diet of this swiftly flying hawk, but its common name is not without justification. Murie (1935: 20) found the remains of the bat Molossus aztecus in a Bat Falcon he collected on the Mountain Pine Ridge in February. Some of the Bat Falcons taken in the period of February to May had enlarged gonads.

I refer the specimens from British Honduras to the nominate race, F. a. albigularis.^{60/}

Falco femoralis Temminck

Aplomado Falcon

SPECIMENS. LSUMZ: Hill Bank - ♂ (235.1 g.), Feb. 18, 1956. OTHER MUSEUM (MCZ): Ycacos Lagoon - ♂, Mar. 8, 1907.

The Aplomado Falcon is rare or local in British Honduras. The half dozen records from the Colony were

obtained in February, March, April, May, November, and December in coastal scrub, lowland pinelands, and the Mountain Pine Ridge. There are no breeding data from British Honduras, but I presume the Aplomado Falcon is a resident, although some northern individuals may winter as far south as the Colony.

Friedmann (1950a: 687) referred the specimen from Ycacos Lagoon to F. f. femoralis^{61/}. The male from Hill Bank has the following measurements: wing 244.0, tail 160.0, and culmen from cere 16.0 mm. On the basis of its small size, I refer it also to the nominate form.

Falco columbarius Linnaeus

Pigeon Hawk

No specimens of this small falcon have been collected in British Honduras, but in 1958 Verner saw single birds at Half Moon Cay on seven dates from April 7 to May 6 and 20 individuals on April 16.

Falco sparverius Linnaeus

Sparrow Hawk

SPECIMENS. LSUMZ: Gallon Jug - ♀, Feb. 17; ♂ (90.2 g.), Mar. 1; ♀ (108.7), Nov. 17. OTHER MUSEUMS (BM, CM, MCZ): Seven specimens from Belize, Manatee Lagoon area, Cayo, 12 mi. S Cayo; Feb., Mar., Oct., Nov., Dec. CRITICAL PUBLISHED RECORD: Orange Walk (Salvin and Godman, Biologia, iii, 1901: 123).

The Sparrow Hawk is a moderately common winter visitant and has been recorded from October 18 to April 9 in the Colony. The species frequents pine-lands and the semi-open at all elevations. At Gallon Jug, presumably the same individual perched daily on the flag pole at the landing field from the time of its arrival in the fall until its departure in the following spring.

All specimens from British Honduras are referable to F. s. sparverius.^{62/}

Family CRACIDAE

Crax rubra Linnaeus

Great Curassow

SPECIMENS. LSUMZ: Gallon Jug area - ♀, Mar. 16; ♀ (4120 g.), Mar. 26; ♂ (4060), Mar. 27; ♂ (4230), Mar. 28; ♂ chick (160.1), May 30. OTHER MUSEUM (CM): Two specimens from Manatee Lagoon, E slope Cockscomb Mts. (750'); Mar., Sept.

The Great Curassow is resident in tall rain forest and is common where it is not extensively hunted. It ranges throughout the mainland where suitable habitat exists, and I have seen it from near sea level to about 3000 feet elevation. On May 4, 1956, on a trail beside Cockscomb Branch, I disturbed a female curassow, which feigned injury and attempted to lead me away. When I turned opposite to the direction in which she apparently wished to lead me, she uttered a threatening,

mammallike snarl, similar to that of an angry dog. I then sat motionless for several minutes and the curassow circled clockwise about me many times at a half-run, half-walk. The radius of these circles varied from 10 to 30 feet. Presumably a nest or young birds were in the vicinity. She ran ahead of me as I departed and after a hundred feet she whirled high into the air and disappeared. Normally curassows run away when alarmed or fly into the treetops and continue to move away by many short flights.

I refer the British Honduran specimens to the nominate race, C. r. rubra.^{63/}

Penelope purpurascens Wagler

Crested Guan

SPECIMENS. LSUMZ: Gallon Jug - ?, Jan. 23. OTHER MUSEUMS (CM, MCZ, UMMZ): Five specimens from the Manatee Lagoon area, 12 mi. S Cayo, E slope Cockscomb Mts. (750'); Feb., Mar., Aug., Oct.

The arboreal Crested Guan is a moderately common resident of tall, undisturbed rain forest and ranges from forests near sea level to above 3200 feet in the Cockscomb Mountains. Along with other game species, the guan, or "quam" as it is called locally, is least numerous where extensively hunted. The specimen collected in February was an adult male weighing about 2.1 kilograms and was one of a pair found near the edge of the pines in the Mountain Pine Ridge.

I refer the specimens to the nominate race, P. p.
purpurascens.^{64/}

Ortalis vetula (Wagler)

Plain Chachalaca

SPECIMENS. LSUMZ: Gallon Jug - ♀ (408.9 g.), Mar. 21; ♂ (487.0), June 4. Ballerina Camp - ♀ (414.6), Mar. 9. Two mi. W San Pedro Columbia - ♂, ♀ (384.6, 401.6), May 6; ♀ (345.5), May 11. OTHER MUSEUMS (CC, CM, CNHM, MCZ): Thirteen specimens from the Manatee Lagoon area, Duck Run, Middlesex, 22 Mile Station, Mountain Cow, Freetown, Sittee River; Jan., Feb., Apr., May, June, Sept. CRITICAL PUBLISHED RECORD: Vicinity of Belize (Ogilvie-Grant, 1893: 514).

The "cockrico" is a common resident throughout the mainland of British Honduras, and is found in thickets, dense second growth, and the border of rain forest. Willis saw a short-tailed young bird clambering about the low branches of a tree accompanied by its parents on February 27 -- evidence that breeding begins at least as early as January. I have collected individuals in breeding condition in March and May.

The specimens from Gallon Jug are clearly referable to O. v. intermedia.^{65/} I assign specimens from the other British Honduran localities to O. v. plumbiceps^{66/} on the basis of the bicolored tips of the rectrices and the color of the under parts. Some specimens from the central part of the Colony are intermediate in these characters, as would be expected in a region of overlap between the races.

Family PHASIANIDAE

Colinus nigrogularis (Gould)

Black-throated Bobwhite

SPECIMENS. BM, CC, CM, MCZ, UMMZ: Twenty-five specimens from the vicinity of Belize, Manatee Lagoon area, Freetown, All Pines, Ycacos Lagoon, Toledo Dist.; all months except Jan., Aug., Sept., Oct.

The species is a moderately common resident of lowland pine ridges from the vicinity of Hill Bank south to Ycacos Lagoon. A mixture of oak, pine, and palmetto overgrown with high grasses provides its preferred habitat. Coveys are difficult to flush since the birds prefer to run if the cover is adequate. Each of the 13 specimens collected by Blake and Agostini at Freetown and All Pines in April and May had enlarged gonads.

I refer specimens of the Black-throated Bobwhite from British Honduras to C. n. nigrogularis.^{67/}

Odontophorus guttatus (Gould)

Spotted Wood-Quail

SPECIMENS. LSUMZ: Gallon Jug - ♂ (356.9 g.), Mar. 19. Augustine - ♀, Dec. 13. OTHER MUSEUMS (CM, MCZ): Five specimens from Augustine, Camp VI, N slope Cockscomb Mts. (1300'), Freetown; Mar., Apr., May. CRITICAL PUBLISHED RECORDS: Rio Hondo (Salvin and Godman, Biologia, iii, 1903: 312); Belize, San Felipe (Ogilvie-Grant, 1893: 440, 441).

The Spotted Wood-Quail, which is called the "congo bird" by inhabitants of the Colony, is a moderately common resident of tall rain forest and high second

growth in British Honduras. Although the species is predominantly terrestrial and usually runs when alarmed by humans, it can be flushed by dogs. The birds fly onto low limbs and remain motionless; I have been told by natives that the birds can then be struck with a stick. I collected a male in March that had fully enlarged testes and a female in December that possessed many follicles 3 mm. in diameter.

Family MELEAGRIDIDAE

Meleagris ocellata Cuvier

Ocellated Turkey

SPECIMENS. LSUMZ: Gallon Jug - ♂, Feb. 22, 1955; ♂ (5530 g.), Mar. 25, 1955; ? chick (45.3), June 6, 1956.

The Ocellated Turkey is a moderately common resident from the Eastern Branch of the Belize River on the southern edge of the Mountain Pine Ridge through the northwestern sector of the Colony. Forest borders and low and moderately tall second growth provide the turkeys' favored habitats. Probably the vast regions of rain forest limit its southern distribution, since it does not penetrate the forest. There are a number of published records of the Ocellated Turkey from British Honduras dating back into the last century, but specific localities are not stated. Lancaster found a nest and eggs of this species on April 27, 1957, near Gallon Jug.

Family ARAMIDAE

Aramus guarauna (Linnaeus)

Limpkin

SPECIMENS. LSUMZ: Hill Bank - ♂ (1480 g.), Mar. 24; ♂ (1120), Nov. 23. Four mi. N Gallon Jug - ♂ (1294), Feb. 29. OTHER MUSEUMS (PC, UMMZ): Three specimens from Belize, Manatee Lagoon; Apr., Nov.

In the northern third of the Colony, Limpkins are common residents of marshy river banks, and lagoon and pond edges. They have been recorded in the eastern lowlands as far south as the Sittee River. The testes of the male collected March 24 were only slightly enlarged; those of the male collected November 23 were moderately enlarged, and those of the male obtained in February were fully enlarged. Undoubtedly the variety of sounds produced by this species have led to its local name, "clucking hen."

I refer British Honduran specimens to the Central American race A. g. dolosus.^{68/}

Family RALLIDAE

Rallus longirostris Boddaert

Clapper Rail

SPECIMEN. MCZ: Ycacos Lagoon - ♀, May 14, 1907.

The Clapper Rail frequents coastal and insular mangrove swamps in British Honduras. It is common

locally but its elusiveness in such an impenetrable habitat makes it exceedingly difficult to collect. Peck obtained a nest and five eggs along with the brooding female at Ycacos Lagoon. The nest was situated about 5 feet above the water in the branch of a mangrove. The species is familiar to coastal and insular inhabitants, who call it "top-na-chick" or "chink-topnah."

The one specimen from British Honduras is the type of R. l. belizensis.^{69/} No additional specimens have been collected of this race. Clapper Rails exhibit much individual variation and a series will be necessary to establish the taxonomic position of coastal and insular birds in the Colony. However, I have no other basis on which to doubt the validity of the race belizensis.

Pardirallus maculatus (Boddaert)

Spotted Rail

SPECIMEN. MCZ: Ycacos Lagoon - ?, June, 1907.

Peck obtained this specimen from Hubert Payne, a local collector. Nothing was recorded concerning the habitat in which the bird was found.

The specimen is the type of P. m. insolitus.^{70/} The only additional specimen of this race known to me is one taken near Tuxtla Gutierrez, Chiapas, in 1946 (Friedmann, 1949: 86).

Amaurolimnas concolor (Gosse)

Uniform Crane

SPECIMEN. CM: Freetown - ♂, Apr. 30, 1935.

The specimen was collected by Blake and Agostini near the Sittee River and was in breeding condition. Peck states in his notes that he collected a Uniform Crane on high ground in tall rain forest near Manatee Lagoon in January 1907. Apparently the specimen was not preserved.

The extant British Honduran specimen is referable to A. c. guatemalensis.^{71/}

Aramides cajanea (P. L. S. Müller)

Gray-necked Wood Rail

SPECIMENS. LSUMZ: Six mi. NNE Hill Bank - ♀ (475.0 g.), Mar. 31. Ballerina Camp - ♂ (454.8), Apr. 21. OTHER MUSEUMS (CM, MCZ): Fifteen specimens from the Belize River, Manatee Lagoon area, Mountain Cow, Freetown, Sittee River; Mar., Apr., May, Aug., Sept., Nov. CRITICAL PUBLISHED RECORD: Belize (Sharpe, 1894: 60).

This wood rail is a moderately common resident and has been recorded in all sections of the mainland. It is most numerous in the swampy woodlands in the northern two-thirds of the Colony, but it also inhabits mangrove swamps and well-drained tall forests in the vicinity of streams and ponds. I have recorded it up to an elevation of 1600 feet in forested valleys in the Mountain Pine Ridge. The Gray-necked Wood Rail, or

"top-na-chick" as it is more frequently called in British Honduras, is shy and is most frequently seen walking on branches overhanging waterways or on exposed regions of stream banks. Half the adult specimens collected in March, April, and May were in breeding condition.

Specimens from British Honduras are topotypes of A. c. albiventris.^{72/}

Aramides axillaris Lawrence

Rufous-necked Wood Rail

SPECIMEN. CRITICAL PUBLISHED RECORD: Belize (Sclater and Salvin, 1868: 449).

A specimen, probably now lost, was collected in the mangroves near the mouth of the Manatee River in March, 1901, by Peck. This is the only record supplementing the specimen reported by Sclater and Salvin.

Porzana carolina (Linnaeus)

Sora

SPECIMENS. LSUMZ: Hill Bank - ♂ (81.4 g.), Mar. 24, 1955. Gallon Jug - ♂ (67.9), Nov. 7, 1956. OTHER MUSEUM (CM): Manatee Lagoon area - ♀, Sept. 27, 1905. CRITICAL PUBLISHED RECORD: Belize (Sharpe, 1894: 100).

The Sora is an uncommon by recorded transient and winter visitant. Two or three individuals wintered in a wet grassy area at Gallon Jug and were recorded there

from October 22 to March 13. I observed this rail at Hill Bank in November, and Peck shot one at Toledo Settlement in February but did not preserve it. Verner saw one migrant on Half Moon Cay on April 11, the only other individual recorded from the Colony. I suspect the species is more common than these records indicate.

Laterallus ruber (Sclater and Salvin)

Ruddy Crane

SPECIMENS. LSUMZ: Hill Bank - ♂, ♀ (48.9, 41.6 g.), Feb. 25; ♂, ♀ (48.5, 42.5), Nov. 29. Pomona - ♂ (44.0), Mar. 28. Two mi. W San Pedro Columbia - 2 ♀'s (42.7, 47.6), May 4. OTHER MUSEUMS (MCZ, UMMZ): Five specimens from Belize, Manatee Lagoon area, Toledo Settlement; Jan., Feb., Apr., Dec.

The Ruddy Crane is locally common in British Honduras. The only points of record not listed in the record of specimens are Gallon Jug, Kendal, and Ycacos Lagoon. The species occupies a variety of grassy habitats: tall saw-grass, low grasses growing in water, and grass in fields, pastures, ditches, and citrus groves. Near San Pedro Columbia, I found cranes in the dense grass of low huamil on hillsides with Thamnophilus doliatus and Arremonops conirostris. A mousetrap baited with peanut butter and oats and set in the grass near a citrus grove at Pomona captured an individual at noon. The long, drawn-out, descending trill or whinny of this crane is distinctive and is heard most frequently at sunrise and about two hours before sunset. The specimens that I collected in spring

at Hill Bank and San Pedro Columbia had slightly enlarged gonads but were probably not yet breeding. Peck found three spherical nests of this species constructed in tussocks of grass; two were incomplete on May 21 and May 23, and the third contained an egg on June 6.

Both Brodkorb (1943: 35) and Paynter (1955: 90) examined Mexican and Central American specimens of Laterallus ruber and concluded that on the basis of their material they were unable to recognize any geographic variation. The species is not common in collections and in the seven recent specimens from the Colony, I find individual variation exceeding that ascribed to geographic variation in the species. Consequently, I concur in considering the species monotypic.

Gallinula chloropus (Linnaeus)

Common Gallinule

Two to four Common Gallinules were seen at a marshy pond near Gallon Jug in February, March, and October 1956 (Russell), March 1957 (Willis), and February 1958 (Lancaster). I saw one individual in a marsh at Stann Creek on March 23, 1956. These observations, the only records of the species from the Colony, do not indicate whether the birds were residents, winter visitants, or migrants.

Porphyryula martinica (Linnaeus)

Purple Gallinule

SPECIMENS. LSUMZ: Two mi. W Gallon Jug - ♀ (218.8 g.), Mar. 1, 1956. OTHER MUSEUM (BM): Three undated specimens from Crooked Tree Lagoon. CRITICAL PUBLISHED RECORD: Orange Walk, Dec. (Sharpe, 1894: 191).

Willis noted a pair of Purple Gallinules at a marshy pond near Gallon Jug on July 7 and 21, 1957. The lateness of these dates indicates that the species may breed there. The only additional sight records from the Colony are from the same pond in February and March. The individual collected there March 1, 1956, had a slightly enlarged ovary.

Fulica americana Gmelin

American Coot

SPECIMENS. LSUMZ: Hill Bank - ♀ (402.4 g.), Nov. 29, 1956.

This species winters in small numbers on streams and fresh-water ponds in British Honduras and has been observed on a total of only nine dates near Orange Walk, Hill Bank, Maskalls, and Stann Creek. Thirty individuals at the latter locality on March 23, 1956, had dwindled to two birds on March 30.

American Coot in North and Central America are referable to F. a. americana.^{73/}

Family HELIORNITHIDAE

Heliornis fulica (Boddaert)

Sun Grebe

SPECIMENS. LSUMZ: Three mi. SW Hill Bank - ♂ (139.6 g.), Nov. 30. OTHER MUSEUMS (CC, CM, MCZ, PC, UMMZ): Twelve specimens from the Belize River near Belize, Sibun River, Manatee Lagoon area, Duck Run, Freetown, Rio Grande; Jan., Feb., Mar., Apr., May, Nov., Dec. CRITICAL PUBLISHED RECORD: Rio Makal [= Eastern Branch Belize River] (Sharpe, 1894: 235).

The Sun Grebe is a moderately common resident of rivers and streams in the Colony. I have seen it at elevations from near sea level to 1500 feet. Quiet sections of waterways flowing through woodlands provide its preferred habitat. Normally Sun Grebes seek shelter by swimming away from the cause of alarm or by darting swiftly into the vegetation on the banks. If sufficiently alarmed, they fly rapidly to cover. The specimen taken near Hill Bank was collected at night by a native hunting in his dory by carbide light. He struck the swimming bird with his boat paddle. The specimen was an adult with much fat, but it was not in breeding condition.

Family JACANIDAE

Jacana spinosa (Linnaeus)

Jacana

SPECIMENS. LSUMZ: Gallon Jug - ♂ (86.3 g.), Oct. 26. Stann Creek - ♂ (86.4), Mar. 24. OTHER MUSEUMS (BM, CM, MCZ, UMMZ, USNM): Fourteen specimens from Crooked Tree

Lagoon, Belize, Sibun River, Freetown, Sittie River;
Jan., Feb., Apr., May. CRITICAL PUBLISHED RECORDS:
Orange Walk, Belize River (Sharpe, 1896: 88).

The Jacana or "Georgia bull," as it is called locally, is a common resident of ponds and slowly flowing rivers where mats of floating aquatic vegetation are abundant. Breeding apparently reaches a peak in April and May. The gonads of individuals collected by Blake and Agostini in late April and early May were enlarged and on May 26 I saw adults and chicks along the New River.

I refer British Honduran specimens to J. s. spinosa.^{74/}

Family CHARADRIIDAE

Squatarola squatarola (Linnaeus)

Black-bellied Plover

SPECIMEN. LSUMZ: Calabash Cay - ♂ (169.4 g.), Apr. 14, 1956.

The Black-bellied Plover is an uncommon winter visitant on the sand beaches of the islands of the Colony. It has been recorded only on Half Moon Cay in February (Lancaster and Verner), on Calabash Cay in April (Russell), and Long Cay in December (van Tets). Fewer than seven individuals were noted on each occasion.

Charadrius semipalmatus Bonaparte

Semipalmated Plover

SPECIMENS. LSUMZ: Half Moon Cay - ♀, Apr. 23, 1958.
 OTHER MUSEUMS (CM, PC): Near Manatee Lagoon - ♂,
 Oct. 6, 1905; ♀, Nov. 14, 1905.

Verner saw this species almost daily on Half Moon Cay in 1958 (February 15 - May 8). Marked increases in his daily counts of individuals on several dates in late February, March, and early April undoubtedly are attributable to migration. His maximum one-day count was 24 individuals. Some Semipalmated Plovers winter on the keys, as indicated by birds seen on Half Moon and Long Cays in December by van Tets. The species is known from the mainland only from the two Manatee Lagoon specimens and "one lone bird on the Belize River, March 17" (Austin, 1929: 371). There are no additional records from the Colony.

[Charadrius melodus Ord]

Piping Plover

Peck states in his notes that he collected a Piping Plover in March 1901 at Manatee Lagoon, but I do not know the present location of the specimen. This record must be considered hypothetical, because the species has not otherwise been recorded from Central America, and the identity of Peck's specimen has not been confirmed.

Charadrius collaris Vieillot

Collared Plover

SPECIMEN. LSUMZ: Stann Creek - ♂ (30.0 g.), Mar. 28, 1956.

One individual at Stann Creek on March 28, 1956 (Russell), six on Calabash Cay on April 11, 1956 (Russell), and five on Half Moon Cay on February 14, 1958 (Lancaster), constitute the only records of this species from British Honduras.

Charadrius vociferus Linnaeus

Killdeer

SPECIMENS. LSUMZ: Gallon Jug - ♀ (86.0 g.), Mar. 29. OTHER MUSEUMS (CM, UMMZ): Three specimens from 8 mi. NW Belize, Manatee Lagoon, 12 mi. S Cayo; Feb., Mar., Nov. CRITICAL PUBLISHED RECORD: Cayo (Sharpe, 1896: 246).

The Killdeer is moderately common in British Honduras from October to late March, the extreme dates being October 23 and April 1. It occurs from the coast to 2,500 feet in the Mountain Pine Ridge wherever exposed ground or short grass fields are present. Most wintering birds have been seen on the mainland, but some individuals were noted on Half Moon Cay in December and early January (van Tets). Undoubtedly, some birds are transients in fall and spring, but it is not possible to distinguish between migrants and winter visitants. During his three months stay on

Half Moon Cay in the spring of 1958, Verner saw only two Killdeer, one on March 2 and the other on March 31. This would indicate that the migratory route of transient individuals either does not pass over the island or that the Killdeer is not affected by the same conditions that caused other migrants to stop on the island.

The specimens are referable to the nominate race C. v. vociferus.^{75/}

Charadrius wilsonia Ord

Wilson's Plover

SPECIMENS. LSUMZ: Belize - ♂, Aug. 31, 1960. CRITICAL PUBLISHED RECORD: Grassy Cay (Salvin, 1864: 387).

Salvin collected two adults and found two nests of the Wilson's Plover on Grassy Cay on or about May 20, 1862. Except for a few individuals seen on the Manatee beach and on keys north of Belize by Peck in March and April 1901, the species has been recorded subsequently only by Lay, who collected a specimen at Belize. The testes of this bird were not enlarged.

I refer the specimen from Belize to C. w. wilsonia.^{76/} The Check-list of North American Birds (1957: 169) cites Grassy Cay as the southernmost breeding locality of the nominate race in Central America.

Family SCOLOPACIDAE

Bartramia longicauda (Bechstein)

Upland Plover

SPECIMENS. BM: Two specimens from Cayo, Apr. 8 and 26, 1889. CRITICAL PUBLISHED RECORD: Turneffe Islands (Salvin, 1864: 385).

The specimens represent the only records of the species from British Honduras. The bird from the Turneffe Islands was collected by Salvin on or about May 18, 1862.

Numenius phaeopus (Linnaeus)

Whimbrel

SPECIMEN. CRITICAL PUBLISHED RECORD: Belize (Forbes and Robinson, 1899: 69).

The only record of the Whimbrel in British Honduras is cited above. The specimen is probably referable to N. p. hudsonicus^{77/}, as no other races have been recorded from Central America.

Limosa fedoa (Linnaeus)

Marbled Godwit

SPECIMENS. CRITICAL PUBLISHED RECORD. Belize (Moore, 1859: 64).

British Honduras is often included within the winter range of the Marbled Godwit, presumably on the basis of a specimen collected by Leyland, who considered

it "common" (Moore, 1859: 64) at Belize. The specimen is listed by Forbes and Robinson (1899: 70), but without the date on which it was collected. There are no additional records of the species from the Colony.

Totanus flavipes (Gmelin)

Lesser Yellowlegs

SPECIMENS. LSUMZ: Stann Creek - ♂ (63.9 g.), Mar. 28, 1956. OTHER MUSEUM (UMMZ): Belize - ♂, Feb. 17, 1931.

I saw one Lesser Yellowlegs at Hill Bank on February 19, 1956, and one or two almost daily from March 23 to 30, 1956, at Stann Creek. Peck observed a few individuals in the Manatee Lagoon area in spring but mentioned no specific dates in his notes. The specimen from Belize, collected by Shufeldt, provides the only additional British Honduran record.

Totanus melanoleucus (Gmelin)

Greater Yellowlegs

SPECIMENS. LSUMZ: Stann Creek - ♂, Mar. 24, 1956. OTHER MUSEUMS (BM, USNM): One specimen labeled "British Honduras," another from Belize; without dates.

Verner observed three Greater Yellowlegs on Half Moon Cay on March 26, 1958, following a storm the preceding night. On August 24, 1960, Lay saw an individual on the coast at Belize. There are no additional sight records.

Tringa solitaria Wilson

Solitary Sandpiper

SPECIMENS. LSUMZ: Gallon Jug - ♀, ? (40.2, 37.0 g.), Mar. 3, 1956. OTHER MUSEUMS (BM, MCZ): Sibun River - ♀, May 2, 1906. Cayo - ?, Apr. 5, 1889.

The Solitary Sandpiper is a rare winter visitant and a moderately common spring and fall transient through British Honduras, found usually near freshwater ponds. The earliest recorded southbound migrant was seen by Willis at Gallon Jug on July 30, 1957. In spring, individuals have lingered as late as May 2. There are no November or December records, but Lancaster and Peck each saw Solitary Sandpipers once in January.

The two birds collected in March are referable to the nominate form, T. s. solitaria.^{78/}

Actitis macularia (Linnaeus)

Spotted Sandpiper

SPECIMENS. LSUMZ: Ballerina Camp - ♂ (41.5 g.), Apr. 27. OTHER MUSEUMS (BM, CM, UMMZ): Nine specimens from Manatee Lagoon, Cayo, Eastern Branch Belize River, 12 mi. S Cayo, Freetown, All Pines; Mar., Apr., May, Aug. CRITICAL PUBLISHED RECORD: Belize (Forbes and Robinson, 1899: 71).

The species is a common spring and fall migrant and winter visitant on lagoon, pond, and river banks, on beaches, and in rocky streams. Spotted Sandpipers have been observed at many insular, coastal, and inland

localities in British Honduras and in all months of the year, but they have not been recorded in a short period in early summer (June 2 - July 30). Although most records are of single individuals, Blake and Agostini saw flocks of as many as 25 birds on May 12, 13, and 14, 1935.

Catoptrophorus semipalmatus (Gmelin)

Willet

SPECIMENS. LSUMZ: Hill Bank - ♂ (261.0 g.), Mar. 30, 1955.

The Willet has been recorded in British Honduras only a few times. Peck observed the species in April 1901 on the beach near Manatee Lagoon, but he was not specific in recording numbers of individuals or dates. Lancaster noted two birds on Northern Two Cays on February 15, 1958. Verner saw one on Half Moon Cay on April 23, 1958. And on August 24, 1960, Lay recorded an individual on the coast at Belize.

I refer the specimen to C. s. inornatus^{79/}, but C. s. semipalmatus^{80/} probably also occurs in the Colony.

Arenaria interpres (Linnaeus)

Ruddy Turnstone

SPECIMENS. LSUMZ: Calabash Cay - ♂, ♀ (112.2, 123.2 g.), Apr. 15, 1956. Stann Creek - ♀ (96.6), Mar. 28,

1956. CRITICAL PUBLISHED RECORD: Turneffe Islands (Salvin, 1864: 385).

Ruddy Turnstones have been observed on the beach at Stann Creek and many insular localities. Early and late dates of record for this moderately common visitant are in mid-December and mid-May, but turnstones undoubtedly could be recorded in other months also. I saw flocks of 20 and 22 but most records were of fewer individuals. Verner saw turnstones almost every day on Half Moon Cay in the spring of 1958. Salvin (1864: 385) recorded this species on Ellen and Curlew Cays and implied that he collected it on "Turneffe" on May 18, 1862. Sharpe (1896: 102) lists specimens collected by Salvin on Saw Pit Key and "Turneff Land." The species is so widespread on the keys that the specific locality is inconsequential; all the keys mentioned are part of the Turneffe Islands.

The British Honduran specimens in the LSUMZ are referable to A. i. morinella.^{81/}

Capella gallinago (Linnaeus)

Common Snipe

SPECIMENS. LSUMZ: Gallon Jug - ♂ (73.8 g.), Oct. 27. OTHER MUSEUMS (CM, UMMZ): Five specimens from Belize, Manatee Lagoon; Feb., Nov. CRITICAL PUBLISHED RECORD: Cayo (Sharpe, 1896: 646).

Snipe are moderately common in wet grassy areas of the mainland from mid-November to late March. The

earliest fall arrivals were noted on October 27, and the latest spring birds were seen by Peck on an unspecified date in April. Only one Common Snipe has been recorded on the keys, a bird seen by Verner on Half Moon Cay on March 31, 1958. I believe snipe are more numerous in November, February, and March than in other months, but my data are not adequate for quantitative analysis.

I refer the specimens from the Colony to C. g.
82/
delicata.

Crocethia alba (Pallas)

Sanderling

SPECIMENS. LSUMZ: Stann Creek - ♂ (58.2 g.), Mar. 28, 1956. CRITICAL PUBLISHED RECORD: Northern Two Cays (Salvin, 1864: 386).

The individual collected at Stann Creek was very fat. It was one of four birds that I saw there on the sand beach. Salvin presumably obtained only one specimen. There are no additional observations of the Sanderling in British Honduras.

Ereunetes pusillus (Linnaeus)

Semipalmated Sandpiper

SPECIMEN. CM: South West Cay in Glover's Reef - ♀, May 31, 1935.

Verner saw one Semipalmated Sandpiper on Half Moon Cay on April 5, 1958. This is the only other record of the species from the Colony.

Ereunetes mauri Cabanis

Western Sandpiper

verner carefully studied one Western Sandpiper on Half Moon Cay on March 20, 1958. This is the only record of the species in British Honduras.

Erolia minutilla (Vieillot)

Least Sandpiper

SPECIMENS. LSUMZ: Belize - ♂, ♀ (18.2, 18.8 g.), Mar. 7. Half Moon Cay - ♀ (20.9), Mar. 9. Stann Creek - 2 ♀'s (18.7, 21.5), Mar. 23. OTHER MUSEUMS (BM, MCZ, UMMZ): Five specimens from Belize, Cayo, Toledo District; Apr., May., Oct., Nov.

The species is a moderately common transient and winter visitant at coastal and insular localities and has been recorded from October 9 to May 8. It undoubtedly arrives earlier in the fall than the October date indicates. On Half Moon Cay in the spring of 1958, Verner saw Least Sandpipers almost every day, but usually fewer than eight individuals. There were no marked fluctuations in his daily total counts of individuals that suggested the passage of transients from the south.

Erolia fuscicollis (Vieillot)

White-rumped Sandpiper

SPECIMEN. CM: North East Cay in Glover's Reef - ♀, May 30, 1955.

The specimen collected by Blake and Agostini and a flock of 40 individuals seen on the Belize River on March 20, 1928, by Austin (1929: 371) constitute the only records of this species from the Colony.

Erolia melanotos (Vieillot)

Pectoral Sandpiper

SPECIMENS. LSUMZ: Gallon Jug - ♂ (60.4 g.), Mar. 14, 1957. OTHER MUSEUMS (CM, MCZ): Belize - 2 ♂'s, Apr. 3, 1931. Yacobs Lagoon - ♀, May 22, 1907.

Shufeldt indicates in his notes that Pectoral Sandpipers were numerous in the vicinity of Belize in freshwater ponds on April 3, 1931. One additional observation of the species in British Honduras was made by Peck, who saw two individuals in company with a flock of Jacanas on the Sittee River on April 29, 1907.

Tryngites subruficollis (Vieillot)

Buff-breasted Sandpiper

SPECIMEN. BM: One specimen, without specific locality or date.

This specimen, examined by Todd, represents the only record of the species in British Honduras.

Family RECURVIROSTRIDAE

Himantopus mexicanus (Müller)

Black-necked Stilt

SPECIMENS. LSUMZ: Hill Bank - ♂ (205.0 g.), Mar. 30, 1955. OTHER MUSEUM (BM): Two specimens without specific locality or date.

The specimen collected at Hill Bank, a male with enlarged testes, was one of a pair of stilts seen on the edge of the Hill Bank Lagoon. Col. A. Bellhouse informed me (in litt.) that he saw a "small party" of stilts at the Rice Station at Boom on March 17, 1957. The birds involved in these records could be either migrants or individuals about to nest in the Colony. The species does nest locally in Central America, and there are many suitable breeding areas in British Honduras.

Recurvirostra americana Gmelin

American Avocet

Peck recorded in his notes that he saw American Avocets twice: a few birds flying past the mouth of the Manatee River near the end of March, 1901, and two individuals at Belize on April 18, 1901. Avocets are rare south of Mexico, but it doubtful that Peck could have mistaken such a distinctive species.

Family BURHINIDAE

Burhinus bistriatus(Wagler)

Mexican Thick-knee

Lancaster and Verner studied a bird walking in the yard of the Fort George Hotel in Belize on the evening of February 11, 1958, that they identified beyond doubt as a thick-knee. The area was lighted, and they could examine the bird at very close range. Lancaster was familiar with the species and its nocturnal habits from experience in Mexico. It is possible that the thick-knee is a local resident in the Colony, since it has been overlooked by other ornithologists. The species has been recorded in the Caribbean drainage of Guatemala.

Family LARIDAE

[Larus delawarensis Ord]

Ring-billed Gull

On August 15, 1960, Lay identified five gulls in the bay at Corozal as Ring-billed Gulls. The species was previously unrecorded south of Veracruz on the Atlantic side of Mexico, but it has been seen as far south as El Salvador on the Pacific coast. I do not include this species as one identified beyond doubt in British Honduras.

Larus argentatus Pontoppidan

Herring Gull

SPECIMENS. UNMZ: Belize - ♀, Jan. 19, 1951.

The Herring Gull is an uncommon winter visitant along the coast of British Honduras. Present records show the occurrence of this gull only from mid-December to late March, but it is to be expected much earlier in the autumn. A bird banded by Mr. Walter Nickell on June 11, 1957, at Roger's City, Michigan, was recovered on the Hill Bank Lagoon on January 6, 1958.

I refer the specimen to L. a. smithsonianus.^{82/}

Larus atricilla Linnaeus

Laughing Gull

SPECIMENS. LSUMZ: English Cay - ♂, May 16, 1958.
CRITICAL PUBLISHED RECORDS: Belize (Saunders, 1896: 197); Saddle Cay (Salvin, 1864: 381).

The species is present in small numbers on the coast and among the islands of British Honduras, probably throughout the year, although not yet recorded in June, July, or September. I saw one Laughing Gull on the Hill Bank Lagoon on May 26, 1956, the only inland record for the Colony. The only breeding record ascribed to British Honduras apparently dates back to Sclater and Salvin (1859: 235), who published the information that it was "said to breed in the keys along the coast." No nests have been found in British Honduras. The male

collected by Verner on English Cay did not have enlarged testes.

Larus pipixcan Wagler

Franklin's Gull

SPECIMEN. PC: One specimen without a specific locality; December 2, 1905.

Todd examined the specimen a number of years ago. It represents the only record of the species from British Honduras.

Chlidonias niger (Linnaeus)

Black Tern

SPECIMENS. CM, USNM: Manatee Lagoon - ♂, Oct. 20, 1905. Southern Water Cay - ♂, May 16, 1862. CRITICAL PUBLISHED RECORD: Near Tobacco Cay (Salvin, 1864: 385).

In May 1862, Salvin (1864: 385) saw a large flock of Black Terns near Tobacco Cay and secured "several specimens in all stages of plumage." The localities where the birds were observed or collected appeared subsequently in print as Southern Water Cay (Coues, 1864: 391), Cay Dolores Channel (Saunders, 1896: 23), and Curlew Cay (Salvin and Godman, Biologia, 1903: 399). Consequently, there is some question as to the precise locality (or localities) where the birds were collected. Since all these points of record are within a small area east of Stann Creek and All Pines, the problem is not

critical. I saw 50 Black Terns between Belize and Stann Creek on May 2, 1956, and 65 at the Hill Bank Lagoon on May 26 of the same year. Willis observed single birds on the New River on August 6, 1957, and at Belize the next day.

Specimens from the Colony are referable to U. n.
^{84/}
surinamensis.

Gelochelidon nilotica (Gmelin)

Gull-billed Tern

SPECIMENS. LSUMZ: Stann Creek - ♂, 4 ♀'s (165.7, 161.4, 166.9, 170.6, 177.4 g.), March 28, 1956.

The five specimens were obtained from a flock of ten individuals standing on the beach at Stann Creek. The five birds collected were rather fat, and the largest ova in each female were about 3 mm. in diameter. Willis saw one Gull-billed Tern in Belize on August 7, and two on August 9, 1957.

I assign the specimens to G. m. aranea.^{85/}

Hydroprogne caspia (Pallas)

Caspian Tern

A Caspian Tern shot at Belize on November 28, 1955, had been banded by Mr. W. I. Lyon at Shoe Island, Michigan, on July 18, 1951 (Lincoln, 1956: 148). Lay identified this species near Sergeant's Cay and McNabb's Water

Cay on August 11 and 12, 1960. I know of no other records of this tern from British Honduras.

Sterna hirundo Linnaeus

Common Tern

The only record of the Common Tern from British Honduras is of a bird banded in the Great Lakes region and recovered at Belize (Austin, 1953: 46, 52).

Sterna dougallii Montagu

Roseate Tern

SPECIMEN. CRITICAL PUBLISHED RECORD: Grassy Cay in Turneffe Islands (Salvin, 1864: 387).

On May 20, 1862, Salvin collected a male Roseate Tern from three or four that he saw on Grassy Cay. He also commented (1866: 199) that he thought they were "preparing to breed on that island." Griscom (1926: 7) recorded the species in Chetumal Bay on January 17, 1926. If the birds seen by Griscom were in British Honduran waters, they represent the only point of record, except for Belize, other than Salvin's. Belize is included with Grassy Cay as a British Honduran locality by Salvin and Godman (Biologia, 1903: 404), but I suspect this was a lapsus, for Belize was not included in earlier reports by Salvin.

Sterna anaethetus Scopoli

Bridled Tern

SPECIMENS. USNM: One specimen from Saddle Cay in Lighthouse Reef; May 10, 1862. CRITICAL PUBLISHED RECORD: Southern Water Cay (Saunders, 1896: 106).

Bridled Terns have been recorded in British Honduras only in May, 1862, by Salvin who collected them on Saddle and Southern Water Cays. He found nesting colonies on Saddle, Ellen, and Curlew Cays (Salvin, 1864: 385) and possibly also Southern Water Cay.

Specimens from British Honduras are generally assigned to S. a. recognita.^{86/}

Sterna fuscata Linnaeus

Sooty Tern

SPECIMENS. LSUMZ: Round Cay - ♀, May 15, 1958. CRITICAL PUBLISHED RECORD: Curlew Cay (Salvin, 1864: 385).

In the first account of his two weeks trip among the keys of British Honduras, Salvin states (1864: 385) that he saw this species on Ellen and Curlew Cays and collected one bird. Coues (1864: 392) mentions "one specimen only, from Curlew Cay" with reference to the Sooty Tern collected by Salvin in 1862. Salvin (1866: 200) again writes of this species, "I only met with a few solitary birds of this species about the

Cays of the Belize Coast." In the Catalogue of the Birds of the British Museum (Saunders, 1896: 110), there is a Salvin specimen listed from Southern Water Cay. I assume that the specimen from Southern Water Cay is the same specimen as the one Salvin and Coues reported from Curlew Cay; the two islands are less than three miles apart and the localities could have inadvertently been exchanged. Salvin and Godman (1903: 409) writing in the Biologia include a nesting record of the Sooty Tern from Saddle Cay. This may be an error, as it is the first mention of nesting, and Salvin (1866: 200) earlier stated he encountered only "a few solitary birds." The species was not recorded again until the spring of 1958, when Verner made a search for nesting terns. On that trip, Verner found a colony with nests containing eggs on Round Cay.

British Honduran Sooty Terns are referable to S. f. fuscata.^{87/}

Sterna albifrons Pallas

Least Tern

SPECIMENS. USNM: One specimen from Long Cay in Glover's Reef; May 14, 1862.

The Least Terns that Salvin found on Long Cay on May 14, 1862, were about to lay (Salvin, 1864: 384), and on Grassy Cay on May 19, he found eggs of this

species (Oates, 1901: 195). This tern has not been recorded in British Honduras since Salvin's trip.

Least Tern's breeding in the Caribbean area are representative of S. a. antillarum.^{88/}

Thalasseus maximus (Boddaert)

Royal Tern

SPECIMENS. LSUMZ: Stann Creek - ? (380.6 g.), Mar. 28, 1956. OTHER MUSEUMS (CC, CM, MCZ): Five specimens from the mouth of the Manatee River, Wild Cane Cay; Mar., Dec. CRITICAL PUBLISHED RECORD: Long Cay in Glover's Reef (Salvin, 1864: 385).

Royal Terns are moderately common winter visitants and have been recorded at many coastal and insular localities between extreme dates of November 20 and May 2. I expect some individuals will eventually be recorded in the summer and early autumn. On July 24, 1935, Mr. E. M. Burton banded a Royal Tern in Charleston County, South Carolina, which was recovered at Corozal on April 1, 1936 (Lincoln, 1936: 148).

I assign the specimens from the Colony to T. m.^{89/}
maximus.

Thalasseus sandvicensis (Latham)

Sandwich Tern

SPECIMENS. UMMZ: One specimen from Belize; Nov. 11, 1927. CRITICAL PUBLISHED RECORD: Saddle Cay in Lighthouse Reef (Salvin, 1864: 381).

Salvin found the species nesting on Northern Two Cays, for eggs collected by Salvin are listed from that locality in the Catalogue of the Collection of Birds' Eggs in the British Museum (Oates, 1901: 187). On January 17, 1926, Griscom (1926: 7) saw 20 Sandwich Terns in Chetumal Bay. The only additional records from the Colony consist of six and twelve individuals that van Tets saw feeding in the Belize harbor on December 21, 1960, and January 3, 1961, respectively.

I refer the British Honduran specimens to T. s.
90/
acuflavidus, which is the only race recorded in North and Central American waters.

Anous stolidus (Linnaeus)

Brown Noddy

SPECIMENS. LSUMZ: South West Cay in Glover's Reef - 3 ♀'s (185.5, 185.7, 203.2), Apr. 25; 2 ♂'s (164.4, 167.0), Apr. 26, 1956. OTHER MUSEUMS (CC, CM, UMMZ, USNM): Thirty specimens from South West Cay collected in April and May; one specimen from Sergeant's Cay collected June 23, 1930. CRITICAL PUBLISHED RECORD: Cay Dolores Channel (Saunders, 1896: 140).

Salvin (1864: 383-385) found eggs and nestlings about May 12 to 17, 1862, on South West, Ellen, Curlew, and Southern Water Cays. He collected specimens on South West Cay and in Cay Dolores Channel. On April 17 and 21, 1907, Berry obtained a series of Noddy Terns, also on South West Cay. Blake and Agostini collected a number of specimens on this same key on May 29, 1935,

and noted young birds in the nests. Dennett and I collected on South West Cay on April 25 and 26, 1956, and found a colony of 300 to 400 Noddy Terns. These birds were in the process of building their nests 60 feet above the ground in the axils of leaves of the coconut palms. Salvin (1864: 383) also indicated that this tern was nesting in the tops of coconut palms. Noddy Terns once nested on Round and Pompion Cays, according to Mr. Austin Garbutt, lightkeeper on English Cay. In 1958, Verner searched for Noddies on these two keys but found none.

Noddy Terns from British Honduras are referable to A. s. stolidus.^{91/}

Anous tenuirostris Temminick

Black Noddy

SPECIMENS. LSUMZ: "British Honduras" - ♂, [Apr. 13,] 1907. OTHER MUSEUMS (CC, USNM): Thirteen specimens from South West Cay in Glover's Reef, Morgan Cay; May, 1862: Apr., 1907.

Only two collectors have recorded Black Noddies in British Honduran waters. Salvin (1864: 383-384) found the species nesting, with eggs on "point of hatching," on South West Cay on May 12, 1862. On April 13 and 17, 1907, on the same key and on Morgan Cay, Berry collected this tern and found it breeding in considerable numbers. Although South West Cay and other islands in the vicinity have been searched for the Black Noddy since

1907, it has not been found again. I do not think it likely that the species still breeds on South West Cay, although there may be other small keys that have a nesting colony. Mr. R. K. Masson, Sr., who was Comptroller of Customs and Lighthouse Inspector in British Honduras for many years, knew that two "kinds" of noddies once nested on South West Cay and had seen the "small noddy" nesting on Tom Owens Cay about 1950. A systematic search of the many small keys off British Honduras will be required to determine the definite status of this and several other species of Laridae.

Mathews (1912: 423) described a new subspecies A. t. americanus^{92/} on the basis of specimens from British Honduras. Until recently, when the Black Noddy was found on several islands off the northern coast of South America, the British Honduran colony was the only known population of the race. Unfortunately, only one of the series of 12 skins that was in the Coe College collection is now extant. I recognize A. t. americanus, but I do feel that Mathew's race needs critical review with the aid of recently collected specimens from the Caribbean area.

Family COLUMBIDAE

Columba leucocephala Linnaeus

White-crowned Pigeon

SPECIMENS. LSUMZ: Calabash Cay - ♂ (240.5 g.), Apr. 11. Half Moon Cay - ♀, Apr. 7. OTHER MUSEUMS (CC, UMMZ): Four specimens from Cay Corker, Manatee River; Aug., Dec. CRITICAL PUBLISHED RECORD: Middle Cay of Glover's Reef (Salvin, 1864: 383).

I know of no records of the White-crowned Pigeon in British Honduras during July, September, October, or November. In the remaining months, it has been seen frequently but in small numbers on many of the mangrove covered keys, but only once on the mainland (December, Manatee River). Practically no field work has been done on the islands in summer and fall; consequently, the lack of records at these seasons is perhaps not significant. Verner noted one to seven individuals nearly every day in his three months stay on Half Moon Cay in the spring of 1958. There is no information concerning breeding except that the female collected April 7 had a slightly enlarged ovary and that the testes of the male taken April 11 were not enlarged.

Columba flavirostris Wagler

Red-billed Pigeon

SPECIMEN. LSUMZ: Corozal - ♀, Aug. 19, 1960.

Lay saw two Red-billed Pigeons and collected one of them in tall woods on the outskirts of Corozal. The

bird had a fully enlarged ovary. There are no other records of the species from the Colony.

I refer the specimen to C. f. flavirostris.^{93/}

Columba cayennensis Bonnaterre

Pale-vented Pigeon

SPECIMENS. LSUMZ: Hill Bank - ♂ (238.1 g.), Feb. 24.
OTHER MUSEUMS (CC, CM, MCZ): Eleven specimens from the Manatee Lagoon area, Freetown; Mar., Apr., May, June, July, Aug.

Pale-vented Pigeons are moderately common residents from Orange Walk, Hill Bank, and Gallon Jug south through the coastal plain to the Toledo District. The species is unrecorded above an elevation of 400 feet in the Colony and I did not find it in the vicinity of San Pedro Columbia. The species is shy and arboreal and is most numerous in open woodlands, at the edge of pinelands, and in the tops of tall trees near lagoons. Peck found seven nests between May 3 and May 31, and one on July 22, each with only one egg. In his notes, Peck indicates that some nests were situated in low bushes, mangroves, and tufts of grass, but others were placed as high as 50 feet in pine trees.

The race to which I refer the British Honduran specimens is C. c. pallidicrissa.^{94/}

Columba speciosa Gmelin

Scaled Pigeon

SPECIMENS. LSUMZ: Hill Bank - ♂ (274.5 g.), Nov. 26. Gallon Jug - ♀ (272.8), Mar. 21; ♂ (256.1), Mar. 26; ♂ (271.7), May 31; ♂ (267.8), June 2. OTHER MUSEUMS (UM, UMMZ): Four specimens from the Manatee Lagoon area, 12 mi. S Cayo; Feb., Mar., Aug., Dec.

The species is a moderately common resident of heavy rain forest, the forest borders, and tall second growth, and it is not infrequently found in pinelands. I normally recorded fewer than four individuals in a day in the field, but in late November in a very heavily overgrown "broken pine ridge" near Hill Bank I counted 50 Scaled Pigeons. Possibly this species wanders in the winter. I attribute the paucity of localities of record (Sittee River, South Stann Creek, the San Pedro Columbia area, and Toledo Settlement are the only additional localities) to the inconspicuousness of the birds. The "mountain pigeon", as many people call the species, is difficult to detect, especially when perched high in a forest tree. Peck found two nests of The Scaled Pigeon, each containing one egg, one on April 22 and the other on September 2. The nests were situated about 12 feet above the ground in small vine-entangled trees in huamil of medium height. A male collected by van Tyne in the Mountain Pine Ridge on February 27 weighed 313 grams including 35 grams of food (mostly palm seeds) in the crop. The bird had enlarged testes and was presumably breeding.

Specimens collected in March, May, and June at Gallon Jug also had enlarged gonads.

Columba nigrirostris Sclater

Short-billed Pigeon

SPECIMENS. LSUMZ: Gallon Jug - ♂ (159.1 g.), Mar. 11; ♀ (124.8), Mar. 20; ♂ (156.4), Apr. 5. Two mi. W San Pedro Columbia - ♀ (145.5), May 13; ♀ (154.7), May 18. OTHER MUSEUMS (BM, CM, CNHM, MCZ): Ten specimens from the Manatee Lagoon area, Cayo, San Felipe, Augustine, Pomona; Feb., Mar., Apr., June, July, Sept., Nov. CRITICAL PUBLISHED RECORD: Vicinity of Belize (Salvadori, 1893: 323).

Short-billed Pigeons are common residents of the vast regions of tall humid forests and are moderately common in high second growth. The species apparently does not flock, for I have seen only pairs or single individuals. As with other members of the genus that perch high in the forest trees, it is very likely to be overlooked unless it is calling. In April and May, I found it the most abundant pigeon in the Cockscomb Basin. Locally its song is expressed as "Tres pe-sos son." All the individuals collected in March, April, or May at Gallon Jug and San Pedro Columbia were breeding.

Zenaidura macroura (Linnaeus)

Mourning Dove

SPECIMENS. LSUMZ: Hill Bank - ♂ (98.7 g.), Nov. 26, 1956. Augustine - ♂, Dec. 8, 1956. OTHER MUSEUM (MCZ): Toledo Settlement - ♂, October 17, 1906.

The Mourning Dove is a moderately common winter visitant and presumably also a transient. Pine ridges and cultivated land, especially cane fields, are its preferred habitats while in the Colony. On December 4, 1956, I counted over 100 doves along the highway right-of-way between Orange Walk and Corozal. The specimen collected by Peck on October 17 represents the earliest fall date in British Honduras, and an unspecified date in March (Peck notes) is the latest spring record.

Ridgway (1916: 341) referred the bird from Toledo Settlement to the West Indian race, Z. m. macroura^{95/}. I was unable to identify the two specimens in the LSUMZ to subspecies.

Columbina passerina (Linnaeus)

Common Ground Dove

SPECIMENS. CM, MCZ, UMMZ: Seven specimens from eight mi. NW Belize, Manatee Lagoon area, Toledo Settlement; Jan., Feb., Apr., May, June. CRITICAL PUBLISHED RECORD: Orange Walk (Salvadori, 1893: 479).

This resident dove is local in British Honduras. Cayo (Holt, notes) and Camp VI (Austin, 1929: 370) are the only points of record not listed above. Field parties from the LSUMZ have not recorded the species, but the field notes of Holt, Peck, and Shufeldt indicate that it is found in pinelands, brushy pastures, and clearings. Peck found nests and eggs in late May and June in the pine ridges.

I refer the British Honduran specimens to C. p.
^{96/}
pallescens.

Columbina minuta (Linnaeus)

Plain-breasted Ground Dove

SPECIMENS. LSUMZ: Three mi. NE Hill Bank - ♀, Mar. 23; ♂ (34.0 g.), Apr. 1. OTHER MUSEUMS (CM, MCZ, UMMZ): Thirteen specimens from pine ridges N and W of Belize, the Manatee Lagoon area, All Pines, Toledo Settlement; Jan., Feb., Mar., Apr.

This small ground dove is an uncommon resident of the pinelands of the coastal areas of the northern two-thirds of the Colony. I did not see it in the extreme southern third, but Peck noted it in cultivated fields at Toledo Settlement and found it breeding there in May. Two birds collected at the Belize airfield on February 28 by Shufeldt were breeding, as were the four individuals taken by Blake and Agostini in April at All Pines.

^{97/}
C. m. interrupta is the race to which I assign the specimens from British Honduras.

Columbina talpacoti (Temminck)

‡ Ruddy Ground Dove

SPECIMENS. LSUMZ: Gallon Jug - ♂ (49.2 g.), Feb. 22; ♀ (44.2), Mar. 14; ♂ (56.3), Nov. 16. OTHER MUSEUMS (CM, CNHM, UMMZ): Three specimens from Belize, Cayo, Middlesex; Feb., Apr.

The Ruddy Ground Dove is a locally common resident and has been recorded in the vicinity of Corozal, Orange

Walk, Hill Bank, Gallon Jug, Belize, Cayo, Stann Creek Valley, and San Pedro Columbia. The species is most frequently seen in small flocks on the ground on the roadsides or in cleared areas. At Gallon Jug I captured several individuals in mist nets suspended in low dense second growth near plantations. Birds collected in February and April were breeding, and the testes of the male taken in October were slightly enlarged.

British Honduran specimens are typical of the race ^{98/}
C. t. rufipennis.

Claravis pretiosa (Ferrari-Perez)

Blue Ground Dove

SPECIMENS. LSUMZ: Gallon Jug - ♀ (68.5 g.), Feb. 18; ♂ (76.6), Mar. 21. Two mi. W San Pedro Columbia - ♂ (71.4), May 3. OTHER MUSEUMS (CM, USNM): Five specimens from the Manatee Lagoon area, Cayo; Mar., Aug., Sept. CRITICAL PUBLISHED RECORDS: Orange Walk, Belize (Salvadori, 1893: 493).

Rain forest clearings and tall second growth provide the habitat in British Honduras for this largely terrestrial species. Along with many other resident doves, it is somewhat local in its distribution and does not occur in every locality where the habitat appears suitable. Yet in some places, for example, Gallon Jug and the Stann Creek Valley, it is common. Peck recorded it in the pine ridges near Manatee Lagoon, but I failed to find it in pinelands in any region. Additional points of record are provided by Austin (1929: 371) who saw it "in small flocks

in the roads and clearings all through the rain forest" in the Camp VI to Mountain Cow area. The birds taken at Gallon Jug and San Pedro Columbia had fully enlarged gonads.

Leptotila verreauxi (Bonaparte)

White-fronted Dove

SPECIMENS. LSUMZ: Corozal - ♀, Aug. 16, 1960. OTHER MUSEUM (CM): Manatee Lagoon - ♂, June 22, 1905.

Species of Leptotila are notoriously difficult to identify in the field. The observer rarely has more than a momentary glimpse of a dark terrestrial dove as it disappears behind a tree trunk or fallen log. Lay collected a female White-fronted Dove in breeding condition at Corozal in tall second growth, and Peck obtained a specimen in the forest near Manatee Lagoon. In tall second growth at Gallon Jug and Hill Bank in the spring and summer of 1957, Willis several times recorded a dove he believed to be of this species. There is a possibility the dove noted by Willis was L. jamaicensis, a species never reported from the Colony. At Agua Blanca, Quintana Roo, a locality on the Rio Hondo less than 35 miles from Gallon Jug and Hill Bank, Paynter (1955: 122) found L. plumbeiceps, numerous examples of L. jamaicensis, but no L. verreauxi.

The two specimens from British Honduras are referable to L. v. fulviventris.^{99/}

Leptotila plumbeiceps Sclater and Salvin

Gray-headed Dove

SPECIMENS. LSUMZ: Gallon Jug - ♂, ♀ (139.4, 163.5 g.), Mar. 5; ♂ (162.1), Mar. 20; ♂ (161.0), June 2; ♀ (163.2), Nov. 10; ♂ (165.2), Nov. 12; ♀ (205.0), Nov. 13; 2 ♀'s (161.8, 191.8), Nov. 16. Two mi. NW Augustine - ♀, Dec. 12. Ballerina Camp - ♂ (192.4), Apr. 30. OTHER MUSEUMS (CC, CM, UMMZ): Ten specimens from Belize, Manatee Lagoon area, Duck Run, Cayo, Freetown; Jan., Apr., May, June, July, Dec. CRITICAL PUBLISHED RECORD: Orange Walk (Salvadori, 1893: 551).

The Gray-headed Dove is a common resident in the northern two-thirds of the Colony on the floor of tall, wet forest and high second growth. It is unrecorded from Toledo District. Willis found six nests in the period of February to June at Gallon Jug. The gonads of half the specimens collected in the fall were enlarged; some contained ova about 2 mm. in diameter. Several individuals were extremely fat.

The specimens are typical of L. p. plumbeiceps.^{100/}

Leptotila cassinii (Lawrence)

Cassin's Dove

SPECIMENS. LSUMZ: Four mi. W Stann Creek - ♂ (162.2 g.), Mar. 28. Ballerina Camp - ♂ (173.4), Apr. 24; ♂ (163.4), Apr. 30. Two mi. W San Pedro Columbia - ♀ (142.7), May 3; ♀ (158.9), May 4; ♂ (163.0), May 11; 2 ♂'s, ♀ (149.2, 131.6, 179.4), May 21. OTHER MUSEUMS (BM, CC, CM, MCZ): Eleven specimens from the Manatee Lagoon area, Cayo, Freetown, Toledo Settlement; Apr., May, June, July, Oct.

Cassin's Dove is common in the vicinity of Ballerina Camp, San Pedro Columbia, and Manatee Lagoon, where

collecting has confirmed field indentifications. Its preferred habitat appears to be the ground in medium and high second growth where the vegetation is rather dense but the floor is relatively open. I have not recorded this species in the heart of rain forest, although it does occur within the forest border. The habitats of L. cassinii and L. plumbeiceps rarely overlap; in general, the former species is one of second growth, the latter of heavy forest. I have collected breeding birds in March, April, and May, and Blancaneaux obtained eggs at Cayo in June (Oates, 1901: 105). I do not have data to indicate whether the species breeds in other months also.

L. c. cerviniventris^{101/} ranges from Mexico to Panamá.

Geotrygon montana (Linnaeus)

Ruddy Quail-Dove

SPECIMENS. LSUMZ: Gallon Jug - ♂ (143.0 g.), Feb. 6. Two mi. SSE Victoria Peak - ♂, May 8. OTHER MUSEUMS (CM, MCZ): Eleven specimens from the Manatee Lagoon area, Augustine, Toledo Settlement; Feb., Mar., Apr., Sept., Oct., Dec. CRITICAL PUBLISHED RECORD: Orange Walk (Salvadori, 1893: 569).

The species is an extremely inconspicuous terrestrial resident of heavy rain forests. Although it has been recorded only at the localities where it was collected, it is probably moderately common in all undisturbed rain forest areas. Both Lancaster and Willis found the Ruddy Quail-Dove frequently during the course of their field

work in limited study areas at Gallon Jug. Peck thought the species "plentiful" at Manatee Lagoon. In April and May at Gallon Jug Willis found four nests constructed on brushpiles or stumps, within 6 feet of the ground. Only two nests contained eggs.

The race of this species in British Honduras is G. m.
102/
montana.

Family PSITTACIDAE

Ara macao (Linnaeus)

Scarlet Macaw

SPECIMEN. LSUMZ: Ballerina Camp - ♂ (1153 g.), Apr. 22, 1955.

Flocks of a few to 30 macaws frequent the uninhabited headwaters of many of the larger streams in the central part of British Honduras. I have seen "guacamayas", as they are called locally, in the Mountain Pine Ridge, along the Eastern Branch of the Belize River, near the Hummingbird Highway, and in the upper parts of South Stann Creek. They ascend to 3000 feet or more in the Cockscomb Mountains; and in late May 1959, I saw a pair of macaws attending what I suspect was an occupied nest in a tall tree on the crest of a narrow ridge south of Victoria Peak. In the Mountain Pine Ridge, flocks are sometimes observed in pine trees a short distance from the rain forest. Macaws, to

my knowledge, do not enter the coastal plain in British Honduras, although escaped cage birds have been seen near Belize.

Aratinga astec (Sovancé)

Aztec Parakeet

SPECIMENS. LSUMZ: Gallon Jug - ♀ (73.3 g.), Mar. 2. Augustine - ♀, Aug. 23. Two mi. W San Pedro Columbia - ♀ (79.7), May 20. OTHER MUSEUMS (CC, CM, MCZ, PC, UMMZ): Twenty-five specimens from Belize, Manatee Lagoon area, Duck Run, 12 mi. S Cayo, Camp VI, Mountain Cow; all months except May, June, Sept., Oct. CRITICAL PUBLISHED RECORD: Orange Walk (Salvadori, 1891: 193).

The Aztec Parakeet is widely distributed in the mainland of the Colony and has been observed in pairs or small flocks at nearly every collecting station. It occurs in all wooded habitats and in the semi-open but is least common in the heart of rain forest. I have seen this resident often in the pine ridges, and Peck noted it on the beach at the mouth of the Manatee River. Although Aratinga astec is moderately common and enjoys the greatest habitat range of the British Honduran parrots, other forest parrots are recorded more frequently and in greater numbers. At Gallon Jug, for example, Pionus senilis, Pionopsitta haematotis, Amazona autumnalis, and Amazona farinosa are more common. Breeding in April and May is indicated by the enlarged gonads of Aztec Parakeets collected in those months.

103/

A. a. astec ranges from southern Mexico to western Panamá.

Pionopsitta haematotis (Sclater and Salvin)

Brown-hooded Parrot

SPECIMENS. LSUMZ: Gallon Jug - ♀, Feb. 17. Ballerina Camp - ♂ (131.7 g.), Apr. 30. OTHER MUSEUMS (BM, CC, CM, PC): Eighteen specimens from the Manatee Lagoon area, Duck Run, San Antonio, N slope Cockscomb Mts. (1500'), Freetown, Toledo Settlement; Jan., Mar., Apr., May, July, Oct., Dec. CRITICAL PUBLISHED RECORD: Orange Walk (Salvadori, 1891: 344).

This species is an inconspicuous but common resident of the tall forests of the Colony. Small flocks of Brown-hooded Parrots may feed unnoticed high in the treetops until their presence is made known by an occasional warbling call or a falling fruit. They remain quiet and still when alarmed. Only three of ten birds shot in April and May had enlarged gonads. Specimens collected at other seasons are without breeding data or were not breeding.

The Central American race is P. h. hematotis.^{104/}

Pionus senilis (Spix)

White-crowned Parrot

SPECIMENS. LSUMZ: Gallon Jug - ♀ (193.2 g.), Mar. 1; ♀ (203.6), Mar. 9; ♂ (198.6), May 29. Sibun River at Hummingbird Hwy. - ♂ (215.1), Mar. 26. Augustine - ♂ (228.8), May 5. Two mi. NE Millionario - ♀ (209.7), Mar. 15. OTHER MUSEUMS (BM, CC, CM, MCZ, PC, UMMZ): Twenty-nine specimens from the Manatee Lagoon area, Duck Run, Cayo, 12 mi. S Cayo, Camp VI, Freetown; all months except June, Sept., Nov., Dec. CRITICAL PUBLISHED RECORDS: Orange Walk, vicinity of Belize (Salvadori, 1891: 332).

In nearly every part of the Colony, White-crowned Parrots are noisy and conspicuous residents of forests

(especially near their borders), the semi-open, and pinelands. Willis noted adults of this common species occupying nesting cavities in late February and March, and Peck found a nest containing three eggs in mid-April. The three holes were about 17, 24, and 27 feet above the ground. The testes of the specimen collected at Augustine in May were enlarged.

I refer British Honduran specimens to P. s. senilis.^{105/} Adults from the Colony are not distinguishable from San Luis Potosí specimens in the USNM. On the basis of the few Costa Rican specimens that I have examined, I agree with Brodkorb (1943: 41) in doubting the validity of P. s. decoloratus.^{106/}

Amazona xantholora (Gray)

Yellow-lored Parrot

SPECIMENS. CC, CM, MCZ, UMMZ: Twelve specimens from Belize, Manatee Lagoon area, Duck Run; Apr., May, June, Nov. CRITICAL PUBLISHED RECORD: Orange Walk (Salvadori, 1891: 314).

Peck observed this parrot "in considerable numbers" in the pine ridges near the Sibun River and Manatee Lagoon, and Holt collected two from oak trees in the pine ridge near Duck Run. It is probable that the Belize specimen was taken in the pinelands near the city. Young birds occupied each of the four nests found by Peck in April and May. Amazona albifrons also enters the pine

ridges, and it is probable that the two sibling species have often been misidentified in the field.

Amazona albifrons (Sparrmann)

White-fronted Parrot

SPECIMENS. LSUMZ: Hill Bank - ♀ (205.7 g.), Nov. 26. Gallon Jug - ♂ (198.6), Mar. 22. OTHER MUSEUMS (BM, CM, UMMZ): Five specimens from the Manatee Lagoon area, Cayo; Mar., June.

Lay saw this uncommon species at Corozal and I recorded it near Pomona; these are the only localities where it has been observed with certainty but not collected. The White-fronted Parrot inhabits high second growth, the edge of rain forest, pinelands, and areas with scattered tall trees. The female collected in November at Hill Bank had a slightly enlarged ovary.

The British Honduran specimens are typical of the small Yucatán Peninsula race, A. a. nana.^{107/}

Amazona autumnalis (Linnaeus)

Yellow-cheeked Parrot

SPECIMENS. LSUMZ: Gallon Jug - ♀ (332.6 g.), Feb. 24; ♂, ♀ (336.1, 376.5), Mar. 16; ♀, June 15. OTHER MUSEUMS (BM, CC, CM, MCZ, PC, UMMZ): Twenty-one specimens from Belize, Manatee Lagoon area, Cayo, 12 mi. S Cayo, pine ridge near Camp VI, Freetown, All Pines, Toledo Settlement; all months except Jan., June, July, Sept.

Yellow-cheeked Parrots are common and widely distributed residents of most parts of British Honduras. In the extreme southern region of the Colony, this parrot is

present but it seemed less numerous to me than in the north. Plantation clearings and second growth in the immediate vicinity of tall rain forest are its usual habitats, but the species also penetrates the forests and is not uncommon in the pine ridges. Yellow-cheeked Parrots frequently raid ripening citrus and mango fruits, along with other parrot species. I have collected birds in breeding condition in February and March; Peck found a nest containing two eggs on March 16 and holes presumably occupied by nesting individuals as late as May 20.

^{108/}
A. a. autumnalis is the subspecies to which I assign the British Honduran specimens.

Amazona ochrocephala (Gmelin)

Yellow-headed Parrot

SPECIMENS. LSUMZ: Hill Bank - ♀ (410.0 g.), Feb. 21; ♂ (460.8), Nov. 20. Gallon Jug - ♂, May 5. OTHER MUSE-UMS (BM, CM, MCZ): Four specimens from Crooked Tree Lagoon, All Pines, Ycacos Lagoon; Mar., Apr. CRITICAL PUBLISHED RECORD: Belize (Salvin, 1866: 195).

The personable "yellow-head," as it is called in British Honduras, is local in its distribution in the Colony and is common only in the vicinity of the Hill Bank and Ycacos Lagoons and the lower sections of the Sibun and Sittee Rivers. The species roosts and nests in the pine ridges but flies daily into nearby tall, humid forests in order to feed. At twilight, pairs or loose groups of several pairs of loudly calling Yellow-headed Parrots regularly flew east across the Hill Bank

Lagoon to the pine ridges. yellow-heads usually roost in the highest branches of tall pines, one or two pairs to a tree. Peck found nest cavities containing eggs in pine trees in March and April, and in May he found a nest holding a young bird. The female that I collected in February contained an ovum 5 mm. in diameter, and the male collected by Lancaster in May had enlarged testes.

I refer specimens from the Colony to A. o. oratrix.^{109/}

Amazona farinosa (Boddaert)

Blue-crowned Parrot

SPECIMENS. LSUMZ: Gallon Jug - ♂, Mar. 29, 1955.
OTHER MUSEUMS (CM, PC): Near Manatee Lagoon - ♀, Oct. 17, 1905; ♀, Oct. 19, 1905. N slope Cockscomb Mts. (1600') - ♂, Mar. 25, 1935.

The raucous cry of this large parrot sounds to local people like the words of warning "watch out!", and they therefore call it the "watch-out parrot." It is a moderately common resident in or close to tall, humid forests, and I have seen it near Hill Bank, the edge of the Mountain Pine Ridge, Millionario, and San Pedro Columbia in addition to the collecting localities. I have no evidence indicating the breeding season.

The race occupying northern Central America is A. f. guatemalae.^{110/}

[Coccyzus erythrophthalmus (Wilson)]

Black-billed Cuckoo

In his notes, Peck recorded seeing one Black-billed Cuckoo at Toledo Settlement on November 15, 1906. Peck included no qualifying comments in his notes. Since the species is rare in Central America, it should not be considered a species recorded without question in British Honduras.

Family CUCULIDAE

Coccyzus americanus (Linnaeus)

Yellow-billed Cuckoo

SPECIMENS. LSUMZ: Half Moon Cay - ♀ (48.1 g.), May 6, 1958.

Verner collected the specimen listed, a female with a slightly enlarged ovary. He observed others on the island on March 26, April 17 and 18, and May 5, 6, 7, and 8. On most dates, only one cuckoo was seen, but on May 7 Verner counted 12. I watched one Yellow-billed Cuckoo at Ballerina Camp on April 26, 1955, the only additional record from the Colony.

The wing of the specimen measures 149.5, the tail 148.5, and the exposed culmen 27.0 mm. These measurements are near the mean for C. a. occidentalis^{111/} but still within the upper limits of C. a. americanus^{112/}. Use of a trinomial is not advisable in this case.

Coccyzus minor (Gmelin)

Mangrove cuckoo

SPECIMENS. CM, UMMZ: Belize - ♀, Oct. 23, 1931.
 Manatee Lagoon - ♂, Dec. 10, 1905. Cayo - ♂, Apr.
 8, 1926.

The three specimens were obtained by Shufeldt, Peck, and Holt, respectively. The bird collected by Holt at Cayo had enlarged testes and was taken from low growth on the riverbank. Peck states in his notes that he saw three Mangrove Cuckoos (including the one he collected) in the edge of the pineland near the Manatee Lagoon. I have not seen this species and presume that it is rare, although it is to be expected in the extensive coastal mangrove swamps.

The specimens are referable to C. m. continentalis.^{113/}

Piaya cayana (Linnaeus)

Squirrel cuckoo

SPECIMENS. LSUMZ: Hill Bank - ♂ (96.1 g.), Feb. 18. Gallon Jug - ♀, Feb. 18; ? (103.1), Feb. 26; ♂ (89.2), Mar. 16; ♂ (90.0), Apr. 5; ♂ (110.5), Oct. 26; ♂ (103.2), Nov. 6. Augustine - ♀, Aug. 16. Two mi. W San Pedro Columbia - ♂ (110.8), May 8. OTHER MUSEUMS (CC, CM, MCZ, PC, UMMZ): Nineteen specimens from Belize, Manatee Lagoon area, Duck Run, Cayo, Camp VI, Mountain Cow, Toledo Settlement; Jan., Feb., Mar., Apr., July, Aug., Dec.

The resident Squirrel cuckoo is found in forests of all heights, tall second growth, and the scattered trees of the semi-open. Its explosive call, resembling its local name, "pe-quam," may be heard in almost all parts of the mainland of the Colony. More than four individuals

are rarely recorded in a day of field work but the species is seen with great regularity in suitable habitats. The gonads of most of the cuckoos dissected in February, March, April, and May were slightly enlarged. Considerable fat was present on the two birds collected in October and November.

The race P. c. thermophila^{114/} ranges through eastern Mexico and south to Panamá.

Crotophaga ani Linnaeus

Smooth-billed Ani

SPECIMEN. CC: Middle Long Cay - ♀, Apr. 23, 1907.

The sole specimen from British Honduras was examined some years ago by Todd. However, in a recent check of the British Honduran skins in the Coe College collection, Dr. Karl E. Goellner was unable to find this ani.

Crotophaga sulcirostris Swainson

Groove-billed Ani

SPECIMENS. LSUMZ: Gallon Jug - ♀ (66.6 g.), Mar. 27; ♂ (82.7), May 9. OTHER MUSEUMS (BM, CC, CM, MCZ, PC, UMMZ): Twenty-three specimens from Belize, the Manatee Lagoon area, Cayo, Freetown, All Pines; all months except June, Aug., Sept. CRITICAL PUBLISHED RECORD: Orange Walk (Shelly, 1891: 433).

Pastures, thickets, second growth, riverbanks, and forest borders provide habitats for this common resident throughout most parts of mainland British Honduras. It

is less common in the vicinity of extensive rain forest and in the Mountain Pine Ridge. Half Moon Cay is the only key on which the species has been seen. There Holt in 1926 and Verner in 1958 saw it almost daily. Two birds collected April 25 and May 9 had slightly enlarged gonads. The only occupied nest found by Peck held one egg on June 3.

The nominate form, C. s. ^{115/}sulcirostris, ranges from Mexico to South America.

Tapera naevia (Linnaeus)

Striped Cuckoo

On November 24, 1956, I saw a Striped Cuckoo in low, dense second growth at Hill Bank. There are no other records of the species from British Honduras. Paynter (1955: 131) collected one of these cuckoos in a similar habitat at Uhetumal, Quintana Roo.

Family TYTONIDAE

Tyto alba (Scopoli)

Barn Owl

This owl has not been collected in British Honduras; but Dennett, Lancaster, and I have seen it in April and May at Cayo, and Willis recorded it at Gallon Jug in June.

Paul Scott, my local field assistant in 1959, described a Barn Owl to me and noted that one or more had resided in a building at Middlesex for some time.

British Honduras would presumably be included in the range of T. a. pratincola.^{116/}

Family STRIGIDAE

Otus guatemalae (Sharpe)

Vermiculated Screech Owl

Lancaster saw and heard a vermiculated Screech Owl in the daytime at Gallon Jug on February 5 and 6 and on March 6, 1958. Also at Gallon Jug, Willis noted an individual of an unidentified species of Otus on July 10, 1957.

O. g. guatemalae^{117/} has been collected about 75 miles west of Gallon Jug at Chuntuqui, Petén, Guatemala (Van Tyne, 1935: 18).

Bubo virginianus (Gmelin)

Great Horned Owl

SPECIMEN. MCZ: near Manatee Lagoon - ♂, May 20, 1906.

The specimen listed above was collected in the open pine ridge near Manatee Lagoon by Peck. The bird retains some of its down plumage; consequently it was probably reared in the area.

I have not critically examined the specimen, but Nelson (Bangs and Peck, 1908: 44) referred it to B. v.^{118/}mayensis, which he described. Webster and Orr (1958: 141) in their study of the Middle American populations of the species also examined the Manatee Lagoon bird and referred it to this race.

Pulsatrix perspicillata (Latham)

Spectacled Owl

SPECIMENS. LSUMZ: Gallon Jug - ♀ (981.5 g.), Mar. 12; ♀ (816.0), June 5. OTHER MUSEUMS (BM, CM, MCZ): Six specimens from Western Dist. [= Cayo Dist.], E slope Cockscomb Mts. (750'), Freetown, Toledo Settlement; Mar., May, Nov.

This species is an uncommon or inconspicuous resident of tall second growth and heavy forest in British Honduras. In addition to the two specimens that I collected at Gallon Jug, I saw one individual about 15 miles southeast of Cayo on December 7, 1956. Two specimens in the British Museum examined by Todd and noted by him as from "Western District" are probably birds obtained by Blancaneaux and listed in Part III of the Biologia by Salvin and Godman (1897: 28) as collected at "Cayo in the Western District."

The only recognized race of the Spectacled Owl in Central America is P. p. saturata.^{119/}

Glaucidium minutissimum (Wied)

Least Pygmy Owl

SPECIMENS. BM: Southern [= Mountain] Pine Ridge - sex ?, Jan. 12, 1888.

In 1934 Todd examined the specimen, which was collected by Blancaneaux, and referred it to G. m.
griseiceps^{120/}. Todd describes the bird in his notes as follows: "extreme rufescent phase, head almost as deep brown as back, browner than in any . . . skin from Guatemala, but [is] approached by one."

Glaucidium brasilianum (Gmelin)

Ferruginous Pygmy Owl

SPECIMENS. USNM: Gallon Jug - ♂ (60.5 g.), Feb. 8. Augustine - ♀ (74.6), Mar. 20; ♀, Aug. 13. Five mi. S Augustine - ♀ (77.7), Mar. 10. Ballerina Camp - ♀ (94.8), Mar. 9; ♂ (62.6), Apr. 23. OTHER MUSEUMS (MCZ, UMMZ): Six specimens from 12 mi. S Cayo, Augustine; Feb., Mar., Apr.

The Ferruginous Pygmy Owl is a moderately common resident of the Mountain Pine Ridge, where it usually frequents the narrow transitional area between open pineland and rain forest. The only additional point of record is Gallon Jug, where it is uncommon but presumably resident in the second growth at the forest edge. Individuals of this species are active and usually forage within 15 feet of the ground. The female collected March 9 was breeding, but the gonads of four

other specimens collected in February, March, and April were only slightly enlarged.

Specimens of this owl from British Honduras are referable to G. b. ridgwayi.^{121/}

Speotyto cunicularia (Molina)

Burrowing Owl

According to his notes, Peck collected two individuals of this species on the beach at the mouth of the Manatee River in January 1901. The present location of the specimens is unknown to me, and there are no other records from the Colony. It is not improbable that the Burrowing Owl occurs in British Honduras as a regular but rare winter visitant.

Specimens from the Colony would presumably be referable to S. c. hypugaea.^{122/}

Ciccaba virgata (Cassin)

Mottled Wood Owl

SPECIMENS. LSUMZ: Gallon Jug - ♀ (250.7 g.), Feb. 23; ♂ (177.4), Mar. 2; ?, May 2. Ballerina Camp - ♀ (344.9), Apr. 25. Two mi. NE Millionario - ♂ (242.1), Mar. 12. Two mi. W San Pedro Columbia - ♂ (229.8), May 9. OTHER MUSEUMS (CM, MCZ, UMMZ, USNM): Thirteen specimens from Belize, Manatee Lagoon area, Toledo Settlement; Jan., May, June, Oct., Nov., Dec. CRITICAL PUBLISHED RECORDS: Orange Walk, San Felipe (Salvin and Godman, Biologia, iii, 1897: 29); Cayo (Lantz, 1899: 219).

The species is a moderately common resident of heavy forest and medium to tall second growth throughout the

mainland of the Colony. It occasionally enters pine-lands, since Peck collected one bird in the pine ridge near Manatee Lagoon in October. Peck noted a nest near Ycacos Lagoon on March 16, 1907, which contained two eggs. A male collected near Millionario in March was in breeding condition, but four February, April, and May birds were not. At Gallon Jug on June 6, 1956, I saw a fledgling with an adult nearby.

I refer the British Honduran specimens to C. v.
^{123/}
centralis.

Ciccaba nigrolineata Selater

Black-and-white Owl

SPECIMENS. USUMZ: Ballerina Camp - ♂ (402.5 g.), Apr. 28, 1955. CRITICAL PUBLISHED RECORD: Cayo (Salvin and Godman, Biologia, iii, 1897: 27).

At Ballerina Camp, I lured an adult male about 200 yards to a nearby tree by imitating its loud, highpitched call — a who-ah, uttered almost as one note. I collected the bird. Its testes were not fully enlarged. Both this individual and another that I saw near Millionario on March 12, 1956, were in heavy forest. I presume the Black-and-white Owl is a rare resident in British Honduras.

Blake (1958:514) considered C. nigrolineata and C. huhula conspecific primarily on the basis of two specimens from Columbia that exhibit a combination of the characters of the two owls. Until the relationship between

these two species is further studied, I prefer to consider them monotypic species.

Asio stygius (Wagler)

Stygian Owl

SPECIMEN. LSUMZ: Five mi. W Baldy Beacon (about 2200') - ♂ (390.7 g.), Apr. 21, 1956.

The only Stygian Owl ever recorded in British Honduras flew into a pine tree in my lighted camp shortly after dark and perched on a limb 50 feet overhead from which I shot it. Open pineland surrounded the camp, although there was heavy forest in a ravine a mile distant. The bird was an adult but not in breeding condition.

I refer the specimen to A. s. robustus.^{124/}

Family NYCTIBIIDAE

Nyctibius griseus (Gmelin)

Common Potoo

SPECIMENS. LSUMZ: Gallon Jug - ♀ (250.4 g.), Feb. 7, 1958; ♂ (252.6), Mar. 7, 1955. OTHER MUSEUM (BM): One undated specimen from the Eastern Branch of the Belize River.

The two specimens from Gallon Jug were collected from the edge of the rain forest, one of them from the top of a telephone pole along a railroad track. The Common Potoo is an uncommon resident in British Honduras,

as indicated by the lack of additional records by museum personnel. It is known to some residents of the Colony as the "six-months bird," presumably because it habitually returns to the same perch month after month. The gonads of the Gallon Jug specimens were slightly enlarged.

British Honduras lies well within the range attributed to N. g. mexicanus.^{125/}

Family CAPRIMULGIDAE

Chordeiles acutipennis (Hermann)

Lesser Nighthawk

SPECIMENS. LSUMZ: Half Moon Cay - ♂ (55.6 g.), Apr. 8, 1958. Calabash Cay - ♂ (49.1), Apr. 9, 1956. OTHER MUSEUM (CM): All Pines - ♀, Apr. 17, 1935.

The Lesser Nighthawk has been observed regularly on the keys in spring (March 30 - May 8), presumably as a transient. It is unlikely that this nighthawk winters on the keys, for in the course of daily observations on Half Moon Cay in the spring of 1958, Verner did not see the species until March 30. Two individuals noted at Gallon Jug by Willis on February 28, 1957, and one on the following day, may have been winter visitants.

I refer the three specimens to C. a. texensis.^{126/}

The specimen from Calabash Cay is the smallest of the three specimens (wing 177, tail 104 mm.) but indistinguishable from birds from Texas. Oberholser (1914: 101)

includes British Honduras in the breeding range of the small race, C. a. micromeris^{127/}, but he did not examine any specimens from the Colony. I found no evidence indicating that the species breeds in British Honduras, although the breeding range of C. a. micromeris allegedly extends from southern Mexico to Nicaragua.

Chordeiles minor (Forster)

Common Nighthawk

SPECIMENS. LSUMZ: Augustine - ♀, Aug. 24, 1961. OTHER MUSEUM (MCZ): Augustine - ♀, Apr. 26, 1928. CRITICAL PUBLISHED RECORD: Southern [= Mountain] Pine Ridge (Hartert, 1892: 613).

I have seen and heard one to four individuals of this species migrating over the Mountain Pine Ridge from April 24 to May 5 and over the forest at South Stann Creek on April 24 and 25. Lancaster noted one Common Nighthawk at Gallon Jug on April 23, and at the same locality Willis saw one on April 12 and others from May 4 to May 11, including a flock of 20 on May 9. Willis recorded one bird at Gallon Jug on the very late date of June 5. Another at Hill Bank on August 1 was probably an early migrant.

I refer the specimen collected at Augustine in August to C. m. minor^{128/}. Austin (1929: 375) identified the bird he collected at Augustine in April as C. m. henryi^{129/}. The three specimens in the British Museum were

listed as C. m. henryi by Hartert in 1892, but several other races have been named subsequently.

Nyctidromus albigollis (Gmelin)

Pauraque

SPECIMENS. LSUMZ: Hill Bank - ?, Feb. 24. Gallon Jug - ♂ (46.9 g.), Feb. 21; ♂ (57.0), Feb. 23; ♀ (69.6, 66.6), Mar. 17; ♂ (84.8), Oct. 22. Two mi. W San Pedro Columbia - ♀ (72.9), May 7. OTHER MUSEUMS (BM, CC, CM, CNHM, MCZ, UMMZ): Thirty-seven specimens from Belize, Manatee Lagoon area, Duck Run, Cayo, Middlesex, 12 mi. S Cayo, Augustine, Camp VI, Freetown, Toledo Settlement; all months except June, July, Sept., Nov. CRITICAL PUBLISHED RECORD: Orange Walk (Hartert, 1892: 589).

The Pauraque, better known as "hoo-yoo" in British Honduras, is a common resident of the open areas of the mainland of the Colony and is especially abundant in the clearings bordering tall forest or second growth. The call of the Pauraque may be heard throughout the year, although it is very characteristic of the months from January to July. Like other caprimulgids, this species is crepuscular and nocturnal. Half a dozen individuals may occasionally be found in a small clearing, probably because such an area represents the most suitable habitat for the species in an otherwise overgrown region. Nests containing one or two eggs were found in April, May, and June; and I collected birds in breeding condition in mid-March.

I refer all British Honduran specimens to N. a.
130/
yucatanensis. I do not note any significant differences

between birds from the coastal areas and those from the more humid interior of the Colony. Weights vary considerably among the Gallon Jug specimens and can be correlated with the amount of fat stored by the bird.

Otophanes yucatanicus (Hartert)

Yucatán Poor-will

SPECIMEN. LSUMZ: Gallon Jug - ♀ (27.7 g.), Mar. 28, 1955.

The specimen, a female with a moderately enlarged ovary, was collected by Lancaster. Willis saw one or two individuals of this rare arboreal species on 19 dates in the period of February 16 to July 31 at Gallon Jug in 1958. He found four Yucatán Poor-wills at Hill Bank on August 3, 1958.

Caprimulgus salvini (Bangs and Peck)

Tawny-collared Nightjar

SPECIMENS. LSUMZ: Half Moon Cay - ♀ (64.3 g.), Feb. 28, 1958. OTHER MUSEUM (MCZ): Toledo Settlement - ♂, Jan. 2, 1907.

verner collected this species on Half Moon Cay, and also saw one bird there on March 1 and 26. The only additional record from the Colony is the type of the race C. s. badius^{131/}, collected by M. E. Peck. The presence of this nightjar on one of the small outer keys in late February and March suggests that the species is migratory.

However, specimens have been obtained in November in Campeche (Storer, 1961: 8) and in January in Yucatán (Paynter, 1955: 143). Paynter also recorded it on Cozumel Island on February 3 and found it nesting there on June 5. It is possible this species is resident on some of the wooded keys off British Honduras but wanders locally in winter and spring.

The Half Moon Cay specimen is assignable to C. s. badius.

Caprimulgus vociferus Wilson

Whip-poor-will

SPECIMEN. MCZ: Toledo Settlement - ♀, Nov. 3, 1906.

The specimen, collected by Peck, is referable to C. v. vociferus.^{132/}

Family APODIDAE

Streptoprocne zonaris (Shaw)

White-collared Swift

SPECIMENS. CM, MCZ, UMMZ: Seven specimens from Manatee Lagoon, Toledo Settlement; Feb., Aug., Sept.

The White-collared Swift was first recorded from British Honduras by Peck, who saw them almost daily in large flocks in September and October of 1906 at Toledo Settlement. From November into the following June, Peck

continued to see flocks at irregular intervals. On August 9, 1931, Shufeldt collected four birds from a large flock in the vicinity of Manatee Lagoon. I have seen the species at Gallon Jug in November, Augustine in December, Cubetas in March, and San Pedro Columbia in May. There are no other records from British Honduras and I do not know whether this swift nests in the Colony.

I have not critically examined the three specimens from Toledo Settlement, but Ridgway (1911: 701) referred them to S. z. mexicana.^{133/} A first year male from Manatee Lagoon has a distinct, bluish gloss on the upper parts, and its forehead is the same sooty-black as the pileum. Its wing measures 194.5 mm. The specimen resembles S. z. albicincta.^{134/} from southern Central America, and I refer it to that race. A first-year female from Manatee Lagoon (wing 191.5 mm.) has a dark forehead that is barely lighter than the pileum and this specimen is probably referable to S. z. albicincta. The upper parts of an adult male from the same locality are not decidedly sooty black and its forehead is paler than its pileum; I refer this specimen to S. z. mexicana. The fourth bird from Manatee Lagoon, a juvenile male, is probably S. z. mexicana.

[Chaetura pelagica (Linnaeus)]

Chimney Swift

Bent (1940: 293) listed British Honduras among the localities where the Chimney Swift had been recorded. He commented, "A specimen was taken (accidentally destroyed) in March 1905." A reference to British Honduras is also included in the account of this species in the Check-list of North American Birds (1957: 298). I know of no evidence that substantiates these two records. Consequently, I do not consider the Chimney Swift a species definitely recorded in the Colony.

Verner noted a single swift belonging to the genus Chaetura on Half Moon Cay on April 22, 1957. It is possible this bird was C. pelagica. Chimney Swifts were collected by Gaumer on Isla Cozumel in April (Salvin, 1889: 367).

Chaetura vauxi (J. K. Townsend)

Vaux's Swift

SPECIMENS. LSUMZ: Corozal - ?, Aug. 15; 2 ♂'s, Aug. 17. Gallon Jug - ? (14.3 g.), Nov. 12. Belize - ♀, Apr. 6.

Vaux's Swifts have been observed in the Colony in every month except September and October, but only the presence of the birds in spring and summer suggests that they may breed there. Willis noted five to ten individuals almost daily at Gallon Jug from March to July and

flocks of 30 to 40 birds in February, early March, and late July. I have seen small flocks at Hill Bank, Belize, the Mountain Pine Ridge, Cockscomb Mountains, and San Pedro Columbia. Almost without exception the birds were flying high. In August 1960, Lay found an old water tank about nine feet high and six feet in diameter in the center of Corozal that was used as a roost by approximately 700 swifts. Lay examined 254 of the birds in the tank and found that all were Vaux's Swifts. He preserved two as skins.

Alexander Wetmore has examined the three specimens collected by Lay at Corozal and identified them as C. v. richmondi.^{135/} I refer the two specimens from Gallon Jug and Belize to the same race.

Cypseloides cryptus Zimmer

White-chinned Swift

SPECIMENS. UMMZ: Four specimens from Manatee Lagoon; Aug. 9, 1931.

The four specimens of this species listed above were collected by Shufeldt at the same time that he obtained four White-collared Swifts. Unfortunately, Shufeldt's notes do not describe the conditions associated with the capture of these eight swifts on the same day.

Zimmer (1945: 588) described this species from four specimens from Perú, British Guiana, Venezuela,

and Costa Rica. Howell (1957: 82) collected one in Nicaragua and a specimen from Panamá reported by Rogers (1939: 83) is presumably this swift. The Shufeldt series from Manatee Lagoon consists of an adult male and female and an immature male and female. The maturity of the birds was determined by the degree of skeletal ossification (Shufeldt notes). The wing and tail feathers of the adult male were being replaced, but the other three birds were in fresh plumage. Measurements in millimeters of the four British Honduran specimens follow.

Measurements in millimeters of four specimens of
Cypseloides cryptus from British Honduras

	<u>ad. ♂</u>	<u>imm. ♂</u>	<u>ad. ♀</u>	<u>imm. ♀</u>
wing	131 *	135	135	134
tail	48	52	47.5	48.5
exposed culmen	5.1	5.2	5.1	5.0
culmen from base	9.1	10.1	9.2	9.1
tarsus	16.1	17.1	17.1	16.5

* worn

The adult male agrees very well with the description of the type of C. cryptus. The adult female from Manatee Lagoon is similar to the female from Costa Rica described by Zimmer; the adult female differs from the adult male primarily in having white tips to the feathers of the belly and under tail-coverts and in having very little white on the chin. The two immature birds are very similar to the adult female but have no white at all on the sides of the head. The white is replaced by a buffy brown that

causes the head to appear darker than that of the female. The shafts of the feathers of the under parts are dark in the four British Honduran specimens and in this respect differ from those of all C. niger that I have examined.

Aeronautes saxatalis (Woodhouse)

White-throated Swift

Lancaster saw two White-throated Swifts at Gallon Jug on February 6 and 8 and March 8, 1958, and Peck believed that he saw many individuals of this species at Manatee Lagoon in February and March 1906. Bent (1940: 313) described a nest of this species in the collection of the Museum of Comparative Zoölogy that was collected May 27, 1906, in the Cockscomb Mountains by Gerald B. Thomas.

Presumably breeding birds from British Honduras would be referable to A. s. nigrrior^{136/}, the race present in the mountains of El Salvador, Guatemala, and southern Mexico.

Panyptila cayennensis (Gmelin)

Swallow-tailed Swift

During the period from February 16, 1957, to August 1, 1957, Willis carried out ornithological field studies at Gallon Jug. In the course of his field work, he observed one to five Swallow-tailed Swifts on 24 dates. Most observations were in February, March, and July, but

he did see one or two birds three times in April, once in May, and twice in June. Usually these swifts were circling high in wheeling blocks of vaux's Swifts. Willis wrote (in litt.), "The Panyptila had distinctly white throats; the abdomen, and rest of the body was black, except for whitish patches on the flanks. The Panyptila rarely showed their forked tails, keeping them closed much of the time; but I distinctly saw the forked tails on several occasions when birds turned sharply." The species probably nests in the area, since Edwards (1959: 358) recently found it nesting in Petén, Guatemala.

Family TROCHILIDAE

Phaethornis superciliosus (Linnaeus)

Long-tailed Hermit

SPECIMENS. LSUMZ: Hummingbird Gap - ♂ (6.1 g.), Mar. 26. OTHER MUSEUMS (BM, CC, MCZ): Eight specimens from the Manatee Lagoon area, Cayo, Mountain Pine Ridge, Mountain Cow, Toledo District; Mar., Apr., Oct., Dec. CRITICAL PUBLISHED RECORD: San Felipe (Salvin, 1892: 272).

The species is moderately common in the understory of tall, wet forest of the central and southern regions of the Colony but is rare in the drier northern third. I saw it only twice at Gallon Jug (Oct., Nov.) and Willis noted it there once in August. It ranges from near sea level to at least 2700 feet in the Cockscomb Mountains. The gonads of a male I collected on March 26 were only

slightly enlarged. Peck (1910: 55-56) found a nest and two eggs on April 20, 1907, at Toledo Settlement.

Specimens of the Long-tailed Hermit from British Honduras are referable to P. s. longirostris.^{137/}

Phaethornis longuemareus (Lesson)

Little Hermit

SPECIMENS. LSUMZ: Hummingbird Gap - ♂ (2.8 g.), Mar. 26. Ballerina Camp - ♀ (2.5), Apr. 26. Two mi. W San Pedro Columbia - ? (2.0), May 12. OTHER MUSEUMS (CM, MCZ, USNM): Five specimens from Manatee Lagoon, Cayo, Freetown; Mar., May, July, Nov.

This tiny hermit is the most common hummingbird of the understory of heavy forests throughout mainland British Honduras. It is frequently noted in the forest border and within the forest where the undergrowth is exceptionally dense. Although this species occupies almost the same habitat as the Long-tailed Hermit, it is much more common than its larger relative. At Gallon Jug Willis noted nests under construction on May 30 and June 27, 1957, and at Toledo Settlement Peck found a nest containing eggs on May 26, 1907.

I have compared British Honduran specimens with the type of P. l. saturatus^{138/} from Costa Rica and with specimens of P. l. adolphi^{139/} from Veracruz. Birds from the Colony are intermediate between the two races. The specimen from Freetown is closer to P. l. saturatus than to P. l. adolphi; specimens from other localities in

the Colony are paler and could be referred to either race.

Phaeochroa cuvierii (DeLattre and Bourcier)

Cuvier's Hummingbird

SPECIMENS. LSUMZ: Gallon Jug - ♂ (8.6 g.), Feb. 6; ♀ (8.0), Oct. 25; ♀ (8.2), Nov. 13. OTHER MUSEUMS (BM): Two specimens from Cayo; undated. CRITICAL PUBLISHED RECORDS: Belize River, San Felipe; Feb., Mar., Dec. (Salvin, 1892: 300).

Cuvier's Hummingbird is an uncommon species in British Honduras. Personnel of the LSUMZ recorded it only at Gallon Jug, where they found it in the forest edge. The species is presumably resident since Willis saw half a dozen individuals in as many days in July and early August near Gallon Jug, but there are no additional summer records from the Colony. The testes of a bird collected by Verner at Gallon Jug on February 6, 1958, were slightly enlarged.

I refer specimens from British Honduras to P. c. roberti.
140/

Campylopterus curvipennis (Lichtenstein)

Wedge-tailed Sabrewing

SPECIMENS. LSUMZ: Gallon Jug - ♂ (6.6 g.), Mar. 29; ♂ (6.7), June 6; ♂ (5.4), Nov. 1. Ballerina Camp - ♂ (7.4), May 1. Two mi. NE Millionario - ♀ (6.7), Mar. 15. Two mi. W San Pedro Columbia - ♂ (7.1), May 13.

This hummingbird is a moderately common resident of tall forest and the forest edge, and it sometimes visits flowering trees in open areas outside the forest. I have seen it in the North Stann Creek valley, the only additional point of record. It is perhaps local in its distribution since I found it at only four localities and none of the other ornithologists who have visited the Colony reported it at all. The bird collected May 1 had only slightly enlarged gonads, but the other four specimens, taken in March, May, and June, were in breeding condition. The male obtained in November was an immature bird.

The specimens are typical of C. c. pampa.^{141/}

Campylopterus hemileucurus (Lichtenstein)

Violet Sabrewing

SPECIMENS. LSUMZ: Ballerina Camp - ? (8.4), May 1. Two mi. W San Pedro Columbia - ♂ (12.5), May 5. OTHER MUSEUM (CM): Three specimens from the Manatee Lagoon area (July, Aug., 1905), N slope Cockscomb Mts. (1200', Mar., 1935).

During late April and early May, 1958, and in late May and early June, 1959, I found the Violet Sabrewing to be the most common hummingbird from an elevation of about 400 feet along South Stann Creek to about 2400 feet in the Cockscomb Mountains. Above the latter elevation only Eupherusa eximia was more common. I saw the present species several times at Gallon Jug in October

and November and once at Augustine in December. The specimen collected by Agostini in the Cockscomb Mountains on March 15 was in breeding condition. The birds collected at Ballerina Camp (1500') and west of San Pedro Columbia (250') in May were not in breeding condition. These data suggest that this hummingbird breeds in the Tropical Wet Forest Life Zone of the Maya and Cockscomb Mountain area, perhaps descending to as low as 400 feet above sea level, and wanders to the north and east after the nesting season. There is no climatological information from these mountains; thus there is the possibility that their upper slopes are transitional into the subtropical belt. Nevertheless, C. hemileucurus does presumably nest in the tropical zone, at least in British Honduras. Todd (1942: 289) suggested that the species is limited to the subtropics, but this statement was questioned by Blake (1950: 403).

Florisuga mellivora (Linnaeus)

White-necked Jacobin

SPECIMENS. LSUMZ: Hill Bank - 2 ♀'s (7.1, 8.1 g.), Nov. 26. Two mi. S Pomona - ♂ (7.0), Mar. 31. OTHER MUSEUMS (BM, CM, UMMZ): Eight specimens from the Belize River, Manatee Lagoon; July, Nov. CRITICAL PUBLISHED RECORD: Western [= Cayo] District, Nov. (Salvin, 1892: 330).

On November 26, 1956, I observed nine individuals of this species in the "broken" pine ridge near Hill Bank and I saw three near Pomona on March 31, 1956. At

the latter locality, Dennett collected one of a pair of birds hovering about 40 feet over a small stream in tall second growth. Shufeldt collected one specimen on November 6, 1930, in the pine ridge near Manatee Lagoon, but the five specimens Peck collected in July, 1905, near the same lagoon were "about openings in the forest" (Peck notes). There are no additional records from British Honduras; consequently my knowledge of its status and distribution is meager. None of the Hill Bank or Pomona specimens was in breeding condition.

Mexican and Central American specimens of this species are generally referred to F. m. mellivora.^{142/}

Colibri delphinae (Lesson)

Brown Violet-ear

SPECIMENS. LSUMZ: Hill Bank - ♀ (5.6 g.), Nov. 25, 1956. One and one-half mi. E Victoria Peak (2600') - ♀, May 8, 1958. OTHER MUSEUM (CM): One specimen from the Manatee Lagoon area, July 28, 1905.

I collected the specimen taken at Hill Bank as it perched silently about ten feet above the ground in extremely dense second growth that was 30 feet high. The bird from the Cockscomb Mountains was one of two or three I saw on the crest of the mountain in low growth that was heavily laden with epiphytes. The gonads of the Hill Bank and Cockscomb Mountain specimens were only slightly enlarged. Peck's notes contain no additional

information concerning the specimen that he collected near Manatee Lagoon.

Anthracothorax prevostii (Lesson)

Green-breasted Mango

SPECIMENS. LSUMZ: Four mi. NE Hill Bank - ♀ (6.9 g.), Apr. 1. Calabash Cay - ♀ (6.6), Apr. 13; ♂, 2 ♀'s (6.2, 6.4, 7.0), Apr. 14; ♂ (6.7), Apr. 15. Hunting Cay - ♂ (6.7), Apr. 27. OTHER MUSEUMS (CM, UMMZ): Twenty-two specimens from Belize, Manatee Lagoon area, Half Moon Cay, Freetown, Northeast and Middle Cays in Glover's Reef; Feb., Mar., Apr., May, July, Dec. CRITICAL PUBLISHED RECORD: Isabella (Lantz, 1899: 221).

The Green-breasted Mango is a moderately common resident of keys and coastal lowlands from Corozal south at least to Freetown. I believe individuals move about between islands or between islands and the mainland. Two birds were noted on Hunting Cay on April 27, 1956, an island that seemed too small to support many breeding birds. It is normally found in scrub growth, especially where Hibiscus or other flowering plants are in bloom, and in small numbers in the pinelands. In Belize it is one of the commonest hummingbirds. The species is rare inland but has been recorded at Hill Bank, Gallon Jug (twice), and Ballerina Camp. Breeding begins in early April and continues through May and possibly longer.

I refer British Honduran specimens to A. p. prevostii.^{143/}
No specimens from the Colony approach A. p. nigrilineatus.^{144/}
of the Bay Islands, Honduras.

Paphosia helenae (DeLattre)

Black-crested Coquette

SPECIMEN. BM: Cayo, undated.

This specimen, examined by Todd in the British Museum, constitutes the only record of the species from the Colony.

Chlorostilbon canivetii (Lesson)

Fork-tailed Emerald

SPECIMENS. CM, MCZ, UMMZ: Nine specimens from Belize and the Manatee Lagoon area; Jan., Feb., July, Aug., Nov. CRITICAL PUBLISHED RECORD: Orange Walk (Salvin, 1892: 48).

The species is an uncommon resident of coastal scrub and pine ridge thickets in the northeastern lowlands south to the Manatee Lagoon area. There is no information concerning the breeding season of this hummingbird in British Honduras, but farther north in the Yucatán Peninsula ~~it~~ breeds from February at least to May (Paynter, 1955: 147).

Specimens from the Colony are referable to C. c.
^{145/}
canivetii.

Thalurania furcata (Gmelin)

Common Woodnymph

SPECIMEN. LSUMZ: Seven mi. NW San Pedro Columbia - ♂ (5.8 g.), May 18, 1956.

This specimen, a male with slightly enlarged testes, was collected by Dennett in heavy forest and constitutes the only record of the species from the Colony.

I refer the specimen to T. f. townsendi.^{146/}

Hylocharis eliciae (Bourcier and Mulsant)

Elicia Goldentail

Eisenmann (1955a: 48) implied that this species has been recorded from British Honduras but I have been unable to confirm its presence there. It should be omitted from the list of birds known to occur in the Colony.

Amazilia candida (Bourcier and Mulsant)

White-bellied Emerald

SPECIMENS. LSUMZ: Gallon Jug - ♂ (3.5 g.), Apr. 5; ♂ (3.9), Oct. 27; ♂ (3.6), Nov. 6. Augustine - ♂, Aug. 13. Seven mi. NW San Pedro Columbia - ♀ (3.9), May 18. OTHER MUSEUMS (CM, MCZ, UMMZ, USNM): Eight specimens from Belize, Manatee Lagoon area, Cayo, Mountain Cow; Jan., Feb., Mar., Apr., June, July. CRITICAL PUBLISHED RECORDS: Corozal, Southern [= Mountain] Pine Ridge (Salvin, 1892: 190).

Semi-open, moderately tall and tall second growth, the forest edge, and sometimes the interior of heavy forest provide habitats for this moderately common resident. It is distributed throughout the mainland of British Honduras. And additional points of record are

Hill Bank, Ballerina Camp, Ycacos Lagoon, and Toledo Settlement. I collected a male on April 5 that had enlarged testes and a female on May 18 that had an enlarged ovary. A nest with eggs found by Peck on May 5 was built about 12 feet above the ground in a small tree.

Specimens from the Colony are assignable to A. c.
^{147/}
candida.

Amazilia cyanocephala (Lesson)

Red-billed Azurecrown

SPECIMENS. LSUMZ: Three mi. NE Hill Bank - 2 ♀'s (4.7, 6.3 g.), Apr. 1; ♀ ? (4.4), Nov. 29. Augustine - ♀ (5.8), Mar. 19; ♂, ♀ (6.1, 4.9), Apr. 20. Ballerina Camp - ? (5.6), Apr. 26. OTHER MUSEUMS (CC, CM, MCZ, UMMZ): Eighteen specimens from 8 mi. NW Belize, the Manatee Lagoon area, 12 mi. S Cayo, Augustine, Freetown, All Pines; Feb., Mar., Apr., May, June, July.

The Red-billed Azurecrown is the most common and characteristic hummingbird of the pinelands at all elevations in British Honduras, and it frequently enters other open habitats in the vicinity of the pine ridges. Shufeldt collected a female containing an egg almost ready for laying on February 20, the earliest indication of breeding. The nesting season continues at least to July 30, when a nest containing eggs was noted by Peck.

Specimens from British Honduras are referable to
A. c. guatemalensis.^{148/}

Amazilia rutila (DeLattre)

Cinnamon Hummingbird

SPECIMENS. LSUMZ: Calabash Cay - ♂ (4.9 g.), Apr. 9; ♂ (4.2), Apr. 16. OTHER MUSEUM (MCZ): Two specimens from Wild Cane Cay; Dec. 31. CRITICAL PUBLISHED RECORDS: Orange Walk, Belize (Salvin, 1892: 208); Turneffe (Bond, 1954: 8).

The species is an abundant resident of the larger keys but is rare on the mainland. Specimens collected by Gaumer at Orange Walk and by Blancaneaux at Belize are the only records from the mainland. It has been observed on Northern Two Cays (Bond, 1954: 6), Half Moon Cay (Salvin: 1864: 380; Verner; van Tets), and McNabb's Water Cay (Lay) in addition to the keys on which it was collected. On the keys the Cinnamon Hummingbird is found in low scrub growth and coconut groves but not in the mangroves.

I refer British Honduran specimens to A. r. rutila.^{149/}

Amazilia yucatanensis (Cabot)

Buff-bellied Hummingbird

SPECIMENS. LSUMZ: Hill Bank - ♀ (3.7 g.), Nov. 25, 1956. OTHER MUSEUMS (CM, MCZ): Two specimens from the Manatee Lagoon area; Aug. 2 and Nov. 11, 1905.

The three specimens were collected in thickets in the pine ridge. Peck, who collected the birds near Manatee Lagoon, also saw the species north of Belize and at Point Placentia. On April 10 and June 23, 1906, he located nests of the Buff-bellied Hummingbird situated

about 4 feet above the ground in open thickets in the pine ridge near Manatee Lagoon. There are no other records of the species from the Colony.

I refer the specimens from British Honduras to the nominate form, A. y. yucatanensis.^{150/}

Amazilia tzacatl (De la Llave)

Rieffer's Hummingbird

SPECIMENS. LSUMZ: Hill Bank - ♂ (5.5 g.), Nov. 25. Gallon Jug - 2 ?'s, Jan. 15; ?, Feb. 18; ♂ (5.2), Feb. 25; ♀ (5.4), Mar. 9; ♂ (5.4), Oct. 30. Augustine - ♂, Aug. 13. Two mi. W San Pedro Columbia - ♂ (5.3), May 3; ♀ (4.1), May 12. OTHER MUSEUMS (CC, CM, CNHM, MCZ, UMMZ, USNM): Fifty-two specimens from 8 mi. NW Belize, Belize, Belize River, Manatee Lagoon area, Duck Run, Cayo, Middlesex, Pomona, Freetown, All Pines, Toledo Settlement; all months except Aug., Sept., Nov. CRITICAL PUBLISHED RECORDS: Corozal, Orange Walk (Salvin, 1892: 218).

Rieffer's Hummingbird is a common to abundant resident of the mainland of the Colony, where it inhabits the semi-open and most wooded areas except the pine ridges. Although the species does occur in heavy rain forest, it is less common within the forest than at its edges. I did not see it in the heavily forested Cockscomb Mountains, nor did Blake and Agostini collect it there. Peck found occupied nests in January, February, May, August, and September, and males that I collected in October and November had slightly enlarged gonads.

The subspecies in Middle America is A. t. tzacatl.^{151/}

Eupherusa eximia (DeLattre)

Stripe-tailed Hummingbird

SPECIMENS. LSUMZ: S slope Victoria Peak (3400'), May 29. OTHER MUSEUM (CM): Seven specimens from the N slope Cockscomb Mts. (1300'-1500'); March, 1935.

The species has been recorded only from the Cockscomb Mountains above an elevation of about 1000 feet. On the steep slopes above 2400 feet, I found it the most common hummingbird in April and May. Presumably it is resident there, but the mountains have not been visited by ornithologists at other seasons.

The specimens from British Honduras are similar to Guatemalan specimens. I refer them to E. e. eximia.^{152/}

Heliothryx barroti (Bourcier)

Purple-crowned Fairy

SPECIMENS. BM: Two specimens from Cayo; no date. CRITICAL PUBLISHED RECORDS: Belize, San Felipe (Salvin, 1892: 33).

Todd examined the two specimens from Cayo in the British Museum, and Salvin (1892: 33) lists specimens collected by Blancaneaux at Belize, Cayo, and San Felipe. Lantz (1899: 220) records a male collected at Cayo by Goss. There are no other records of the species from British Honduras.

Archilochus colubris (Linnaeus)

Ruby-throated Hummingbird

SPECIMENS. LSUMZ: Gallon Jug - ♂ (2.9 g.), Mar. 2. Half Moon Cay - ♀ (3.4), Apr. 8. OTHER MUSEUMS (BM, CC, CM, UMMZ): Five specimens from Belize, Manatee River, Cayo; Feb., Mar., Apr.

Ruby-throated Hummingbirds are uncommon in British Honduras and have been collected only in the period of February 7 to April 8. A few individuals seen in mid-winter and early spring by Peck at Manatee Lagoon and Toledo Settlement and one bird noted at Gallon Jug on February 8, 1958, by Lancaster supply the only additional records. The bird collected on Half Moon Cay by Verner was certainly a migrant, as it was the only one observed during the three months Verner spent on the island. The remaining records could presumably be of migrants or winter visitants.

Family TROGONIDAE

Trogon massena Gould

Massena Trogon

SPECIMENS. LSUMZ: Sixteen mi. N Gallon Jug - ♀ (148.5 g.), Mar. 4. Gallon Jug - ♂ (143.9), Mar. 11; ♀ (162.1), Nov. 14. Seven mi. NW San Pedro Columbia - ♂ (163.3), May 19. OTHER MUSEUMS (BM, CC, CM, MCZ, UMMZ): Twenty-one specimens from Belize, Manatee Lagoon area, Duck Run, San Antonio, 12 mi. S Augustine, Augustine, Freetown, S slope Cockscomb Mts. (1650'); all months except Aug. - Nov., inclusive. CRITICAL PUBLISHED RECORDS: Cayo, San Felipe (Grant, 1892: 475).

The Massena Trogon is a moderately common resident of heavy forest and tall second growth throughout most parts of mainland British Honduras. I have seen it at elevations ranging from sea level near Stann Creek up to at least 2700 feet in the Cockscomb Mountains. It has a wide vertical distribution within the forest but is most often observed perched motionless in the middle level. Nests made in aerial termite houses were noted by Peck in May and June, but the enlarged gonads of specimens that I collected in March indicate that breeding begins earlier. Van Tyne collected a female south of Cayo on February 19, 1931, which weighed 147 grams.

The race occurring in northern Central America is T. m. massena.^{153/}

Trogon citreolus (Gould)

Citreoline Trogon

SPECIMENS. USMZ: Gallon Jug - ♂ (48.2 g.), Feb. 25; ♂ (71.5), Feb. 28. Two mi. W San Pedro Columbia - ♀ (74.7), May 11. OTHER MUSEUMS (BM, CC, CM, MCZ, UMMZ, USNM): Thirty specimens from Belize, Manatee Lagoon area, Cayo, San Antonio, Mountain Cow, Freetown, All Pines; Jan., Feb., Mar., Apr., May, June. CRITICAL PUBLISHED RECORDS: Corozal, Orange Walk, San Felipe (Grant, 1892: 464).

This resident species is the most common trogon in British Honduras and is found throughout the mainland. It is most frequently seen in medium to tall second growth and the forest border, but it also occurs in pinelands and areas where trees are scattered. Rarely is it found

in heavy forest. Peck collected six sets of eggs from nests in the pine ridge near Manatee Lagoon from May 14 to June 16, 1906. All the nests were in termite houses less than 25 feet above the ground.

The race of the Citreoline Trogon in British Honduras is T. c. melanocephala.^{154/}

Trogon collaris (Vieillot)

Collared Trogon

SPECIMENS. LSUMZ: Three-fourths mi. SE Victoria Peak (2700') - ♀, May 30, 1959. OTHER MUSEUM (MCZ): One specimen from Mountain Cow; Apr. 7, 1928. CRITICAL PUBLISHED RECORD: Western [= Cayo] Dist. (Grant, 1892: 454).

On April 14, 1957, Lancaster found a nest and two eggs of this rare species in a moho stub in high second growth at Gallon Jug. A predator took the eggs and killed the female a few days later. In the same area, Willis saw a single individual on five dates during the three months following the death of the female. There are no other sight records of the Collared Trogon from the Colony. The bird that I collected near Victoria Peak was calling from a limb about 40 feet above the ground in tall undisturbed forest. Its ovary was slightly enlarged.

The specimens are referable to T. c. puella.^{155/}

Trogon violaceus (Gmelin)

Violaceous Trogon

SPECIMENS. LSUMZ: Gallon Jug - ♀ (55.7 g.), Mar. 3. Two mi. W San Pedro Columbia - ♂ (57.2), May 8; ♂ (58.8), May 17. OTHER MUSEUMS (CM, MCZ): Four specimens from Cayo, Camp VI, Freetown; Mar., Apr.

The Violaceous Trogon is a moderately common resident of tall second growth, the forest edge, and heavy forest. Sight observations of this species at Hill Bank, Duck Run, Hummingbird Gap, Augustine, Ballerina Camp, Kendal, and South Stann Creek supplement the specimen records. I collected a female at Gallon Jug on March 3 that had a slightly enlarged gonad, but two males taken in May near San Pedro Columbia were not in breeding condition. Willis noted an adult with a short-tailed juvenile at Gallon Jug on July 4.

The race of this trogon in British Honduras is T. v.
^{156/}
braccatus.

Family ALCEDINIDAE

Ceryle torquata (Linnaeus)

Ringed Kingfisher

SPECIMENS. BM, CC, CM, UMMZ: Nine specimens from Belize, Manatee Lagoon area, Cayo, Freetown; Feb., May, Aug., Nov. CRITICAL PUBLISHED RECORD: Belize River (Sharpe, 1892: 122).

This kingfisher is a common resident along inland lagoons and larger waterways, and it is sometimes seen

along the coastal beaches. Occasionally I saw one or two birds flying very high over the lowland pinelands from one body of water to another. Peck found eight occupied nesting cavities from April 26 to May 27. Two burrows that he excavated on May 8 were complete but contained no eggs.

I refer specimens from the Colony to the widely ranging C. t. torquata.^{157/}

Ceryle alcyon (Linnaeus)

Belted Kingfisher

SPECIMENS. LSUMZ: Hill Bank - ♀ (142.0 g.), Feb. 26. OTHER MUSEUMS (CM, UMMZ): Three specimens from Belize, Manatee Lagoon; Jan., Sept.

Among the keys, along coastal beaches, and in the larger lagoons, the Belted Kingfisher is moderately common from early September (Peck) to late April. The latest individual recorded in spring was seen by Verner at Half Moon Cay on May 8, 1958. Daily counts of individuals are so inconsistent during the nine months Ceryle alcyon is in the Colony that migrating birds are difficult to detect. The species is very uncommon inland; so perhaps 12 individuals that I observed in three days in late March at Hill Bank Lagoon were migrants.

The specimens are referable to C. a. alcyon.^{158/}

Chloroceryle amazona (Latham)

Amazon Kingfisher

SPECIMENS. LSUMZ: Two mi. W San Pedro Columbia - 2 ♂'s (129.0, 143.4), May 16. OTHER MUSEUMS (BM, CC, CM, UMMZ): Six specimens from the Manatee Lagoon area, Cayo, Eastern Branch Belize River; Mar., May.

The Amazon Kingfisher is a moderately common resident of the larger lagoons and rivers from the coast inland. In April 1955, I saw this species daily at Ballerina Camp at an elevation of 1400 feet, which is the highest point from which I recorded it. There the Eastern Branch of the Belize River is still a sizable stream with many large deep pools interspersed between the rapids. The two males collected near San Pedro Columbia had only slightly enlarged gonads.

The Central American race is C. a. mexicana.^{159/}

Chloroceryle americana (Gmelin)

Little Green Kingfisher

SPECIMENS. LSUMZ: Six mi. NNE Hill Bank - ♀ (36.6), Feb. 25. Gallon Jug - ♀ (49.3), Mar. 28. OTHER MUSEUMS (CC, CM, CNHM, MCZ, UMMZ): Twenty specimens from the Belize River, Manatee Lagoon area, 12 mi. S Cayo, Middlesex, Camp VI, Freetown; Feb., Mar., Apr., May, Aug., Sept., Dec. CRITICAL PUBLISHED RECORD: Cayo (Sharpe, 1892: 135).

The species is a moderately common resident of the Colony and is found on nearly all streams and lagoons. Of the seven specimens collected in February, March, April, and May for which there is information, five had at least slightly enlarged gonads. Two males and a female

collected by van Tyne in February and March south of Cayo weighed 32.7, 38.5, and 40.0 grams, respectively.

In some specimens from several areas in British Honduras, the extent of the submalar line, the amount of spotting on the under parts, and the extent of white on the throat approach the characters of C. a. isthmica,^{160/} but I refer all specimens from the Colony to C. a. septentrionalis.^{161/}

Chloroceryle aenea (Pallas)

Pygmy Kingfisher

SPECIMENS. USNM: Four mi. NE Hill Bnk - ♂, Mar. 23. OTHER MUSEUMS (BM, CC, CM, UMNZ): Twenty specimens from Belize, Belize River, Manatee Lagoon area, Benque Viejo, Eastern Branch Belize River, San Felipe, Freetown; all months except Feb., June, Oct., Nov.

Pygmy Kingfishers are common residents of small streams in forested areas at all altitudes and are moderately common along lowland streams and lagoons lined with woods or mangrove thickets. The only indication of breeding was provided by the enlarged gonads of two specimens collected in May by Blake and Agostini.

British Honduran specimens are referable to C. a. stictoptera.^{162/}

Family MOMOTIDAE

Hylomanes momotula (Lichtenstein)

Tody Motmot

SPECIMENS. LSUMZ: Gallon Jug - ♀, Jan. 7; ♀ (29.2 g.), Feb. 29; ♀ (25.2), Mar. 7; ? (20.3), Mar. 14; ♂ (28.2), Mar. 21; ♂ (31.6), Nov. 17. OTHER MUSEUMS (BM, CM, MCZ): Six specimens from Eastern Branch Belize River, Toledo Settlement; Feb., Nov., Dec. CRITICAL PUBLISHED RECORD: Cayo (Sharpe, 1892: 332).

This small motmot is a quiet and retiring resident of the understory in heavy forest. The only point of record in addition to the collecting localities is Ballerina Camp. The species is uncommon and individuals are nearly always solitary. Willis noted adults carrying food near Gallon Jug on June 21 and saw a grown young bird with an adult on July 3 in the same vicinity.

Specimens from the Colony are assignable to H. m.
^{163/}
momotula.

Electron carinatum (DuBus)

Keel-billed Motmot

SPECIMENS. BM, CM: Belize and San Felipe - one undated specimen from each locality. N slope Cockscomb Mts. - ♀, March 15, 1935.

Two undated specimens in the British Museum and a specimen collected by Blake in the Cockscomb Mountains constitute the only records from the Colony.

I have examined the specimen from the Cockscomb Mountains and I refer it to E. c. carinatum.
^{164/}
 The other

two specimens are probably referable to this race also.

Momotus momota (Linnaeus)

Blue-crowned Motmot

SPECIMENS. LSUMZ: Gallon Jug - ♀, Mar. 16; ♀ (136.5 g.), Nov. 6. Two mi. NW Augustine - ♂, Dec. 13. Ballerina Camp - ♀ (148.2), Apr. 27; ♀ (113.0), Apr. 29. Two mi. W San Pedro Columbia - ♂ (125.0), May 7; ♀ (129.1), May 8. OTHER MUSEUMS (BM, CC, CM, MCZ, UMMZ): Twenty-one specimens from the Manatee Lagoon area, Cayo, San Felipe, Mountain Cow, N slope Cockscomb Mts. (1300' - 1500'), Freetown, Toledo Settlement; Mar., Apr., May, June, Sept., Oct., Dec.

Blue-crowned Motmots are common but inconspicuous residents of the tall forests of British Honduras. In the heavy forests of the hilly and mountainous western and southern sections of the Colony, where banks suitable for nesting are plentiful, the species is especially abundant. The species is well known to rural residents as "good cook," a name derived from the phonetic expression of its call. I have noted nests or collected breeding birds from late April to early June, and Willis saw a pair feeding young in a hole near Gallon Jug on June 28. The females weighing 129.1 and 148.2 grams were in breeding condition, and the lighter bird contained a fully developed egg in the oviduct. The least heavy bird of each sex from British Honduras weighed more than the heaviest bird of the same sex recorded by Paynter (1955: 160) from Quintana Roo or by Van Tyne (1935: 19) from the Petén.

I refer British Honduran specimens to M. m.
165/
lessoni.

Family GALBULIDAE

Galbula ruficauda (Cuvier)

Rufous-tailed Jacamar

SPECIMENS. ISUMZ: Gallon Jug - ♀, Jan. 8; ♀ (28.9 g.), Mar. 4; ♀ (19.3), Mar. 7; ♀ (28.1), Oct. 21. Two mi. W San Pedro Columbia - 2 ♂'s (27.6, 28.9), May 7. OTHER MUSEUMS (BM, MCZ): Two specimens from San Antonio, Rio Grande; Nov. CRITICAL PUBLISHED RECORD: Belize (Sclater, 1891: 167).

Jacamars are moderately common birds in British Honduras and have been observed in a number of localities not represented by specimens. I have seen them near Hill Bank, along sections of the Hummingbird Highway, in the Stann Creek Valley, and at Guacamallo, Ballerina Camp, Cubetas, Kendall, and South Stann Creek. The preferred habitats of this species in the Colony are the forest edge and second growth, but it does occur in the lower level of heavy forest. Jacamars are conspicuous and noisy birds and are prone to use the same few exposed perches over and over again as base stations for their insect catching activity. West of San Pedro Columbia on May 7, 1956, I watched a female Rufous-tailed Jacamar enter a circular hole in a hard dirt bank about two feet above a dry stream bed. Although she carried a hymenopteron about an inch and one-half long, I could

hear no young in the nest. On May 21 and 22 young were calling from this nest.

The race of this species present in Central America is G. r. melanogenia.^{166/}

Family BUCCONIDAE

Notharcus macrorhynchus (Gmelin)

White-necked Puffbird

SPECIMENS. LSUMZ: Gallon Jug - ♀ (84.4 g.), Mar. 2. Seven mi. NW San Pedro Columbia - ♂, ♀ (102.8, 112.7), May 14; ♀ (109.9), May 19. OTHER MUSEUM (CC): One specimen from the Manatee Lagoon area; Jan. 22, 1907. CRITICAL PUBLISHED RECORD: Cayo (Sclater, 1891: 182).

Although LSUMZ field parties have worked many months in British Honduras, only one additional observation supplements the specimen records: one individual was observed at Gallon Jug the day after a specimen was collected. The Gallon Jug and San Pedro Columbia birds were collected from perches 20 to 40 feet high in open areas along roads through tall rain forest. The females taken in May contained many 3 and 4 mm. ova, and the male had slightly enlarged testes.

I refer the British Honduran birds to the widely ranging race N. m. hyperrhynchus.^{167/}

Malacoptila panamensis (Lafresnaye)

White-whiskered Puffbird

SPECIMENS. LSUMZ: Gallon Jug - ♂ (33.4 g.), Feb. 7. Ten mi. NW Middlesex on Hummingbird Hwy. - ♂ (33.8), Mar. 26. OTHER MUSEUMS (CM, MCZ): Seven specimens from Augustine, N slope Cockscomb Mts. (1300'), upper Moho River, Toledo Settlement; Jan., Mar., Apr., Dec.

Solitary White-whiskered Puffbirds were seen at Gallon Jug on February 17 and 26 and March 12 in different years and five individuals were noted near the Hummingbird Highway on March 26 in addition to the one collected that day. I do not know the precise status of this species in British Honduras, except that it is rare. There are no records from May to mid-December. No data indicate nesting; furthermore, the males collected February 7 and March 26 did not have enlarged testes. The field notes of persons who have seen or collected this species in the Colony indicate that they found it in the lower level of tall forest and high second growth.

I refer the British Honduran specimens to M. p.
168/
inornata.

Family RAMPHASTIDAE

Aulacorhynchus prasinus (Gould)

Emerald Toucanet

SPECIMENS. LSUMZ: Gallon Jug - ♀ (144.1 g.), Mar. 7; ♀ (113.0), May 8; ♂, June 15. Augustine - ♀, Aug. 16.

Seven mi. NW San Pedro Columbia - ♂ (153.6), May 19.
OTHER MUSEUMS (BM, MCZ): Three specimens from Cayo
and Mountain Cow; Apr.

This species is very uncommon in British Honduras,
where it inhabits heavy forest and tall second growth
in the vicinity of rain forest. It has been seen but
not collected near Hill Bank and Hummingbird Gap. I
presume that the Emerald Toucanet is a resident, but I
know of no records in the Colony from early September
through January. Specimens collected in March, May,
and June had slightly enlarged gonads.

The British Honduran specimens are assignable to
A. p. virescens.^{169/}

Pteroglossus torquatus (Gmelin)

Collared Araçari

SPECIMENS. LSUMZ: Gallon Jug - ♂ (197.7 g.), Mar. 1;
♀ (186.8), Mar. 21; ♀ (179.1), Mar. 26; ?, Apr. 1; ♀
(174.5), Nov. 1; ♂ (194.6), Nov. 13; 2 ♂'s (171.1,
180.5), Nov. 15. Augustine - ♀, Aug. 13. Two mi. W
San Pedro Columbia - ♂ (211.1), May 3. OTHER MUSEUMS
(BM, CC, CM, MCZ, PC, UMMZ, WU): Twenty-seven specimens
from Belize, Sibun River near Churchyard, Manatee Lagoon
area, Cayo, Camp VI, Freetown, All Pines; all months
except Aug., Oct., Nov. CRITICAL PUBLISHED RECORD:
Orange Walk (Sclater, 1891: 142).

The "Phyllis," as it is usually called in the Colony,
is a common resident throughout the mainland of British
Honduras. It is found in clearings where tall scattered
trees are present, in tall second growth, and in high
rain forest although most frequently near its borders.

Araçaris forage in pairs or small groups usually well above the ground. The species may be inclined to wander extensively in winter since Peck collected a specimen on the beach at the mouth of the Manatee River in December. In spite of the frequency with which these birds are seen, no nests have been reported. Some but not all the individuals collected in April and May had enlarged gonads.

I refer the specimen from San Pedro Columbia to P. t.^{170/} torquatus and specimens from all other localities in the Colony to the smaller Yucatán race, P. t.^{171/} erythrozonas.

The bird from the extreme southern portion of the Colony that I refer to the nominate form is the largest and heaviest (wing 141 mm., tail 152 mm., culmen 105 mm., weight 211.1 g.) and possesses a distinctly bluish tinge on the back. Brodkorb (1943: 50) has discussed the intermediate characters of British Honduran specimens in respect to the two races, and his observations are substantiated by the larger series that I have examined. The measurements in millimeters of seven males and seven females, respectively, that I assigned to P. t. erythrozonas are as follows: wing, 131-140 (135) and 127-140 (133); tail, 135-152 (144) and 139-149 (144); culmen, 85-97 (90) and 77-90 (83).

Ramphastos sulphuratus (Lesson)

Keel-billed Toucan

SPECIMENS. LSUMZ: Gallon Jug - ♂ (443.7), Mar. 28; ♂ (412.2), Apr. 6; ♀ (366.3), May 27; ♂ (408.1), Nov. 13;

♂ (466.4), Nov. 15; 2 ♂'s (418.0, 550.9), Nov. 16; ♂ (380.9), Nov. 17. OTHER MUSEUMS (BM, CC, CM, MCZ, PC, UMMZ, USNM, WU): Twenty-two specimens from Belize, Manatee Lagoon area, Duck Run, Cayo, Camp VI, Freetown, Toledo Settlement; all months except Apr., Nov. CRITICAL PUBLISHED RECORD: Orange Walk (Sclater, 1891: 126).

Keel-billed Toucans, or "bill-birds," are a common and conspicuous element of the avifauna of British Honduras. The species is present in open areas where large trees are present and in the taller second growth and rain forest. A tree in the middle of the village of Gallon Jug was used by one pair for roosting or nesting purposes. Peck found that this toucan is more abundant in coastal localities in winter and believed that breeding individuals retire to more inland forests. There are no nesting records from the Colony and of the relatively few specimens for which the condition of the gonads is known, only two birds had enlarged gonads, both collected in May.

Todd (1943: 157) referred the extensive series of British Honduran birds in the Carnegie Museum to R. s. sulfuratus^{172/}. I refer the additional specimens that I have examined to the same form. For the most part, all specimens from the Colony have very inconspicuous red borders along the yellow of the throat. Although one of the males collected November 16 was exceptionally heavy (550.9 g.), it was not fat. It was the largest of the Gallon Jug specimens (wing 206 mm., tail 168 mm., culmen 149 mm.).

Family PICIDAE

Piculus rubiginosus (Swainson)

Golden-olive Woodpecker

SPECIMENS. LSUMZ: Gallon Jug - ♀ (77.8 g.), Mar. 4; ♂ (84.7), Oct. 22; ♂ (85.5), Oct. 29. Hummingbird Gap - ♂ (87.5), Mar. 26. Augustine - ♀ (79.0), May 5. OTHER MUSEUMS (BM, CM, MCZ, UMMZ, WU): Nineteen specimens from Belize, Manatee Lagoon area, Cayo, 12 mi. S Cayo, Mountain Pine Ridge, Freetown, All Pines; Jan., Feb., Mar., Apr., May, Dec. CRITICAL PUBLISHED RECORD: Orange Walk (Hargitt; 1890: 85).

The species is a moderately common and widely distributed resident in British Honduras. Individuals have been seen or collected in all types of mainland wooded habitats from coastal mangroves and scrub to pineland and high forest. Although it is not really numerous in any area, it is perhaps most frequently seen in the semi-open and second growth in the vicinity of tall forest. I noted that it was decidedly less common near San Pedro Columbia in May than in other areas to the north. Specimens collected in March, April, and May were in breeding condition.

I assign the British Honduran specimens to P. r.
173/
yucatanensis. Six birds collected in the Mountain Pine Ridge are decidedly paler and grayer than specimens from the lowlands. Yet all birds examined from the Colony fall within the range of variability exhibited by specimens from Yucatán.

Celeus castaneus (Wagler)

Chestnut-collared Woodpecker

SPECIMENS. LSUMZ: Gallon Jug - ♂ (90.4 g.), Mar. 4. ♀ (85.1), Mar. 11; ♀, May 31; ♂ (97.4), June 1; 2 ♂'s (85.1, 86.4), Nov. 13. OTHER MUSEUMS (BM, CC, CM, MCZ, PC, UMMZ, WU): Thirty-eight specimens from Belize, Manatee Lagoon area, 5 mi. N Cayo, Cayo, Mountain Pine Ridge, Mountain Cow, N and E slopes Cockscomb Mts. (750'-1500'), Freetown, All Pines, Toledo Settlement; all months except July. CRITICAL PUBLISHED RECORD: Orange Walk (Hargitt, 1890: 434).

Chestnut-collared Woodpeckers are moderately common to common residents of tall second growth and heavy forest throughout the mainland of the Colony. In winter it wanders into the coastal scrub and mangroves along the beach (Peck). Gonads enlarge in March; and among the specimens with gonadal data, those collected in April, May, and June were in breeding condition. Willis noted noisy young in two different nests in mid-May and late July, and Peck examined a nest containing four eggs in an advanced stage of incubation on June 10. The three nests were in dead trees and were 3 feet, 35 feet, and "high" above the ground. The lowest was in a Sabal palm.

Dryocopus lineatus (Linnaeus)

Lineated Woodpecker

SPECIMENS. LSUMZ: Gallon Jug - ♂ (163.7 g.), Feb. 19; ♂, Mar. 18; ♂ (157.2), Nov. 16. Augustine - ♀, Aug. 15. Eight mi. NW San Pedro Columbia - ♂ (149.9), May 16. OTHER MUSEUMS (BM, CC, CM, MCZ, PC, UMMZ): Twenty-five specimens from Belize, Manatee Lagoon area, Duck Run, Cayo, 12 mi. S Cayo, All Pines; Jan., Feb., Mar., Apr., June, July.

This large resident woodpecker is a moderately common inhabitant of the semi-open, second growth, forest border, and tall rain forest. It is least common in the latter habitat, where the similar Phloeocoastes guatemalensis is more abundant. But the two species do share habitats; in a clearing at Gallon Jug I once saw individuals of the two species hammering away on the same limb exactly opposite one another. Lineated Woodpeckers frequently enter pine-lands, and sometimes even nest there (Agostini notes, April, 1935). Peck found a nest containing young birds on May 31, and Van Tyne noted that a female he collected in early March was "about to lay." The testes of an adult that I collected on May 16 were not enlarged.

Lineated Woodpeckers from British Honduras are referable to D. l. similis^{174/}, which ranges from southern Mexico to Costa Rica.

Melanerpes formicivorus (Swainson)

Acorn Woodpecker

SPECIMENS. LSUMZ: Two mi. E Hill Bank - ♀, Mar. 23; ♀ (75.3 g.), Nov. 22; ♀ (75.0), Nov. 23. Augustine - ♂ (82.9), Mar. 9; 2 ♀'s (76.6, 79.4), Mar. 19; ♀ (77.5), Mar. 20. One mi. N Ballerina Camp - ♂ (76.1), Apr. 30. OTHER MUSEUMS (BM, CC, CM, CNHM, MCZ, UMMZ): Fifty-two specimens from Belize, 9 mi. W Belize, Belize River, Manatee Lagoon area, 5 mi. N Cayo, Duck Run, Cayo, 12 mi. S Cayo, Mountain Pine Ridge, All Pines; all months except July, Aug., Oct., Dec. CRITICAL PUBLISHED RECORD: Punta Placentia (Salvin and Godman, Biologia, 11, 1895: 413).

Acorn Woodpeckers or "black and white woodpeckers," as they are locally called, are abundant residents of pineland and pine-oak associations in the Colony. They sometimes wander into the semi-open and second growth that are adjacent to the pinelands. The bark of an entire pine trunk is frequently riddled with holes made by these woodpeckers and used by them as depositories for acorns, (Peck, 1921: 131). Breeding has been noted from mid-March to early June. In a fine series of specimens collected by Van Tyne in February and March, 1931, at localities near Cayo and on the Mountain Pine Ridge, ten males ranged in weight from 68.7 to 88.5 grams (mean 78.1), and six females ranged from 67.4 to 76.0 grams (mean 72.6).

Specimens of this species from the highlands of the Mountain Pine Ridge are not different from birds of the lowlands of British Honduras, which were described by Todd as M. f. albeolus^{175/}, and I refer all specimens from the Colony to that race.

Centurus aurifrons (Wagler)

Golden-fronted Woodpecker

SPECIMENS. LSUMZ: Hill Bank - ♂ (86.4 g.), Mar. 20; ♀ (80.0), Nov. 20; ♀ (76.3), Nov. 27. Gallon Jug - ♂ (81.9), Feb. 22; ♂, Aug. 8; ♂ (87.5), Oct. 22; ♂, 2 ♀'s (82.7, 74.0, 75.5), Nov. 1; ♂ (84.7), Nov. 2; ♂ (80.5), Nov. 5; ♂ (86.5), Nov. 12; ♀ (81.4), Nov. 17. Calabash Cay - ♂ (84.9), Apr. 9; 2 ♂'s (78.2, 81.2), Apr. 10; ♀ (63.5), Apr. 13; ♀ (68.7), Apr. 14; ♂ (78.4), Apr. 15. Augustine - ♂ (86.4), Mar. 20. OTHER MUSEUMS (BM, CC,

CM, CNHM, MCZ, PANS, PC, UMMZ): Fifty-three specimens from Belize, Cockroach Cay, Manatee Lagoon area, 5 mi. N Cayo, Duck Run, Cayo, Middlesex, Camp VI, Freetown, All Pines; all months except Oct., Nov. CRITICAL PUBLISHED RECORDS: Rio Mopan, San Felipe (Hargitt, 1890: 174).

The "carpenter," as British Hondurans call this woodpecker, is a common resident of the northern two-thirds of the Colony in tall second growth, the semi-open, and the edge of the rain forest. Peck observed this woodpecker at Monkey River, the most southerly locality where it has been recorded. At coastal and insular localities, it is especially conspicuous in coconut groves. Nests containing young birds have been noted as early as April 21 (Willis), and on July 14 Peck found a nest containing four eggs.

I have compared Golden-fronted Woodpeckers from British Honduras with a series of C. a. dubius^{176/} from Yucatán, and I find all mainland birds distinctly referable to that race. Specimens from Belize, the Manatee Lagoon area, Freetown, and All Pines do not approach C. a. pauper^{177/} from Honduras. Compared with specimens from the mainland, birds from the Turneffe Islands have broader white barring on the secondaries; an orange belly and pileum, not Scarlet; less Scarlet on the forehead; and the breast is more Avellaneous, without Deep Olive-Buff.

Centurus pygmaeus (Ridgway)

Red-vented Woodpecker

SPECIMENS. UMMZ: Belize - 2 ♂'s (40.5, 42.2 g.), Feb. 2, 1931.

The two specimens represent the only record of the species from British Honduras, although it is not uncommon at Chetumal and other localities in southern Quintana Roo (Paynter, 1955: 166). Van Tyne collected the birds in a pasture on the outskirts of Belize.

The specimens are similar to Yucatán birds; so I refer them to C. p. rubricornis.^{178/}

Centurus pucherani (Malherbe)

Black-cheeked Woodpecker

SPECIMENS. LSUMZ: Gallon Jug - ♂ (55.2 g.), Mar. 7; 2 ♂'s (47.0, ?), Mar. 9; ♀ (49.3), May 31; ♂ (56.3), Nov. 2; ♂ (51.5), Nov. 6; ♀ (48.6), Nov. 9. Hummingbird Gap - ♂ (53.9), Mar. 26. Seven mi. NW San Pedro Columbia - ♂ (49.9), May 14. Two mi. NW San Pedro Columbia - ♂ (53.9), May 5. OTHER MUSEUMS (BM, CC, CM, MCZ, PC, UMMZ): Fourteen specimens from Manatee River, Duck Run, Cayo, San Antonio, Mountain Cow, Freetown, Toledo Settlement; Mar., Apr., May, Sept., Dec.

Scattered trees in plantation clearings, tall second growth, the forest border, and heavy forest provide suitable habitats for this moderately common species. In the semi-open it is much less numerous than the Golden-fronted woodpecker, but within tall forest the Black-cheeked Woodpecker replaces its

sibling species. I have seen the Black-cheeked Woodpecker near Hummingbird Gap, Ballerina Camp, and South Stann Creek in addition to the collecting localities, but it apparently does not enter the generally lower forest and coastal scrub of the northeastern quarter of the Colony. It generally forages fairly high in the trees. Five nests found by Peck or Willis in April, May, and July were 12, 36, 40, 55, and 55 feet above the ground in palms or dead trees.

C. p. perileucus,^{179/} the race to which I refer the British Honduran specimens, ranges from southern Mexico to Honduras.

Sphyrapicus varius (Linnaeus)

Yellow-bellied Sapsucker

SPECIMENS. LSUMZ: Gallon Jug - ♀ (51.4), Mar. 9. Silver Creek at Hummingbird Hwy. - ♀ (46.9), Mar. 27. Augustine - ♀, Dec. 12. OTHER MUSEUMS (BM, CM, MCZ, UMMZ): Seven specimens from Belize, Manatee Lagoon, Cayo, Ycacos Lagoon; Feb., Mar., May, Nov.

Observations of a total of 20 individuals on 14 dates from November 13 to April 5 supplement the specimen records. All observations were of single birds except on November 13, when two were seen at Gallon Jug, and on March 26, when six migrant sapsuckers stopped on Half Moon Cay because of a severe storm the night before. The extreme dates for this uncommon migrant and winter visitant are November 10 and May 20.

Of the nine sexed specimens, eight were females. The single male was the bird collected on May 20. Some individuals may winter on the keys, since G. van Tets saw one bird on Half Moon Cay on January 1, 1961.

The five specimens that I have racially identified are all S. v. varius.^{180/}

Veniliornis fumigatus (d'Orbigny)

Smoky-brown Woodpecker

SPECIMENS. LSUMZ: Gallon Jug - ♀ (33.5), Mar. 11; ♂ (37.6), Nov. 9. Two mi. W San Pedro Columbia - ♂ (31.2), May 3; ♀ (30.1), May 8. OTHER MUSEUMS (CM, MCZ, PC, UMMZ): Fourteen specimens from Belize, Manatee Lagoon area, Duck Run, Cayo, Mountain Cow, N slope Cockscomb Mts. (1300'-1500'), Toledo Settlement; Jan., Feb., Mar., Apr., Nov. CRITICAL PUBLISHED RECORD: Orange Walk (Hargitt, 1890: 344).

This small woodpecker is a moderately common resident of taller second growth and rain forest. It is usually found in the lower level of such forested areas, especially where thickets or edge conditions exist. A male that I collected in November had fully enlarged testes, but the gonads of three other specimens collected in March and May were either not enlarged or only slightly enlarged. Smoky-brown Woodpeckers were seen occupying holes 5 to 12 feet above the ground on four occasions in May and June by Peck, Willis, or me, but the contents of the holes is not known. In each case the hole was in a dead limb or in the tall standing trunk of a small fallen tree. A

male collected by Van Tyne at Cayo on March 15, 1931, weighed 33.6 grams.

I refer the British Honduran specimens to V. f.
^{181/}
sanguinolentus.

Dendrocopus scalaris (Wagler)

Ladder-backed Woodpecker

SPECIMENS. (CM, MCZ): Manatee Lagoon area - 2 ♂'s, Oct. 1905. All Pines - ♂, Apr. 23, 1935. Ycacos Lagoon - ♀, Mar. 9, 1907; ♂, May 29, 1907.

The Ladder-backed Woodpecker has been recorded only in the lowland pine ridges from the Sibun River south to Ycacos Lagoon. The species is rare or very local, since only Blake and Agostini (who collected the specimen at All Pines) and Peck have recorded it. In his notes, Peck writes that this woodpecker is "extremely shy and keeps almost entirely in the tops of the trees." The population of this species in British Honduras is an isolated one. In Quintana Roo, Ladder-backed Woodpeckers occur as far south as Carrillo Puerto (Paynter, 1955: 168), a locality 150 miles north of the Sibun River. In the Colony it was found only in pineland, whereas in Quintana Roo it was found in coastal scrub and forest.

The British Honduran population is D. s. leucoptilurus,
^{182/}
a race endemic to the Colony.

Phloeoceastes guatemalensis (Hartlaub)

Guatemalan Ivory-billed Woodpecker

SPECIMENS. LSUMZ: Gallon Jug - ♀, Feb. 15; ♂, ♀ (236.5, 244.6 g.), Mar. 7; ♂ (241.5), Nov. 1; ♂, ♀ (228.3, 227.0), Nov. 16. Two mi. W San Pedro Columbia - ♀ (228.0), May 7. OTHER MUSEUMS (CC, CM, MCZ, UMMZ, WU): Twenty-three specimens from Belize, Manatee Lagoon area, Duck Run, Cayo, 12 mi. S Cayo, Mountain Cow, N slope Cockscomb Mts. (1300'), Freetown; Jan., Feb., Apr., May, July, Sept., Nov. CRITICAL PUBLISHED RECORD: Orange Walk (Hargitt, 1891: 475).

This species, the largest of British Honduran woodpeckers, is a moderately common resident of tall rain forest and its edge. The species also occurs in the semi-open and tall second growth, but there it is slightly less common than *Dryocopus lineatus*. Pineland in the vicinity of heavy forest is only rarely entered by the Guatemalan Ivory-billed Woodpecker. The gonads of the three birds that I collected at Gallon Jug in November were enlarged. Peck thought that two holes he saw high in dead trees in January and February were being used for nesting purposes by this species. No evidence indicates breeding at later dates. Agostini, Blake, and Holt collected nine specimens during April and May (1926, 1935). As a practice, these collectors usually made a record of enlarged gonads, but none of the nine was so marked; thus the implication is that they were not in breeding condition. Two individuals of this species that I collected in March were paired; however, the gonads of these birds were not enlarged.

Many residents of the Colony are familiar with this species and call it "father red-cap."

British Honduran specimens are referable to
P. g. guatemalensis.^{183/}

Family DENDROCOLAPTIDAE

Dendrocincla anabatina Sclater

Tawny-winged Woodcreeper

SPECIMENS. LSUMZ: Hill Bank - ♂ (36.7 g.), Feb. 20. Gallon Jug - ♂ (40.6), Mar. 7; ♂ (35.6), Mar. 9; ♂ (33.5), Mar. 10; ♀ (30.3), Oct. 26; ♂ (36.8), Oct. 30. One mi. S Ballerina Camp - ♂ (38.2), Apr. 28. Eight mi. NW San Pedro Columbia - ♂ (39.6), May 16. Two mi. W San Pedro Columbia - ♂ (36.7), May 7; ♂ (38.3), May 8; ♂ (33.5), May 9; ♀ (36.0), May 11; ♂, May 22. OTHER MUSEUMS (CM, MCZ): Sixteen specimens from the Manatee Lagoon area, Mountain Cow, Freetown, Toledo Settlement; all months except June, Aug., Sept. CRITICAL PUBLISHED RECORD: Orange Walk (Salvin and Godman, Biologia, ii, 1891: 172).

Tawny-winged Woodcreepers are common residents of rain forest, tall second growth, and the forest margins. A frequent follower of ant swarms, this species snatches insects that have been put to flight by the ants, capturing them both on tree trunks and in the air (Willis, 1960a: 158). Mist nets are effective in trapping D. anabatina since it normally forages in the lower level of the forest. Birds having fully enlarged gonads have been collected in late April and throughout May. Two newly hatched young were noted on May 29 in a nest near

Manatee Lagoon (Peck) and Willis noted two adults feeding a juvenile at Gallon Jug on July 11.

In his study of the birds of the Yucatán Peninsula, Paynter (1955: 170) noted that some specimens from southern Quintana Roo were assignable to D. a. anabatina^{184/} and others to D. a. typhla^{185/}. Many specimens that he examined from this area were intermediate between these races. As might be expected, the British Honduran specimens are referable to D. a. anabatina. There is little tendency toward the characteristics of D. a. typhla, even in specimens from Gallon Jug and Hill Bank.

Dendrocincla homochroa (Scalater)

Ruddy Woodcreeper

SPECIMENS. LSUMZ: Hill Bank - ♀ (33.9 g.), Nov. 25. Gallon Jug - ♀ (31.2), Feb. 26; ♀ (26.8), Mar. 14. One mi. S Ballerina Camp - ♂ (38.3), Apr. 28. Eight mi. NW San Pedro Columbia - ♂ (37.4), May 16. OTHER MUSEUMS (CM, MCZ, UMMZ): Fourteen specimens from the Manatee Lagoon area, Augustine, Preetown, Toledo Settlement; all months except Feb., Sept., Oct., Nov. CRITICAL PUBLISHED RECORD: Orange Walk (Salvin and Godman, Biologia, ii, 1891: 173).

The upper slopes of the Cockscomb Mountains, Monkey River, and Ycacos Lagoon are the only localities where this resident species has been observed but not collected. It inhabits rain forest, high second growth, and "broken-pine" ridge areas of the lowlands, and is uncommon everywhere. As noted by Willis (1960a: 159), the Ruddy Woodcreeper often follows ant swarms; in doing so it forages

higher than the other dendrocinclid, D. anabatina. Peck found two nests of this species in June. One was in a shallow cavity about 2 feet from the ground in a decayed stump in the "broken-pine" ridge near Manatee Lagoon. This nest contained two eggs. The second nest was found in the dense rain forest near Manatee Lagoon. It was in a cavity in the base of a dead palm leaf about 5 feet from the forest floor, and it held three eggs.

The nominate form, D. h. homochroa,^{186/} ranges south from Mexico to Honduras.

Sittasomus griseicapillus (Vieillot)

Olivaceous Woodcreeper

SPECIMENS. LSUMZ: Ten mi. NW Gallon Jug - ♀ (10.6 g.), Nov. 8. Gallon Jug - ♀ (10.4), Mar. 4; ♂ (12.0), Mar. 7; ♂, Mar. 8; 2 ♂'s (9.8, 10.0), Mar. 9; ♀ (9.4), Mar. 21; ♀ (10.1), Nov. 9; ♂ (12.2), Nov. 10; ♀ (10.1), Nov. 15. Augustine - ♀, Aug. 26. Two mi. NE Millionario - ♀ (11.2), Mar. 17. Eight mi. NW San Pedro Columbia - ♂ (13.1), May 16. Two mi. NW San Pedro Columbia - ♂ (12.2), May 8. OTHER MUSEUMS (BM, CM, MCZ, PC, UMMZ): Twenty-one specimens from the Manatee Lagoon area, Cayo, 12 mi. S Cayo, Augustine, Mountain Cow, N slope Cockscomb Mts., Freetown, Yeacos Lagoon; Feb., Mar., Apr., May, Aug., Oct. CRITICAL PUBLISHED RECORD: Orange Walk (Salvin and Godman, Biologia, ii, 1891: 177).

This small woodcreeper is a moderately common resident of high, humid forest and of tall and moderately tall second growth throughout the Colony. Both Van Tyne and Peck collected it in pinelands (Mountain Pine Ridge,

Ycacos Lagoon), but these birds were probably wanderers from adjacent forests. Enlarged gonads have been noted in specimens obtained in late March, April, and May.

Specimens from the Mountain Pine Ridge, Manatee Lagoon, and the area to the north of these localities are from a population intermediate in characters between the Yucatán Peninsular race, S. g. gracileus,^{187/} and S. g. sylvioides.^{188/} Some specimens from this region are like the former race in coloration, others like the latter. Wing and tail measurements lie between the means for the two races as given by Paynter (1957: 172) but are closer to those of S. g. gracileus. A majority of the specimens from the northern part of the Colony have rather pale wings and scapulars and in this respect resemble the Yucatán race. Although some specimens are very close to S. g. sylvioides in measurements and plumage characters, I refer the sample from the northern area to S. g. gracileus.

I assign specimens from the southern half of the Colony to S. g. sylvioides, although a few birds are not entirely typical of this race. The individual weights of the two males from San Pedro Columbia are equal to or greater than those of males from the northern half of the Colony. This difference in weight is in accordance with Paynter's (1957a: 260) figures, which indicate that S. g. sylvioides is substantially heavier than S. g. gracileus.

Glyphorhynchus spirurus (Vieillot)

Wedge-billed Woodcreeper

SPECIMENS. LSUMZ: Gallon Jug - ♂ (14.5 g.), Mar. 4; ♀ (12.5), Mar. 8; ♀ (15.9), Nov. 7. Ballerina Camp - ♀ (14.3), Apr. 29. Two mi. W San Pedro Columbia - ♂, ♀ (16.3, 14.6), May 5; ♀ (14.2), May 7. OTHER MUSEUM (CM): Three specimens from Manatee Lagoon, Duck Run, N slope Cockscomb Mts. (1600'); Mar., May, Nov.

The Wedge-billed Woodcreeper is an uncommon resident of the interior of tall rain forest. In such a habitat it forages through the lower level of the forest, digging into or prying away decayed wood, bark, or vegetation. At an elevation of 2700 feet on the main Cockscomb ridge, I captured one of these woodcreepers in a mist net, but no others were seen there. The female collected May 5 had a slightly enlarged ovary, and the gonad of the female collected November 7 was considerably enlarged. The gonads of seven other specimens were not enlarged (no data available for the second November bird). Peck found a nest of this species in a shallow cavity in the base of a dead palm leaf on October 5 near Toledo Settlement. Two eggs were in the nest, which was about 8 feet above the ground.

^{189/}
G. s. pectoralis is the race occupying all of Central America and parts of northwestern South America.

Xiphocolaptes promeropirhynchus (Lesson)

Strong-billed Woodcreeper

SPECIMENS. LSUMZ: Gallon Jug - ? ? (143.8 g.), Mar. 2. OTHER MUSEUM (MCZ): Two specimens from Mountain Cow;

Apr. CRITICAL PUBLISHED RECORD: unspecified locality (Sclater, 1890: 145).

All records of this rare woodcreeper from British Honduras are from the Gallon Jug area with the exception of the two birds collected by Austin at Mountain Cow and the British Museum specimen of unspecified locality. One or two birds were observed on 12 dates between January 28 and May 15 over four seasons by Lancaster, Willis, and me. Willis saw one bird on July 5. All observations were made in tall forest. There is no evidence other than the presence of the birds in spring to indicate nesting in the Colony.

I refer these specimens to X. n. emigrans.^{190/}

Dendrocolaptes certhia (Boddaert)

Barred Woodcreeper

SPECIMENS. LSUMZ: Gallon Jug - ♀ ? (58.1 g.), Mar. 2; ♂, ♀ (63.1, 64.3), Oct. 29; ♂ (56.5), Nov. 2; ♂ (63.3), Nov. 5. Augustine - ♀, Dec. 12. OTHER MUSEUMS (CM, MCZ): Thirteen specimens from the Manatee Lagoon area, Cayo, Augustine, Mountain Cow, N slope Cockscomb Mts. (1200', 1500'), Freetown, Toledo Settlement; Mar., Apr., May, Aug., Oct., Nov., Dec. CRITICAL PUBLISHED RECORDS: Belize (Moore, 1859: 54), Orange Walk (Salvin and Godman, Biologia, ii, 1891: 192).

This distinctly marked woodcreeper is a moderately common resident of tall rain forest and its margins and occasionally occurs in high second growth. Along with the two dendrocinclids, this species often feeds upon the insects that flee before army ants (Willis, 1960a:

159). Specimens collected in April by Holt and in May by Agostini had enlarged gonads.

I refer the specimens to D. c. sancti-thomae.^{191/}

Xiphorhynchus flavigaster (Swainson)

Ivory-billed Woodcreeper

SPECIMENS. LSUMZ: Ten mi. NW Gallon Jug - ♂, ♀ (49.2, 42.0 g.), Nov. 8. Hill Bank - ♀ (43.8), Nov. 20. Gallon Jug - ♂ (49.2), Feb. 22; ♀ (40.7), Mar. 2; ♀ (42.2), Oct. 29; ♂ (49.0), Nov. 2; ♂ (48.1), Nov. 7; ♀ (41.0), Nov. 14. Five mi. W Baldy Beacon - ♀ (42.5), Apr. 19. Ballerina Camp - ♂ (51.1), Apr. 25. Two mi. NE Millionario - ♂ (49.3), Mar. 15. Seven mi. NW San Pedro Columbia - 2 ♂'s (51.2, 51.5), May 19. Two mi. NW San Pedro Columbia - ♂ (51.4), May 2; ♀, ♂ (49.8, 51.9), May 7; ♂ (48.1), May 8; ♀ (45.6), May 13. OTHER MUSEUMS (BM, CC, CM, MCZ, PC, UMMZ): Forty-three specimens from Belize, Manatee Lagoon area, Cayo, Mountain Cow, W slope Cockscomb Mts. (1400', 1500'), Freetown, All Pines, Toledo Settlement; every month. CRITICAL PUBLISHED RECORDS: Orange Walk, Southern [= Mountain] Pine Ridge (Salvin and Godman, Biologia, ii, 1891: 179).

All wooded areas except the open pinelands and mangrove swamps are suitable habitats for this very common woodcreeper. It has been noted throughout the Colony (except on the keys) in woodlands as diverse as those on the outskirts of Belize and the upper slopes of the Cockscomb Mountains. I have collected Ivory-billed Woodcreepers that were in breeding condition in March, April, and May. Peck found a recently completed but unoccupied nest on July 6 near Manatee Lagoon. The heavy female collected on May 7 had an egg in the oviduct, and a 15 mm. ovum was found in the bird collected May 13.

I refer the British Honduran population of this species to X. f. eburneirostris.^{192/} A few specimens from Gallon Jug and Belize show a slight approach to X. f. yucatanensis.^{193/} but none is closer to that race than to X. f. eburneirostris.

Lepidocolaptes souleyetii (Des Murs)

Streak-headed Woodcreeper

SPECIMENS. LSUMZ: Gallon Jug - ♂ (28.1 g.), Mar. 11; ♂ (30.7), Mar. 14. Two mi. NE Millionario - ♀ (29.7), Mar. 15. OTHER MUSEUMS (BM, CM, MCZ, UMNZ): Thirteen specimens from the Sibun River, Manatee Lagoon area, Cayo, Freetown, All Pines, Ycacos Lagoon, Toledo Settlement; Jan., Mar., Apr., May, Nov., Dec. CRITICAL PUBLISHED RECORD: Belize (Sclater, 1890: 153).

Xiphocolaptes promeropirhynchus is the only British Honduran woodcreeper that has been recorded less frequently than L. souleyetii. The Streak-headed Woodcreeper is a resident of tall humid forest, high second growth, and occasionally pineland. Although some species of dendrocolaptids are not common, all species share the taller forests. At Gallon Jug, in a few acres of tall but disturbed woodland near a plantation, I have seen each of the eight species of woodcreepers recorded from the Colony. Peck found a pair of Streak-headed Woodcreepers occupying an abandoned woodpecker hole in a pine tree near Ycacos Lagoon on May 17. The hole, which was about 35 feet above the ground, contained only a few bark chips. Specimens collected in April and May by Blake and Agostini were in breeding condition.

The race L. s. insignis^{194/} is found in British Honduras. In 1929, Austin described L. s. decoloris^{195/} from the Cayo area, but the race was mistakenly based on worn specimens, as pointed out by Griscom (1932a: 244).

Family FURNARIIDAE

Synallaxis erythrothorax Sclater

Rufous-breasted Spinetail

SPECIMENS. LSUMZ: Hill Bank - ♀ (17.5 g.), Nov. 27. Gallon Jug - ♀ (17.0), Feb. 9. Ballerina Camp - ♀ (16.6), Apr. 24; ♀ (16.8), Apr. 25. Kendal - ♀, Aug. 31. Two mi. W San Pedro Columbia - ♂, ♀ (18.4, 18.8), May 5; ♂ (17.4), May 11; ♂ (18.8), May 21. OTHER MUSEUMS (BM, CM, MCZ, USNM): Fifteen specimens from Orange Walk, Manatee Lagoon, Cayo, Sittee River, Toledo Settlement; Mar., Apr., June. CRITICAL PUBLISHED RECORD: Belize (Sclater, 1890: 55).

In the southern one-third of the Colony, the Rufous-breasted Spinetail is a common resident of dense thickets in abandoned plantations and in the brushy borders of taller second growth and forest. It is moderately common in the central region, but in the northern sector of British Honduras it is rare and local. At Gallon Jug, the most intensively studied area in the Colony, it has been seen only twice (February, October). I collected a specimen in the "broken pine ridge" at Hill Bank in November, and Lay saw several individuals in thickets near Corozal during mid-August. Gonads do not become fully enlarged until May. The male collected May 11 was a member of a pair that I observed nest-building.

I refer the British Honduran population to S. e.
^{196/}erythrothorax. I compared three females from the Colony
 with a single female from Lake Yajoa, Honduras, and found
 them to be very similar.

Automolus ochrolaemus (Tschudi)

Buff-throated Automolus

SPECIMENS. USNM: Gallon Jug - ♀ (38.3 g.), Mar. 28.
 Ballerina Camp - ♂ (44.4), Apr. 27. Twenty-two mi. SW
 Stann Creek on South Stann Creek - ♀, Apr. 24. Two mi.
 W San Pedro Columbia - ♂ (43.9), May 8; ♀ (42.1), May
 12; ♂ (45.8), May 23. OTHER MUSEUMS (BM, CC, CM, MCZ):
 Seventeen specimens from the Manatee Lagoon area, San
 Antonio, Mountain Pine Ridge, Augustine, Camp VI, Moun-
 tain Cow, N slope Cockscomb Mts. (1400'), Toledo Settle-
 ment; all months except May, June, July, Aug.

The vegetation within 10 feet of the floor in tall,
 humid forest and occasionally the forest floor itself
 provide the preferred habitat for this secretive furnarid.
 It occurs wherever there is high forest but is only
 moderately common south of the Belize River and is rare
 in the north. I have seen the Buff-throated Automolus
 from forest at near sea level up to 2500 feet in the
 Cockscomb Mountains. No nests have been noted in British
 Honduras, but specimens possessing reproductively-active
 gonads have been collected in late March, April, and May.

I refer the British Honduran specimens to A. o.
^{197/}cervinigularis.

Xenops minutus (Sparrrman)

Plain Xenops

SPECIMENS. USNMZ: Gallon Jug - ♂ (11.2 g.), Nov. 6. One mi. S Ballerina Camp - ♂ (12.2), Apr. 28. Two mi. W San Pedro Columbia - ♀ (10.4), May 8. OTHER MUSEUMS (BM, CM, MCZ, PC, UMMZ): Twenty-six specimens from Orange Walk, Manatee Lagoon area, 12 mi. S Cayo, Augustine, Mountain Cow, N slope Cockscomb Mts. (1600'), Freetown, Toledo Settlement; Feb., Mar., Apr., May, July, Oct., Nov.

The Plain Xenops is a moderately common to uncommon resident of the lower level of tall, humid forest and tall second growth. It flits about tree trunks, vines, and leaves and often pries beneath attached vegetation. As observed by Willis (1960c: 105), the xenops sometimes joins the wandering forest flocks of small passerine birds. Some of the specimens taken in mid-March, April, and May had enlarged gonads.

The specimens collected in British Honduras are referable to X. m. mexicanus^{198/}. In 1919, Chubb named X. m. cayoensis^{199/} on the basis of specimens taken at Cayo, but this race was subsequently proven untenable (Austin, 1929: 379).

[Sclerurus mexicanus Sclater]

Tawny-throated Leaf-scraper

This species is listed from British Honduras in the tables in Volume I of Salvin and Godman's Biologia (1904: 24). The specimen could not be found by Todd in

a search in the British Museum in 1934. Mr. Todd did find, however, a specimen of S. guatemalensis taken in Cayo on April 2, 1888. As the latter species is not recorded from the Colony in the Biologia, perhaps S. mexicanus was recorded through error.

Sclerurus guatemalensis (Hartlaub)

Scaly-throated Leaf-scraper

SPECIMENS. USNM: Gallon Jug - ♂ (37.1 g.), Nov. 14. One mi. S Ballerina Camp - ♀ (33.9), Apr. 28; ♂ (32.3), Apr. 30. Two mi. NE Millionario - ♀, Mar. 15. OTHER MUSEUMS (BM, CM, MCZ): Four specimens from Cayo and Toledo Settlement; Apr., Sept., Nov., Dec.

Only a few sight records supplement the specimen data listed above. On May 28 a leaf-scraper, presumably this species, flew into my camp at 2900 feet on the slope of Victoria Peak. Peck shot but did not preserve a bird at Manatee Lagoon in May, and he saw another on the upper Temash River in December. This rarely noted resident prefers the floor of tall undisturbed forest. Its shyness and the similarity of the color of its plumage to the ground litter undoubtedly contribute to its apparent scarcity. None of the three birds that I collected in March and April had enlarged gonads, but the male collected November 14 did have enlarged testes.

The birds residing in northern Central America are S. g. guatemalensis.^{200/}

Family FORMICARIIDAE

Taraba major (Vieillot)

Great Antshrike

SPECIMENS. CM, UNMZ: Cayo - ♀ (60.6 g.), Mar. 20, 1931; ♂, Apr. 4, 1926.

These two specimens represent the only records of the species from the Colony. Holt collected the specimen on April 4 in a "tangle of vines in [a] brushy clearing."

I follow current practice in referring these specimens to T. m. melanocrissus.^{201/}

Thamnophilus doliatus (Linnaeus)

Barred Antshrike

SPECIMENS. USNM: Gallon Jug - ♂ (26.9 g.), Feb. 18; ♂ (27.4), Feb. 19; ♀ (21.6), Feb. 21; ♂ (22.2), Feb. 22; ♀ (26.2), Mar. 9; ♀ (26.4), May 27; ♂ (26.1), May 28; ♂ (23.6), May 29; ♂ (27.9), June 8; ♂ (27.4), Oct. 27; ♂ (27.3), Nov. 2; ♀ (26.1), Nov. 2; ♂ (27.3), Nov. 12; ♀ (25.0), Nov. 16. Melinda - ♂, Sept. 2. Kendal - ♂, Aug. 31. Two mi. NW San Pedro Columbia - ♂ (26.8), May 3; 2 ♀'s (23.4, 23.8), May 5; ♂ (23.7), May 6; ♂ (23.2), May 14. OTHER MUSEUMS (BM, CG, CM, MCZ, UNMZ, USNM): Fifteen specimens from the Manatee Lagoon area, Cayo, San Antonio, 12 mi. S Cayo, Sittee River, Toledo Settlement; Jan., Mar., Apr., June, July, Aug. CRITICAL PUBLISHED RECORDS: Vicinity of Belize (Sclater, 1890: 208); Orange Walk (Salvin and Godman, Biologia, ii, 1892: 203).

This antshrike occurs in low huamil and in thickets at the edge of tall forest. The species is very local in its distribution but may be common where it is found. Like many other birds of the thickets, the Barred Antshrike is more often heard than seen. Mist nets were

effective in capturing many of the Gallon Jug and San Pedro Columbia specimens. Birds in breeding condition have been collected from March to early June, but half the specimens collected during this period did not have enlarged gonads.

Specimens from northern British Honduras approach T. d. yucatanensis^{202/} and specimens from the southern part of the Colony are referable to T. d. intermedius.^{203/}

Dr. Kenneth Parkes is presently revising this species and my designations are accordingly only tentative.

Thamnophilus punctatus (Shaw)

Slaty Antshrike

SPECIMEN. MCZ: Upper Rio Grande - ♂, Nov. 25, 1906.

Reference to this specimen, which was collected by Peck, has been made by Ridgway (1911: 51) and others under the more general locality of "Toledo District." Presumably this specimen represents the most northern record of the species. Peck saw two or three others at the same locality. There are no other records from British Honduras.

The race of Slaty Antshrike found in Central America and part of northern South America is T. p. atrinucha.^{204/}

Thamnistes anabatinus (Sclater and Salvin)

Tawny Antshrike

SPECIMENS. USNM: Seven mi. NW San Pedro Columbia - ♂ (20.2 g.), May 19. OTHER MUSEUMS (CM, MCZ): Four specimens from Mountain Cow and Toledo Settlement; Jan., Apr.

In British Honduras, the Tawny Antshrike is known only from five specimens. Three individuals collected by Peck and the one bird that I shot near San Pedro Columbia were foraging high in the tops of trees in the tall, humid forest. The specimen collected in May had fully enlarged testes.

These birds are referable to T. a. anabatinus. ^{205/}

Dysithamnus mentalis (Temminck)

Slaty-capped Antvireo

SPECIMENS. CM: Five specimens from Duck Run and Cayo; April, 1926.

These five specimens were collected by Ernest G. Holt and constitute the only records of the species from British Honduras. According to Holt's notes, these birds had enlarged gonads.

I refer the specimens to D. m. septentrionalis, ^{206/} which ranges from Mexico to Panamá. I have compared the five British Honduran and three Honduran specimens with four birds from Costa Rica, and I believe that the Costa Rican population may be darker and possibly larger.

Microerhophias guixensis (Cornalia)

Dot-winged Antwren

SPECIMENS. LSUMZ: Gallon Jug - ♂ (7.7 g.), Mar. 4; ♂, ♀ (7.8, 7.5), Mar. 7; ♂ (7.6), Oct. 25; ♀ (8.0), Nov. 9. Ballerina Camp - ♂ (7.6), Apr. 24. Seven mi. NW San-Pedro Columbia - ♂ (7.8), May 18; ♀ (9.7), May 19. Two mi. W San Pedro Columbia - ♂, ♀ (7.2, 8.0), May 11; ♂ (8.2), May 13. OTHER MUSEUMS (BM, CC, CM, CMNH, MCZ): Nineteen specimens from the Manatee Lagoon area, Duck Run, Cayo, Middlesex, Augustine, Camp VI, Mountain Cow, Freetown, Toledo Settlement; Jan., Feb., Mar., Apr., May, Aug., Sept.

Dot-winged Antwrens are moderately common residents of tall and moderately tall forests. There they forage in pairs or sometimes in groups of four or even six birds in the lower story of the forest, their presence marked by an often-repeated high, rather plaintive note. These antwrens attain enlarged gonads during March and April and are breeding by May. The female collected May 19 held an egg in the oviduct. On June 10, Willis observed a male building a nest in a tree fork about 20 feet above the ground.

The race present in British Honduras is M. g. boucardi. ^{207/}

Cercomacra tyrannina (Scalater)

Dusky Antbird

SPECIMENS. LSUMZ: Gallon Jug - ♂ (16.0 g.), May 1; ♂ (16.9), Oct. 24. Pomona - ♂ (16.9), Apr. 1. Ballerina Camp - ♂ (15.7), Apr. 25. Two mi. W San Pedro Columbia - ♀ (16.9), May 5; ♂ (17.2), May 8; ♀ (17.3), May 9; ♂, ♀ (17.4, 16.3), May 11; ♂ (18.2), May 18. OTHER MUSEUMS (BM, CC, CM, USNM): Ten specimens from the Manatee Lagoon area, Duck Run, Cayo, Freetown; Jan., Mar., Apr., May, Aug., Nov. CRITICAL PUBLISHED RECORD: Belize (Moore, 1859: 55).

Low huamil that has grown into almost impenetrable thickets offers the most suitable habitat for this shy antbird in British Honduras. The Dusky Antbird has been observed not only at the specimen localities but also at Mill Bank (Willis), Kendal and South Stann Creek (Russell), and Yacacos Lagoon and the upper Moho River (Peck). This resident was common only in the vicinity of San Pedro Columbia, where the primitive agricultural practices produced extensive areas of suitable habitat. Elsewhere it was uncommon. Birds with fully enlarged gonads were collected April 25, May 1, and May 8. Other specimens collected in April and May had only slightly enlarged gonads.

I assign the British Honduran population to C. t.
^{208/}crepera, which ranges from Mexico to Panamá.

Gymnocichla nudiceps (Cassin)

Bare-crowned Antbird

SPECIMENS. USNM: Two mi. W San Pedro Columbia - ♀ (31.6 g.), May 13, 1956; ♂ (31.6), May 21, 1956.

Both collected birds had fully enlarged gonads and were taken in second growth. The female was captured in a mist net that had been suspended in extremely dense vegetation about 4 feet tall in a recently abandoned hillside plantation. The male was collected as it flitted about near the ground in low huamil that had grown to a height of 12 to 15 feet. No other individuals of this species have been seen, even though a special effort was made to find them.

I refer these two specimens to G. n. chiroleuca.^{209/}

Formicarius analis (d'Orbigny and Lafresnaye)

Black-faced Antthrush

SPECIMENS. LSUMZ: Gallon Jug - ?, Feb. 24; ♀ (60.0 g.), Feb. 28; ♀ (59.4), Mar. 7; ♂ (62.5), Mar. 21; ♂, ♀ (60.9, 67.8), May 28; ♂ (56.5), May 31; ♂ (61.7), June 6; ♂, Aug. 17; ♂ (66.9), Oct. 23; ♂ (62.5), Oct. 30; ♂ (57.5), Nov. 15. Ballerina Camp - ♂ (65.1), Apr. 27. Seven mi. NW San Pedro Columbia - ♂ (60.1), May 14. Two mi. NW San Pedro Columbia - ♂ (65.8), May 4; ♂ (66.9), May 11; 2 ♂'s (58.4, 63.8), May 13. OTHER MUSEUMS (BM, CC, CM, MCZ): Eighteen specimens from the Manatee Lagoon area, Duck Run, Cayo, Mountain Cow, Freetown, Toledo Settlement; Jan., Feb., Apr., May, June, Aug., Sept., Oct.

Black-faced Antthrushes are common but secretive residents of tall rain forest wherever this habitat occurs in the Colony. Their presence is usually revealed by a series of short explosive whistles that are rather easily imitated. If attracted to the imitation of its call, an antthrush approaches on the ground slowly, deliberately, and well-hidden. Often the bird may circle completely around a sitting observer without detection. Although this species rarely flies, it builds its nest in a natural cavity in a tree 4 to 6 feet above the ground. Two or three eggs are usually laid. Lancaster found an occupied nest on April 28, the earliest date. In 1957, Willis noted four nests, the latest on July 25. Nesting probably does not begin much before late April as specimens that I have collected at earlier dates had only slightly enlarged gonads.

I have compared the specimens of this species from British Honduras with the type and type series of F. a.^{210/}intermedius, and find all are referable to that subspecies. There is considerable variation among specimens from the same locality in respect to the rufous color of the back. But specimens from northern British Honduras (Gallon Jug) are more like the type from the Manatee Lagoon area than birds from the extreme south (San Pedro Columbia); specimens from the latter locality are paler on the upper parts than specimens from farther north. San Pedro Columbia specimens also are slightly darker on the chest.

Family PIPRIDAE

Pipra mentalis Sclater

Yellow-thighed Manakin

SPECIMENS. USNM: Hill Bank - ♂ (17.1 g.), Feb. 24. Gallon Jug - ♂ (12.2), Feb. 24; 2 ♀'s (18.0, -), Mar. 26; ♂, Mar. 28; ♀ (16.3), Oct. 29; ♂ (17.4), Nov. 14; ♂ (18.8), Nov. 17. Twenty-two mi. SW Stann Creek on South Stann Creek - ♂, Apr. 26. One mi. E Victoria Peak - ♀, May 8. OTHER MUSEUMS (BM, CM, MCZ, USNM): Forty-four specimens from Orange Walk, Manatee Lagoon area, Duck Run, Cayo, San Antonio, Mountain Pine Ridge, Augustine, Mountain Cow, N slope Cockscomb Mts. (1300'-1600'), Freetown; Mar., Apr., May, July, Aug., Oct.

This manakin is a common resident of the undergrowth of tall rain forest. There it flits noisily from branch to branch 6 to 25 feet above the ground. On the crests of the very narrow ridges that extend south from the Cockscomb Mountains, Yellow-thighed

Manakins are the most conspicuous birds in late April and May. On one such crest, where the undergrowth was sparse and most trees were less than 12 inches in diameter, I counted ten redcapped males along only 200 feet of trail. Each bird in this unusual assemblage seemed to dart about in a definite area, while it produced many snapping noises (presumably by wing-clapping) and whistles. Birds of this species were seen at Ycacos Lagoon, San Pedro Columbia, and Toledo Settlement (Peck, Russell) although specimens were not collected. I have not noted any seasonal wandering, but Peck writes of finding this bird in mangrove swamps near the seashore in winter. Breeding is well under way by March; a female that I collected on March 26 contained a fully formed egg. Later nesting is indicated by a nest found by Peck near Manatee Lagoon on May 28, 1906, containing one egg. Willis noted a fledgling at Gallon Jug on June 26. A bird in the green plumage of the female was observed singing on April 28; I collected it and found that it was a male with fully enlarged testes.

The nominate form of this species, P. m. mentalis,^{211/} occupies northern Central America.

Manacus candei (Parzudaki)

White-collared Manakin

SPECIMENS. LSUMZ: Hill Bank - ♀ (16.8 g.), Feb. 19.
Gallon Jug - ♂ (20.1), Mar. 2; ♂ (20.8), Mar. 19; ♀
(20.0), Apr. 5. Silver Creek at Hummingbird Highway -

♀ (16.8), Mar. 27. Two mi. W San Pedro Columbia - ♀ (15.8), May 6; ♀ (15.4), May 7; 2 ♂'s (18.2, 18.6), May 8; ♂ (18.1), May 11; ♂ (17.4), May 12; ♂ (19.9), May 21. OTHER MUSEUMS (BM, CC, CM, MCZ, UMMZ): Thirty-seven specimens from Orange Walk, Manatee Lagoon area, Cayo, Camp VI, Freetown, Toledo Settlement; all months except Jan., Feb., Nov. CRITICAL PUBLISHED RECORD: Belize (Sclater, 1888: 314).

This species is a common resident in the southern half of the Colony in tall and moderately tall huamil and in the edge of heavy rain forest. It occasionally occurs also in tall thickets at the edge of plantations. In the northern portion of the Colony, the White-collared Manakin occurs in the same types of habitat as in the south but is less common. The breeding season is long. I collected a male with slightly enlarged testes on March 2, and Peck found a nest containing two eggs on August 5. Each of four other nests found by Peck or Willis between these extreme dates contained either two eggs or two young.

Schiffornis turdinus (Wied)

Thrushlike Manakin

SPECIMENS. USMZ: Hill Bank - ♀ (34.2 g.), Nov. 27. Gallon Jug - ♀ (35.8), Feb. 26; ♀ (32.6), Mar. 8; ♂ (30.0), Mar. 10; ♀ (31.6), Mar. 21; ♂ (29.8), Oct. 25; ♀ ? (27.2), Nov. 14. Two mi. W San Pedro Columbia - ♀ (32.6), May 11. OTHER MUSEUMS (BM, CC, MCZ, UMMZ): Twenty-four specimens from Orange Walk, the Manatee Lagoon area, Cayo, 12 mi. S Cayo, Camp VI, Mountain Cow, N slope Cockscomb Mts. (1300'), Freetown, Toledo Settlement; all months except Nov.

In British Honduras the Thrushlike Manakin is a common resident of mature rain forest and an occasional

resident of tall second growth. It forages for insects in the lowest vegetation with cautious movements, often pausing on a vertical stem to utter its sweet, three-noted song. At Gallon Jug, on March 1 Willis noted an adult incubating two eggs in a nest situated 2 feet above the ground in the stump of a palm. The nest was composed of the skeletal remains of leaves and was lined with a thin layer of fine rootlets. Five weeks later the one young bird had left the nest. The same nest was relined and used in incubating two more eggs in late May. The nest was destroyed by a predator in early June.

S. t. verae-nacis^{212/} is the race to which I refer the British Honduran specimens.

Family COTINGIDAE

Cotinga amabilis (Gould)

Lovely Cotinga

SPECIMEN. MCZ: Camp VI - ♀, Mar. 29, 1928.

Austin (1929: 384) collected the only specimen of this species from British Honduras "in the extreme top of a very tall tree at the edge of the pine ridge." At Gallon Jug in 1957, Willis recorded the Lovely Cotinga twice, one bird on February 27 and one on May 11. I am not aware of any other observations from the Colony.

Attila spadiceus (Gmelin)

Bright-rumped Attila

SPECIMENS. LSUMZ: Hill Bank - ♀ (39.1 g.), Feb. 24. Gallon Jug - ♀, Jan. 10; ♀ (40.5), Mar. 16; ♀ (43.9), Nov. 7. Two mi. S Stann Creek - ♀ (39.1), Mar. 30. Two mi. W San Pedro Columbia - ♂ (42.1), May 12. OTHER MUSEUMS (BM, CC, CM, MCZ, PC, UMMZ, USNM): Twenty-two specimens from Belize, Manatee Lagoon area, Cayo, San Felipe, Freetown, Toledo Settlement; all months except July.

The Bright-rumped Attila is a moderately common resident of tall forest and thickets at the forest's edge. That it is not completely sedentary is suggested by Peck's observation that it wanders from its breeding area in fall and winter and even occurs at the seashore. The female that I collected on March 30 was in mangroves less than 200 yards from the beach; she was in breeding condition and accompanied by another bird. Both members of the presumed pair were singing. I suspect that the birds noted by Peck were not wanderers but residents of the coastal area. At Cayo, Holt found a nest containing four eggs on April 9. Thus March 30 is not too early for the pair of coastal birds that I saw to be breeding. All the specimens collected in April and May had enlarged gonads, but data are not available for specimens collected later in summer.

I refer the specimens to A. s. flammulatus.^{213/} There is considerable individual variation among the specimens from British Honduras, but there is only a slight approach toward the characters of A. s. gauderi.^{214/}

Laniocera rufescens (Sclater)

Speckled Mourner

SPECIMENS. LSUMZ: Ten mi. NW Middlesex on Hummingbird Hwy. - ♂ (49.7 g.), Mar. 26, 1956.

The only Speckled Mourner collected in the Colony was taken by Dennett in heavy rain forest. Willis saw two singing individuals of this species at Gallon Jug on July 14, 1957.

215/
L. r. rufescens, to which I refer the specimen, ranges throughout Central America.

Rhytipterna holerythra (Sclater and Salvin)

Rufous Mourner

SPECIMENS. LSUMZ: Two mi. NE Millionario - ♂ (36.3 g.), Mar. 15. Seven mi. NW San Pedro Columbia - ♂, ♀ (32.0, 35.6), May 19. OTHER MUSEUMS (CH, MCZ): Five specimens from Toledo Settlement and the upper Temash River; Feb., Mar., May, Nov., Dec.

This mourner is an uncommon resident of tall, humid forest in British Honduras. Only a few additional localities of record supplement the specimen localities. Lancaster, Willis, and I observed R. holerythra occasionally at Gallon Jug. Peck saw one near the mouth of the Manatee River in December, and I noted one in the edge of rain forest on South Stann Creek in April. The specimen collected near Millionario on March 15 had slightly enlarged testes, and the two birds collected in May near San Pedro Columbia were in breeding condition.

I refer these birds to the nominate form, R. h.
^{216/}
holerythra.

Libanus unirufus Sclater

Rufous Piha

SPECIMENS. LSUMZ: Sixteen mi. N Gallon Jug - ♂ (87.0 g.), Mar. 4. Silver Creek at Hummingbird Hwy. - ♂ (85.1), Mar. 27. OTHER MUSEUMS (CM, MCZ): Five specimens from Mountain Cow, N slope Cockscomb Mts. (1500'), Toledo Settlement; Feb., Mar., Apr., Oct., Nov.

In dense undisturbed rain forest, this species is a moderately common resident of the middle stratum. There are sight records from Guacamallo, Ballerina Camp, two miles northeast of Millionario, South Stann Creek, the upper Rio Grande, and the upper Moho River. Undoubtedly the Rufous Piha is frequently overlooked, for it may remain perched motionless and silent some distance above the ground. If alarmed, it sometimes emits a piercing, shrill call and flies to a distant perch. The two males collected in March near Gallon Jug and Silver Creek had enlarged testes. On May 28, 1959, on the southern slope of Victoria Peak at about 5000 feet, I flushed a Rufous Piha from its nest. Two pale brown eggs were in a shallow depression about 10 feet above the ground in a crotch, between a sizable epiphytic bromeliad and a large tree.

The British Honduran specimens are typical of L. u.
^{217/}
unirufus.

Pachyramphus cinnamomeus Lawrence

- Cinnamon Becard

SPECIMENS. LSUMZ: Gallon Jug - ♂ (18.7 g.), Mar. 12; ♀ (20.1), Oct. 29. Two mi. W San Pedro Columbia - ♂ (21.5), May 13. OTHER MUSEUMS (BM, MOZ): Eleven specimens from Cayo, San Felipe, Camp VI, Mountain Cow, upper Moho River, Toledo Settlement; Mar., Apr., Oct.

This small cotinga is a moderately common resident of tall rain forest, where it generally forages high above the ground. I have seen the species near the Hummingbird Highway six miles west of Middlesex and in the forest northeast of Millionario. Willis observed it at Hill Bank. These three localities are the only places of record supplementing the specimen localities. The condition of the gonads is known only for the three specimens in the LSUMZ. Of these three birds, only the male collected in May had enlarged gonads. Peck found a nest in a clearing near Toledo Settlement on May 13 that contained one very young bird.

British Honduran specimens of the Cinnamon Becard are referable to P. c. fulvidior.^{218/} The holotype of this race was collected by Peck in Toledo District, according to its label. Consequently, in describing the race, Griscom used "Toledo district" as the type locality. Peck's notes indicate that the specific locality was Toledo Settlement.

Pachyramphus major (Cabanis)

Gray-collared Becard

SPECIMENS. LSUMZ: Seven mi. NW San Pedro Columbia - ♂ (28.4 g.), May 18. OTHER MUSEUMS (COPH, MCZ): Middlesex - ♂, Feb. 4, 1923; Punta Gorda - ♀, Jan. 24, 1907.

The three specimens listed above represent the only records of this species in British Honduras. The male that I collected northwest of San Pedro Columbia was foraging in branches about 30 feet above the ground in tall rain forest. This bird had the plumage of a female, but it was actually a male with much-enlarged testes. Peck collected a bird labeled "♂, Toledo District" that was recorded by Bangs and Peck (1908: 44). Peck's notes supplement this record with the information that the bird was collected in the mangroves at Punta Gorda. Paynter (1955: 182) recently re-examined the Peck specimen and considered it a female. I have not seen the specimen at the Chicago Natural History Museum, which was collected at Middlesex by Schmidt and Walters.

Paynter (1955: 182) critically examined the Punta Gorda specimen and decided that he could not with certainty assign it to either P. m. itzensis^{219/} or P. m. australis.^{220/} Although I have examined good series of these two races, I have not found any specimens in a plumage comparable to the San Pedro Columbia bird. Consequently I cannot identify it to subspecies.

Platypsaris aglaiae (Lafresnaye)

Rose-throated Becard

SPECIMENS. LSUMZ: Hill Bank - ♀ (34.8 g.), Nov. 26. Gallon Jug - ♂, ♀ (28.3, 29.5), Apr. 7. OTHER MUSEUMS (BM, MCZ, UMMZ): Five specimens from 8 mi. WNW Belize, Cayo, Toledo Settlement; Feb., Oct., Nov., Dec.

Rose-throated Becards are uncommon residents of tall second growth, high rain forest, and the forest border and have not been recorded at any localities other than those listed as collecting sites. Lancaster collected a pair at Gallon Jug on April 7 that were in breeding condition.

J. Dan Webster has recently completed a critical study of this species and in the course of this study he examined British Honduran specimens. Webster (in litt.) considered that the three specimens from Hill Bank and Gallon Jug could best be called P. a. yucatanensis^{221/} x P. a. hypophaeus^{222/} or P. a. yucatanensis x P. a. hypophaeus^{223/} x P. a. sumichrasti. He concluded that two specimens from Toledo Settlement and one from an unknown specific locality were typical P. a. hypophaeus.

Tityra semifasciata (Spix)

Masked Tityra

SPECIMENS. LSUMZ: Hill Bank - ? (80.4 g.), Feb. 21. Gallon Jug - ♀ (77.8), Feb. 28; ♂, Mar. 21; ? (82.9), May 7; ♀ (79.7), May 28; ♂ (78.4), Oct. 26; ♂ (94.7), Nov. 16. Augustine - ♀, Aug. 18; ♀, Dec. 11. Ballerina Camp - ♂ (84.7), Apr. 26. Two mi. W San Pedro Columbia - ♂ (71.8), May 21. OTHER MUSEUMS (BM, CC, CM, MCZ, UMMZ):

Thirty-three specimens from Orange Walk, Belize, Manatee Lagoon area, Cayo, San Felipe, 11 mi. S Cayo, Camp VI, Freetown; Feb., Mar., Apr., May, June, July, Sept. CRITICAL PUBLISHED RECORD: Arenal (Hellmayr, 1929: 214).

This species, known locally as the "white woodpecker," is a common resident of forest borders, pinelands, and open areas with scattered trees. It is sometimes seen in treetops in tall forest. The Masked Tityra is most frequently observed in pairs or foursomes, occasionally in larger groups, foraging well above the ground or flying from one feeding area to another. I have collected specimens in March, April, and May that had enlarged gonads. Peck found five nests, each containing three eggs, in May, July, and August. The nest noted August 8 was in a natural cavity in a pine tree near Manatee Lagoon and was re-used the following May. At Gallon Jug on May 16, 1957, Willis observed a pair feeding young in a hole 45 feet above the ground in a tree at the edge of a corn plantation. In a hole in the same tree, but 23 feet higher, a female Black-capped Tityra also fed young.

I assign the specimens collected in British Honduras to T. s. personata^{224/}, which ranges from eastern Mexico south to El Salvador and Honduras.

Erator inquisitor (Lichtenstein)

Black-capped Tityra

SPECIMENS. LSUMZ: Gallon Jug - ♀ (41.9 g.), Feb. 19; ♀ (43.4), June 1; ♂ (46.4), June 2. OTHER MUSEUMS (BM, CC, CM, UMMZ): Twelve specimens from Belize, the Manatee Lagoon area, Cayo, Freetown; Jan., Apr., May, June, July.

This uncommon resident has been observed only at Hill Bank, near San Pedro Columbia, and at the localities where collected. The two tityra species occur in essentially the same habitats, sometimes even nesting in the same tree (see preceding species account). Willis noted two nests containing young at Gallon Jug, one on May 16 and the other on May 19. The latter nest was in a cavity in a Sabal trunk 45 feet above the ground. Each of two nests found by Peck in 1906 near Manatee Lagoon was in a woodpecker hole in a pine tree. The nests each held two eggs. One was 12 and the other 3 feet above the ground, and they were found May 14 and June 4, respectively.

^{225/}
E. i. fraserii ranges from Mexico south through British Honduras and Guatemala to Panamá.

Family TYRANNIDAE

Sayornis nigricans (Swainson)

Black Phoebe

SPECIMENS. LSUMZ: Caves Branch at Hummingbird Highway - ♂ (18.7 g.), Mar. 22. OTHER MUSEUMS (CM, MCZ, UMMZ): Five specimens from Cayo and one from the Sittee River; Mar., Apr.

The Black Phoebe is locally distributed in central and southern British Honduras but is unknown in the northern part of the Colony. It has been recorded only at about 200 to 400 feet above sea level, on the upper parts of the Belize River (as far west as Cayo), on Caves Branch, and the Manatee, Sittee, Moho, and Temash Rivers. Rivers with steep, rocky slopes and exposed rocks in the bed seem to be preferred. It is presumably a resident, although it has been recorded only in spring and in November. Single nests containing three eggs were found by Van Tyne and Holt on March 19 and April 9, respectively. Peck found a nest on April 24 that held three nearly fledged young. Each of these nests was attached to a rock overhanging a river.

Although the British Honduran specimens are from a lowland population, I see no basis for considering them separable from S. n. aquatica^{226/} of the Guatemalan highlands. The under tail coverts of the six specimens are almost completely sooty; the wings of the three males measure 85, 88, and 89.5 mm. and the wings of the females 81.5, 82, and 83 mm. In these two characters, as well as general coloration, the birds from the Colony can be matched by individuals from the mountains of Guatemala. Griscom (1932a: 246) commented on the variability of the characters of S. n. aquatica, and Dickey and van Rossem^{227/} (1938: 347-49) merged S. n. amnicola with S. n. aquatica, because of the great range of individual variation,

especially in the constancy of the sootiness of the under tail coverts.

Pyrocephalus rubinus (Boddaert)

Vermilion Flycatcher

SPECIMENS. LSUMZ: Two mi. NE Hill Bank - ♂, Mar. 23; ♂ (13.0 g.), Nov. 23; ♂ (13.5), Nov. 28; ? (13.2), Nov. 29. Hill Bank - ♂ (13.2), Nov. 23; ♂ (13.0), Nov. 25. OTHER MUSEUMS (BM, CM, CMNH, MCZ, UM, WU): Twenty-nine specimens from Orange Walk, Belize, Sibun River, Manatee Lagoon, Cayo, Freetown, All Pines; Jan., Feb., Mar., Apr., May, Sept., Nov.

Throughout the lowland pine areas of British Honduras, the Vermilion Flycatcher, or "robin red-breast," is a conspicuous and common resident. It occasionally wanders out of the pinelands, especially during the winter, since it has been seen at Gallon Jug, Belize, and Cayo. In the higher Mountain Pine Ridge it has been recorded only once; I saw one bird near Augustine on March 9, 1956. Information on nesting is meager and doubtless does not indicate the full range of the breeding season. Peck found several nests in the last week of May and in June that contained eggs. He also noted that nests are usually placed 3 or 4 feet above the ground in a small palmetto, but he did find one nest 20 feet above the ground in a pine tree. The male collected by Lancaster on March 23 near Hill Bank had only slightly enlarged testes.

Peck collected the type of P. r. blatteus,^{228/} the race to which I refer all British Honduran specimens. In describing this race, Bangs refers to the type locality as "Sabune District." In his notes, Peck more precisely defines the type locality as "near the Sibune River." Since the "Sabune District" no longer exists, the latter locality is preferable. On modern maps it is shown as the Sibun River.

Muscivora forficata (Gmelin)

Scissor-tailed Flycatcher

SPECIMENS. BM, CM: Seven specimens from Cayo and Toledo Settlement; Feb., Oct., Dec.

This flycatcher is a rare winter resident and probably also a rare fall and spring migrant. Few sight records supplement the specimens. The earliest fall record is represented by a bird collected at Cayo on October 12, presumably in 1887. Peck saw "a few" during the winter and spring of 1907, the last one early in April. On March 17, 1927, Col. Alfred Bellhouse saw several on a fence at Boom and on March 25, 1926, Holt saw one in a palm in Belize.

Muscivora tyrannus (Linnaeus)

Fork-tailed Flycatcher

SPECIMENS. LSUMZ: Six mi. NE Hill Bank - ♂, Mar. 22. Two mi. E Hill Bank - ♀ (25.2 g.), Nov. 23; ♀ (24.8), Nov. 28. OTHER MUSEUMS (BM, CC, CM, MCZ, UMMZ):

Fifteen specimens from Belize, Manatee Lagoon area, Mountain Pine Ridge, Freetown, Punta Gorda; all months except Jan., Aug., Sept., Oct. CRITICAL PUBLISHED RECORDS: Saddle Cay and Half Moon Cay (Salvin and Godman, Biologia, ii, 1890: 105).

The Fork-tailed Flycatcher is an uncommon breeding bird of lowland grassy areas of the Colony. It prefers marshy, low grass but does occur in relatively dry areas. The species is rather locally distributed and is absent in some apparently suitable places. There are two, old undated specimens in the British Museum from the Mountain Pine Ridge, but the only recent observation of the species in that area consists of two birds I saw near Augustine on March 11, 1956. This flycatcher has not been recorded in British Honduras in September or October, but this hiatus is probably due to insufficient field work in the more suitable habitats at that season. Data are not available to determine if the breeding birds are residents, since birds seen in fall, winter, and spring may be migrants from the north. Flocks of 6 to 14 or more individuals have been recorded in March, April, August, and November but possibly these were migrants. Specimens recorded by Salvin and Godman from Half Moon and Saddle Cays were not found in the British Museum by Todd nor were they listed in the Catalogue of the Birds in the British Museum. The reference did not indicate dates. Unless the birds were migrants it is probable that this reference is in error. Four nests containing eggs or young have been found

from March 31 to May 22. Three of the nests were located by Peck, who stated in his notes that the nests were found 7 to 20 feet above the ground in very open situations in the pine ridge.

The British Honduran specimens are referable to M. t. monarchus.^{229/}

Tyrannus tyrannus (Linnaeus)

Eastern Kingbird

SPECIMENS. LSUMZ: Calabash Cay - ♂ (46.9 g.), Apr. 9. OTHER MUSEUMS (BM, CM): Fourteen specimens from the Manatee Lagoon area, Cayo, All Pines; Apr., May, Aug., Oct. CRITICAL PUBLISHED RECORDS: Saddle and Half Moon Cays, May 9 (Salvin, 1864: 380).

The Eastern Kingbird migrates in large numbers through British Honduras from late August to October and during a two-month period in spring beginning with the last third of March. It is most frequently seen on the keys and in open coastal areas, but there are a few inland records (Gallon Jug, Cayo, San Pedro Columbia). Peck collected an early autumn migrant on August 23 and states in his notes that this species appears from the north in late July. The latest fall date on which this species was seen was October 23. The earliest recorded spring migrants were seen by Verner at Half Moon Cay on March 19; I saw the latest one recorded in spring on May 20. The birds were in rather silent compact flocks (the largest consisting of 60 individuals).

Two-thirds of the birds noted in spring were seen in the period of March 27 to April 19.

Tyrannus melancholicus (Vieillot)

Tropical Kingbird

SPECIMENS. LSUMZ: Gallon Jug - ? (38.5 g.), Feb. 22; ♀ (41.7), Feb. 26; ♂ (37.2), Mar. 7; ♂, ♀ (39.1, 42.1), May 29; ? (41.9), June 6; ♂ (41.3), Nov. 5. Calabash Cay - ♂, ♀ (36.2, 37.5), Apr. 10. Two mi. S Augustine - ♂ (47.0), Mar. 20. Six mi. S Melinda - ♂, Aug. 31. Two mi. W San Pedro Columbia - ♂ (42.2), May 9. OTHER MUSEUMS (BM, CC, CM, MCZ, PC, UMMZ, USNM): Thirty-seven specimens from Belize, Manatee Lagoon area, Cayo, San Felipe, Free-town, All Pines, Toledo Settlement; all months except July. CRITICAL PUBLISHED RECORD: Cockroach Cay (Bond, 1954: 7).

The Tropical Kingbird is one of the most frequently seen residents of the open areas of British Honduras. It has been noted in all regions of the Colony, although it is less numerous on the keys and the Mountain Pine Ridge. Pastures, fields, plantations, and open stream banks in the lowlands are its preferred habitat. Nesting begins in late April and continues until mid-June.

The race occupying the region from southeastern Mexico to northern South America is T. m. chloronotus.^{230/}

Legatus leucophaeus (Vieillot)

Piratic Flycatcher

SPECIMENS. LSUMZ: Gallon Jug - ♂ (27.5 g.), Apr. 7; ♂ (29.3), May 29. Eight mi. E Gallon Jug - ♂ (23.9), Mar. 28. Half Moon Cay - ♀ (31.5), Mar. 26. Two mi. W San Pedro Columbia - ♂ (27.0), May 5. OTHER MUSEUMS (BM, CM, MCZ): Six specimens from Cayo, Free-town, and Toledo Settlement; Mar., May.

The Piratic Flycatcher is a rather local breeding bird in British Honduras. First arrivals appeared in four different years between extreme dates of March 18 and March 26. At Gallon Jug, Willis recorded this species daily after its arrival until July 22, the latest date on which the species has been seen in British Honduras. It occurs where there are tall trees in extensive clearings and pastures, and on the edges of tall forest. Occasionally it is found in small clearings in the heart of extensive forest. Breeding probably begins soon after arrival, since individuals arrive with the gonads slightly enlarged. The male taken on April 7 had fully enlarged testes, and Willis noted an individual at Gallon Jug on April 21 near a nest about 40 feet above the ground in a Sabal stub (possibly a nest built by Myiozetetes similis). However, the earliest date of a set of eggs is May 2 (Peck). Skutch (1960: 451-464) has described the quite unflycatcherlike practice employed by the Piratic Flycatcher of stealing nests from other species.

The populations occurring in Mexico, Guatemala and British Honduras are referable to L. l. variegatus.^{231/}

Myiodynastes luteiventris Sclater

Sulphur-bellied Flycatcher

SPECIMENS. USNM: Gallon Jug - ♂ (46.0 g.), May 3; ♀, May 28. OTHER MUSEUMS (BM, CM, MCZ): Twenty-six specimens from the Manatee Lagoon area, Duck Run, Cayo, San Antonio,

Camp VI, Mountain Cow, Freetown; Mar., Apr., May, June, July. CRITICAL PUBLISHED RECORD: Belize (Salvin and Godman, Biologia, ii, 1889: 48).

The Sulphur-bellied Flycatcher is an uncommon breeding resident in British Honduras found most often about tall trees in clearings at or near the edge of high forest. There are eight records from Hill Bank, Sittee River, Half Moon Cay (a migrant seen by Verner on March 26 after a storm), Yeacos Lagoon, and Toledo Settlement. Observations made by Willis supply the earliest record in the Colony and provide an indication of local abundance. At Gallon Jug, Willis first saw this species on March 23 and recorded an average of four birds per day a field until July 31, when he left that area. Lay obtained the latest date on August 19, when he saw one bird at Corozal. Nests containing eggs were found during the first week of May; newly hatched birds were in another nest on May 24 (Peck).

Birds nesting from eastern Mexico south to Costa Rica are referable to M. l. luteiventris.^{232/}

Myiodynastes maculatus (Müller)

Streaked Flycatcher

SPECIMENS. USNMZ: Gallon Jug - ♂ (47.6 g.), Mar. 27; ♀ (42.9), May 28; ♂ (41.9), June 2; ♂, June 15. Ballerina Camp - ♀ (47.1), Apr. 24.

The Streaked Flycatcher has been recorded only at Gallon Jug and Ballerina Camp, where trees in clearings

near the edge of the tall forest provide its preferred habitat. Continuous field work at Gallon Jug by Willis in 1957 provides the earliest record in the Colony, on March 13, and the latest, on July 20. Between March 19 and early June, Willis recorded this species every day that he was in the field; most frequently he observed two individuals.

The population in the northern part of the range of this species (including British Honduras) is M. m.
233/
insolens.

Megarhynchus pitangus (Linnaeus)

Boat-billed Flycatcher

SPECIMENS. USNM: Hill Bank - ♀ (73.5 g.), Feb. 20. Gallon Jug - ♂ (64.2), Mar. 3. OTHER MUSEUMS (BM, CM, MCZ, PC, USNM): Nineteen specimens from Belize, Manatee Lagoon area, Cayo, Augustine, Camp VI, Toledo Settlement; Jan., Mar., Apr., Oct., Dec.

This resident flycatcher is found in British Honduras in moderate numbers near forest edges and in tall second growth and pinelands. Counts of only one or two individuals every four days in the field were the experience of Willis at Gallon Jug from March through May; he recorded the species more frequently in June and July. In pineland it is perhaps more common than in other habitats. Peck found four nests between May 22 and June 8 that contained eggs.

The race occupying the area from eastern Mexico through Central America to Panamá is M. p. mexicanus.^{234/}

Myiozetetes similis (Spix)

Vermilion-crowned Flycatcher

SPECIMENS. LSUMZ: Gallon Jug - ♂ (29.2 g.), Mar. 25; ♂ (27.9), June 2. OTHER MUSEUMS (BM, CC, CM, MCZ, PC, UMMZ): Thirty-seven specimens from Orange Walk, Belize, Manatee Lagoon area, Duck Run, Cayo, Camp VI, Freetown, Toledo Settlement; all months except July, Sept.

This species is a common resident of the lowlands of British Honduras, where it occupies clearings, pine-lands, and riverbanks. It is less common in the Mountain Pine Ridge but does occur where the rain forest intrudes into the pineland and it has been recorded up to an elevation of 2700 feet in a ravine just below Baldy Beacon. I did not record the Vermilion-crowned Flycatcher, however, in the Mountain Pine Ridge during ten days work in December. Ten nests containing eggs were found by Peck from May 12 to June 24.

From eastern Mexico southward into Costa Rica, the recognized race is M. s. texensis.^{235/}

Pitangus sulphuratus (Linnaeus)

Great Kiskadee

SPECIMENS. LSUMZ: Melinda - ♀, Aug. 30. OTHER MUSEUMS (BM, CC, CM, MCZ, PC, UMMZ, USNM, WU): Thirty-nine specimens from Orange Walk, Belize, Manatee Lagoon area, Cayo, All Pines, Toledo Settlement; Jan., Feb., Apr., May, June, Aug., Sept.

The Great Kiskadee is a common resident in the cleared regions throughout the lowlands of mainland British Honduras. It is also found in the pinelands and in the mangrove swamps of the coastal areas. In small clearings or clearings recently claimed from the forest, this flycatcher is rarely present. Nests containing eggs have been found in the period of May 2 to June 8 (Peck).

I include British Honduras within the range of P. s. guatimalensis^{236/} with some reservations since I have not made a study of the populations in southern Mexico and northern Central America. Wetmore (1943: 288), Brodkorb (1943: 64), Lowery and Dalquest (1951: 609), and Paynter (1955: 193) have generally followed van Rossem's revision of the northern races of the species and considered central Veracruz the area of intergradation between P. s. guatimalensis and P. s. texanus^{237/}. However, Miller et al (1956: 76) recognizes P. s. derbianus^{238/} as the race occupying "Pacific coastal, central, and southern sections" of Mexico, without commenting on the range of P. s. guatimalensis.

Myiarchus crinitus (Linnaeus)

Great Crested Flycatcher

SPECIMENS. LSUMZ: Half Moon Cay - ♀ (25.0 g.), Mar. 26.
OTHER MUSEUMS (BM, CM): Six specimens from the Manatee Lagoon area, Cayo, Toledo Settlement; Jan., Sept., Nov., Dec.

This North American flycatcher occurs in British Honduras as a rare migrant and winter visitor. The only records for the Colony in addition to the specimens listed above consist of individual birds seen at Gallon Jug and Cayo on five dates in the spring (March 12-April 1). The specimen from Half Moon Cay was killed at night when it flew against the lighthouse. The earliest fall specimen was collected September 13 near Manatee Lagoon.

Kenneth C. Parkes has critically examined the five British Honduran specimens at the Carnegie Museum for me. He notes that the bird collected September 28 near Manatee Lagoon is distinctly small-billed and matches Pennsylvania specimens of M. c. boreus.^{239/} The other four specimens he refers to M. c. crinitus.^{240/} I refer the Half Moon Cay bird also to M. c. crinitus.

Myiarchus tyrannulus (Müller)

Wied's Crested Flycatcher

SPECIMENS. LSUMZ: Gallon Jug - ♀ (30.8 g.), Mar. 14. Calabash Cay - 2 ♂'s, ♀ (39.2, 41.6, 39.0), Apr. 9. Augustine - ♂, Dec. 8. Pallerina Camp - ♂ (38.1), Apr. 26. OTHER MUSEUMS (BM, CM, MCZ, UMNZ): Twenty-four specimens from Orange Walk, Belize, Manatee Lagoon area, Duck Run, Cayo, Camp VI, Freetown, All Pines, Toledo Settlement; Jan., Mar., Apr., May, June, Dec.

This crested flycatcher is common locally in British Honduras. At Gallon Jug four to six were seen daily from March through July in large clearings and second growth (Willis notes). In coastal areas the

species is also found in pinelands. That the Wied's Crested Flycatcher also occurs as a migrant is indicated by the three specimens Dennett and I collected on Calabash Cay on April 9; I saw nine others on April 9 and 10, but none were definitely identified at later dates. Verner noted 35 individuals of the genus Myiarchus on Half Moon Cay on March 26 but was unable to identify them to species. He saw no other Myiarchus during the entire spring. Nesting has been noted at Gallon Jug, the Sibun River, Manatee Lagoon, and Toledo Settlement from April 30 to June 10. In April and May, birds with enlarged gonads have been taken at Duck Run, Ballerina Camp (on pine ridge at an elevation of 1700 feet), Free-town, and All Pines.

I refer all racially identified specimens from British Honduras to M. t. cooperi.^{241/}

Myiarchus yucatanensis Lawrence

Yucatán Flycatcher

At Gallon Jug in the spring and summer of 1957, Willis noted a species of Myiarchus other than the common M. tuberculifer and M. tyrannulus. He saw 26 individuals of this less common species on 21 dates from March 26 to July 14 and identified it by its call as M. yucatanensis. The Yucatán Flycatcher has been collected at Chetumal (75 miles northeast) in December and a specimen taken at

Tabi, Quintana Roo (150 miles north-northeast) on March 16 was in breeding condition (Paynter, 1955: 195). Willis' observations constitute the only records of this species in British Honduras.

Myiarchus tuberculifer (D'Orbigny and Lafresnaye)

Dusky-capped Flycatcher

SPECIMENS. LSUMZ: One mi. NE Corozal - ♂, Aug. 16. Six mi. NE Hill Bank - ♀ (16.2 g.), Apr. 1. Gallon Jug - 2 ♀'s (16.4, 17.1), Feb. 26; ♀, Aug. 19; ♀ (16.1), Nov. 6. Seven mi. NW Belize - ♂ (19.0), Apr. 5. Five mi. W Baldy Beacon - ♀ (19.3), Apr. 20. Augustine - ♂, Dec. 10; ♀, Dec. 12. Two mi. W San Pedro Columbia - ♂ (19.1), May 19. OTHER MUSEUMS (BM, CC, CM, MCZ, UMMZ): Forty-one specimens from Orange Walk, Belize, Manatee Lagoon area, Duck Run, Cayo, Mountain Cow, All Pines, Freetown, N slope Cockscomb Mts. (1500'), Toledo Settlement; all months except July; Aug., Sept.

The Dusky-capped Flycatcher is a common and almost ubiquitous resident on the British Honduran mainland. It is present in the coastal scrub growth, trees bordering clearings and rivers, huamil, tall second growth, lowland pine ridges, and the edges of the rain forest. My notes indicate it is most common in the northern, drier half of the Colony. Willis noted birds carrying "beakfuls of dry grass" to sites situated at the forest edge on April 21 and May 4. Peck found a nest with four eggs on April 21 that was also near the forest edge and another on May 10 with four eggs. The cavities containing these nests ranged from 1.5 to 36 feet above the ground.

The specimen from Corozal has a greenish back and its pileum does not contrast greatly with the back. There is no rufous in the inner webs of the rectrices. These characteristics are typical of M. t. platyrhynchus.^{242/} I refer the specimen to this race. M. t. connectens^{243/} is distinguished by a brownish back and a darker, contrasting pileum, and the inner webs of the rectrices are sometimes rufous. Some specimens from the Gallon Jug - Hill Bank region and from coastal localities as far south as Belize show very little rufous on the inner webs of the rectrices and have little contrast between the crown and a slightly olivaceous back. This geographical region is apparently one of intergradation between M. t. platyrhynchus and M. t. connectens. Specimens from other parts of the Colony are more like M. t. connectens than M. t. platyrhynchus in the color of the upper parts and in the extent of rufous in the tail, although perhaps not wholly typical of that race.

Measurements given by Brodkorb (1943: 65) indicate that M. t. platyrhynchus is smaller than M. t. connectens. All British Honduran specimens are rather small and compare favorably with measurements given by Brodkorb for M. t. platyrhynchus. Unfortunately, Brodkorb indicates neither the size of his sample nor the standard deviation; thus the comparison does not lend itself to statistical analysis. On the basis of characters discussed in the preceding

paragraph, specimens from the southern part of the Colony are referable to M. t. connectens and many specimens from the northern area are intermediate between the two races. The wings of 20 males from British Honduras ranged from 73 to 82 mm. with a mean of 78.5 ± 1.98 mm.; the tails of 18 males ranged from 67 to 76.5 mm. with a mean of 73.5 ± 2.4 mm. In 19 females the wing measurement ranged from 71 to 77 mm. with a mean 74.2 ± 1.72 mm., and in 15 females the tail ranged from 62.5 to 74 mm. with a mean of 69.1 ± 2.79 mm. However, no clinal variation in measurements is evident in specimens taken within the Colony.

Paynter (1957a: 265) suggested that M. t. platyrhynchus generally has a rather horn-colored bill, while M. t. connectens most frequently has a black bill. None of the British Honduran series has a horn-colored bill, although the lower mandible is slightly lighter than the upper one. The specimen from Corozal (M. t. platyrhynchus) actually has the blackest bill in the series. This specimen is four years fresher than other specimens, so perhaps it is not comparable.

Weights have also been suggested by Paynter (1957a: 265) as possibly having subspecific significance in this species. Unfortunately, there are not yet sufficient weights available from southern Mexico, the Yucatán Peninsula, British Honduras, and Guatemala to be useful. In late winter Van Tyne collected a male at Cayo that

weighed 17.0 grams and four females at Cayo and Belize that weighed 15.7, 15.9, 16.2, and 17.2 grams.

Forty-four specimens of this species were critically examined from all localities in the Colony where the species has been collected except Orange Walk and Mountain Cow. British Honduran specimens are not at all like the darker-crowned, more greenish-backed ^{244/}M. t. nigricapillus of Costa Rica, which may range as far north as the Caribbean coast of Honduras.

Nuttallornis borealis (Swainson)

Olive-sided Flycatcher

SPECIMENS. LSUMZ: Gallon Jug - ♀ (33.0 g.), Feb. 28, 1957. Augustine - ♀, Aug. 24, 1961.

The Olive-sided Flycatcher has been noted only a few times in British Honduras. At Corozal on August 18, 1960, Lay collected one of these flycatchers but did not preserve it; and on August 26, he saw another at Regalia. At Gallon Jug, Willis recorded one individual (two on one occasion) almost every day from February 20 to March 15, 1957, and Lancaster saw one bird on seven dates from January 22 to February 6, 1958. These January, February, and March observations may be of wintering birds, since there are apparently no spring arrival dates in Mexico earlier than April. This species is rare north of South America in winter.

Contopus virens (Linnaeus)

Eastern Wood Pewee

SPECIMENS. LSUMZ: Gallon Jug - ♂ (13.0 g.), Apr. 7. Calabash Cay - ? (13.5), Apr. 10. Half Moon Cay - ♂, Mar. 9; ♂ (12.3), Mar. 26. Augustine - ? (13.3), May 2. OTHER MUSEUMS (CM, MCZ): Fourteen specimens from the Manatee Lagoon area, Mountain Cow, All Pines, Free-town, Toledo Settlement; Apr., May, Sept., Oct., Nov.

This pewee is a rather uncommon migrant, occurring on the keys and in open areas throughout the Colony. Fall migration dates range from September 14 to November 5; spring dates from March 9 to May 18, with the greatest number of individuals present from the last week of March into the first week of May. On Half Moon Cay in 1928, Verner noted 30 individuals on March 26 as a result of the arrival of a "norther," although he had seen only one pewee earlier in the spring (March 9). Through April and until May 8, when he left the key, Verner saw one to four of these birds nearly every day. Most pewees are silent when they are in British Honduras in winter and consequently are unidentifiable to species in the field; consequently the Eastern Wood Pewee could winter in British Honduras without being recognized.

Contopus sordidulus Sclater

Western Wood Pewee

SPECIMEN. BM: Orange Walk.

This specimen, collected by Gaumer at Orange Walk in December of 1887, is listed by Salvin and Godman in

the Biologia (1889: 85) as Contopus richardsoni.

Mr. W. E. C. Todd examined the specimen but could not determine its subspecific identity, since it was an immature bird.

Contopus cinereus (Spix)

Tropical Pewee

SPECIMENS. LSUMZ: Gallon Jug - ♂ (11.1 g.), Feb. 28; ♀ (12.2), Mar. 1; ♀ (10.4), Mar. 7; ♀ (12.6), Nov. 18. OTHER MUSEUMS (BM, MCZ, UMMZ): Fifteen specimens from the Belize River, Cayo, Mountain Pine Ridge, Sittee River, Toledo Settlement; Jan., Mar., Apr. CRITICAL PUBLISHED RECORD: Orange Walk (Salvin and Godman, Biologia, ii, 1889: 87).

This resident pewee is moderately common away from the coastal regions of the Colony about clearings, lowland pine forests, riverbanks, and forest edges. It is not a characteristic species of the Mountain Pine Ridge, although it is found at the edge of this area. Nests containing two or three eggs have been found from May 24 to June 20 (Peck). Nesting undoubtedly begins earlier since Willis noted two young birds out of the nest on June 10. The three nests located by Willis at Gallon Jug were between 35 and 50 feet above the ground, all higher than nests noted by Skutch (1960: 327).

The race occupying Central America is C. c. brachytarsus.
245/

Contopus pertinax (Cabanis and Heine)

Coues' Flycatcher

SPECIMENS. LSUMZ: Five mi. W Baldy Beacon - ♀ (26.4 g.), Apr. 21. Augustine - ♀ (22.5), Mar. 9; ♂, Dec. 11; ♂, Dec. 13. Two mi. NW Augustine - ♂, Dec. 13. Three mi. S Augustine - ♀ (21.0), Mar. 11. Eight mi. S Augustine - ♂ (22.7), Apr. 23. OTHER MUSEUMS (BM, MCZ, UMMZ): Fifteen specimens from Augustine, 12 mi. S Cayo, Mountain Pine Ridge; Feb., Apr.

Coues' Flycatcher is a resident in British Honduras, confined apparently to the Mountain Pine Ridge. Its preferred habitat is the open pineland, but it does frequently venture as much as one-half mile into the forest that borders the pine ridges. The female collected March 11 had a slightly enlarged ovary and the one taken April 21 contained an egg in the shell. The birds collected in December all had incompletely ossified skulls.

Austin (1929: 383) collected a single specimen at Augustine in 1928 and on the basis of its smaller measurements assigned it to C. p. minor^{246/} rather than to C. p. pertinax.^{247/} Additional specimens are also small and support Austin's designation. Seven males from the Mountain Pine Ridge provide the following measurements in millimeters: wing 94.5 to 101.5 with a mean of 98.1 ± 2.3 , tail 75 to 82 with the mean 79.4 ± 2.3 ; seven females; wing 91 to 94.5 with a mean of 93.4 ± 1.2 , tail 72 to 78 with a mean of 75.7 ± 1.9 . These measurements agree well with those of the small sample provided by Miller and Griscom in their original description of C. p. minor. Seven males in the

Carnegie Museum from El Hatillo, Honduras, have wing measurements ranging from 95 to 105.5 mm. with a mean of 98.4 ± 3.4 and tails ranging from 72 to 82 mm. with a mean of 78.6 ± 3.2 mm. These birds are also C. p. minor and thus the northern limits of this race extend through Honduras to British Honduras. The larger nominate form extends south into the mountains of Guatemala.

Empidonax flaviventris (Baird and Baird)

Yellow-bellied Flycatcher

SPECIMENS. LSUMZ: Augustine - ? (12.5 g.), Mar. 10. Two mi. NE Millionario - ♂ (11.1), Mar. 16. Two mi. W San Pedro Columbia - ♂ (13.1), May 3; ♀ (10.2), May 8; ♀ (10.3), May 11. OTHER MUSEUM (CM): Four specimens from the Manatee Lagoon area, Freetown, and Toledo Settlement; Jan., May, Oct.

The Yellow-bellied Flycatcher is a moderately common winter resident in the Colony, but it is not common as a transient. Field notes indicate a steady decline in consecutive daily counts of this species in late February and March without conspicuous surges in counts in April or May. It has not been recorded from the keys, where many migrants are detected. This empidonax flycatcher is found in forest edges, huamil, and the lower levels in tall, heavy forest.

Empidonax virescens (Vieillot)

Acadian Flycatcher

SPECIMENS. LSUMZ: Calabash Cay - ♀, ♂, ? (12.9, 16.5, 14.7 g.), Apr. 10. Half Moon Cay - ♂ (12.2), Mar. 26;

♂ (10.0), Apr. 17. OTHER MUSEUM (CM): Three specimens from the Manatee Lagoon area, Cayo; Sept. 6, Oct. 11, Apr. 2.

The Acadian Flycatcher is an uncommon transient in the Colony, and its occurrence is known only from the specimen records listed above. The field notes of all observers who have worked in British Honduras include many flycatchers called only "Empidonax sp." It is not worthwhile, however, to speculate on the identity of such birds. The two heaviest birds taken on Calabash Cay were extremely fat.

Empidonax minimus (Paird and Baird)

Least Flycatcher

SPECIMENS. LSUMZ: Hill Bank - ♀ (10.6), Nov. 20. Gallon Jug - ♂ (9.3 g.), Feb. 21; ♂ (9.9), Mar. 2; ? (12.5), Mar. 7; ♀ (9.9), Oct. 22; ? (9.0), Nov. 12. Pomona - ♀ (10.5), Apr. 1. OTHER MUSEUMS (BM, CM, UMMZ, USNM): Nineteen specimens from Orange Walk, Belize, Manatee Lagoon area, Cayo, Mountain Pine Ridge, 12 mi. S Cayo, Freetown, All Pines, Toledo Settlement; Jan., Feb., Mar., Apr., May, Nov., Dec.

The Least Flycatcher is a common winter visitant, but it is inconspicuous as a transient in British Honduras. This species is found in clearings, second growth, and pinelands throughout the mainland of the Colony. The latest individual recorded in spring was collected on May 2. Daily totals of empidonax flycatchers in general decline in number after a peak in February, and members of the genus are scarce after the end of

March. Of the specimens of the Least Flycatcher for which weights are provided, only the bird collected March 7 was very fat.

Terenotriccus erythrurus (Cabanis)

Ruddy-tailed Flycatcher

SPECIMENS. LSUMZ: Two mi. W San Pedro Columbia - ♀ (5.7 g.), May 8; Eight mi. NW San Pedro Columbia - ♂ (7.0), May 14; ♀ (6.6), May 16. OTHER MUSEUMS (CM, MCZ): Five specimens from Toledo Settlement; Jan., Oct., Nov.

This tiny flycatcher is an uncommon resident of the lower level of tall, humid forest in extreme southern British Honduras. Farther north in the Colony it has been noted only twice: in May at the head of Cockscomb Branch of South Stann Creek (elevation about 1500 feet) and at Gallon Jug in February. Two of the birds collected near San Pedro Columbia had enlarged gonads.

The race occurring in Central America is called T. e. fulvigularis.^{248/}

Myiobius sulphureipygius (Sclater)

Sulphur-rumped Flycatcher

SPECIMENS. LSUMZ: Gallon Jug - ♀ (8.8 g.), Mar. 8; ♂ (10.0), Mar. 10; ♂, Mar. 14; ♂ (12.1), Nov. 9. Two mi. W San Pedro Columbia - ♀ (10.4), May 3; ♀, May 6; ♀ (11.3), May 9. OTHER MUSEUMS (BM, CM, MCZ): Fifteen specimens from the Manatee Lagoon area, Duck Run, Cayo, Mountain Pine Ridge, Mountain Cow, N slope Cockscomb Mts. (1400'), Toledo Settlement; Feb., Mar., Apr., Nov., Dec.

Within a few feet of the ground in the tall humid forests of the Colony, the Sulphur-rumped Flycatcher is a characteristic resident, although it is only moderately common. It is slightly more numerous in the southern third of British Honduras than in the northern part. It ranges high into the Cockscomb Mountains; I saw it in late May in a shaded ravine just below Victoria Peak at an elevation of over 3000 feet. I have rarely seen more than one individual at once, although the species does sometimes join the wandering flocks of small birds in search of insects. At least some birds must begin nesting in April, since I saw an adult on May 4 carrying food into its pensile nest attached to a liana hanging over a tributary of Cockscomb Branch. The latest nesting was recorded by Willis, who saw young being fed in the nest on June 30. Of the five individuals collected in March for which I have data, only the one taken on March 25 had enlarged gonads.

The British Honduran specimens are typical of M. s. sulphureipygius^{249/}, which ranges from Mexico south to Honduras.

Onychorhynchus mexicanus (Sclater)

Royal Flycatcher

SPECIMENS. LSUMZ: Gallon Jug - ♂ (18.6 g.), Nov. 14. Five mi. W Middlesex on Hummingbird Highway - ♂ (20.6), Mar. 27. Two mi. S Pomona - ♂ (19.7), Mar. 31. Augustine - ♂, Dec. 11. Two mi. W San Pedro Columbia - ♂

(20.0), May 5; ♂ (19.7), May 7; ♂ (19.7), May 12; ♂, May 13. OTHER MUSEUMS (CM, MCZ, WU): Ten specimens from the Manatee Lagoon area, Cayo, Camp VI, Mountain Cow, Freetown; Feb., Apr., May, Aug., Sept., Dec.

In the lower level of tall, humid forest and second growth in the southern third of British Honduras, the Royal Flycatcher is a moderately common resident. It is infrequently seen in the northern half of the Colony. Some birds may wander northward during the rainy season, because most observations of this species in the Gallon Jug area were made from July to November. One bird that I saw in November at Gallon Jug was perched 40 feet up in a tall mahogany tree in a pasture, far from its usual forest habitat. Peck collected one on the beach near the mouth of the Manatee River in December. This species was also seen in winter in the limited growth along streams in both the Mountain Pine Ridge and the Hill Bank pine ridge, habitat not occupied by this species in April, May, and June, the months in which breeding usually occurs in British Honduras.

I find that British Honduran specimens are similar to Mexican and Guatemalan birds and are assignable to O. m. mexicanus.^{250/}

Platyrinchus mystaceus (Vieillot)

White-throated Spadebill

SPECIMENS. LSUMZ: Gallon Jug - ♀ (8.2 g.), Feb. 25; ♀ (7.9), Mar. 2; ♀ (7.2), Mar. 4; ♀ (8.2), Oct. 24; ♀

(8.5), Oct. 27; ♀ (8.4), Nov. 10. Ballerina Camp - ♂ (9.6), Apr. 29. Two mi. W San Pedro Columbia - ♂ (10.4), May 20. OTHER MUSEUMS (BM, CC, CM, MCZ, UNMZ): Fourteen specimens from Orange Walk, Manatee Lagoon area, Cayo, Camp VI, Freetown, Toledo Settlement; Feb., Mar., May, Oct., Nov., Dec.

This species is a resident of the rain forest areas throughout British Honduras. It prefers the understory of mature forest but is sometimes found in dense stands of cohune palm and in tall second growth. Usually it is observed within 10 feet of the ground, where it moves about by short, abrupt flights. Though not shy, it may remain inconspicuously perched for some minutes at a time, its presence indicated only by a frequently repeated buzzy two-noted call. Because of its unobtrusive habits, I have rarely recorded over six individuals in a day, even in the most suitable habitats. Breeding apparently begins in late April, as males taken on April 29 and May 20 had enlarged gonads. Willis noted fledglings being fed by a parent on July 12.

Two races are distinguishable in British Honduras. Specimens from Gallon Jug have greenish backs, poorly defined breast bands, and little streaking of the under parts. These features are characteristic of P. m. ^{251/}timothei. Two specimens from Toledo Settlement and one from two miles west of San Pedro Columbia are like veracruz specimens in having brownish backs, clearly defined breast bands, and considerable streaking of the

under parts. I refer these three birds to P. m.
canrominus.^{252/} Specimens that I have examined from
 Ballerina Camp and the Manatee Lagoon area possess
 characters intermediate between those of P. m. can-
rominus and P. m. timothei.

Tolmomyias sulphurescens (Spix)

Sulphury Flatbill

SPECIMENS. LSUMZ: Two mi. E Hill Bank - ♀ (15.2 g.),
 Nov. 22. Hill Bank - ♀ (14.1), Apr. 2. Gallon Jug -
 ♀ (14.7), Mar. 3; ♂ (13.7), Mar. 21; ♀ (15.0), June 7;
 ♂, ? (15.3, 15.5), Nov. 6. Ballerina Camp - ♀ (15.9),
 Apr. 24; ♀ (14.2), Apr. 29. Two mi. NNE Millionario -
 ♀ (16.5), Mar. 16. Two mi. W San Pedro Columbia - ♂
 (14.7), May 5. OTHER MUSEUMS (BM, CM, MCZ, UMMZ):
 Thirteen specimens from Orange Walk, 7 mi. WNW Belize,
 Manatee Lagoon area, Cayo, Toledo Settlement; Jan.,
 Mar., Apr., July, Oct., Nov., Dec.

This inconspicuous flycatcher is a moderately common
 resident of lower levels of tall forest, of high second
 growth, and of forest edges; and rarely, it is found in
 the edge of pine ridges. It may be somewhat local in its
 distribution, as it seemed less common to me in the San
 Pedro Columbia area than in the Gallon Jug and Manatee
 Lagoon regions. I saw one individual at about 3000 feet
 in the Cockscomb Mountains and others along South Stann
 Creek. Peck found nests containing four eggs in deep
 forest on May 19 and 28 near Manatee Lagoon.

The race occupying the area from Mexico to Costa
 Rica is T. s. cinereiceps.^{253/}

Rhynchocyclus brevirostris (Cabanis)

Eye-ringed Flatbill

SPECIMENS. LSUMZ: Eight mi. E Gallon Jug - ♀ (19.8 g.), Mar. 28. Gallon Jug - ♀ (24.0), Nov. 2. Nine mi. W Middlesex on Hummingbird Hwy. - ♂ (21.6), Mar. 26. OTHER MUSEUMS (CM): Five specimens from Manatee Lagoon, Duck Run, N slope Cockscomb Mts. (1400'), Toledo Settlement; Jan., Mar., May, Nov.

The Eye-ringed Flatbill is a rather uncommon resident of tall, wet forest in the Colony. In addition to the specimen localities this species has been observed only at Ballerina Camp and at approximately 3000 feet in the Cockscomb Mountains, where I trapped one in a mist net hung at the crest of the mountain. Forest mid-levels are preferred by this sluggish and usually solitary flycatcher, a factor that contributes to the difficulty involved in seeing the bird. The ovary of the female taken on March 26 was partially enlarged, and the testes of the male taken on March 28 were greatly enlarged.

The race ranging south through Central America to Panamá is R. b. brevirostris.^{224/}

Todirostrum cinereum (Linnaeus)

Common Tody-Flycatcher

SPECIMENS. LSUMZ: Six mi. NE Hill Bank - ♂, Mar. 23. Gallon Jug - ♀ (5.4 g.), Feb. 28; ♀ (5.6), Apr. 2. Seven mi. NW Belize on Corozal Road - ♂ (5.4), Apr. 5. Melinda - ♀, Sept. 2. Two mi. W San Pedro Columbia - ♂ (5.4), May 11. OTHER MUSEUMS (BM, CM, MCZ, UMMZ): Seventeen specimens from Orange Walk, Crooked Tree Lagoon, Belize River, Cayo, Freetown, All Pines, Toledo Settlement; Jan., Mar., Apr., May, Sept., Dec.

This personable little tody-flycatcher is a common inhabitant of cleared and open regions where much scrub growth and many thickets are present and of lake and streambanks lined with scattered trees and tall grass. I found it in greatest numbers in thickets adjacent to milpas surrounding the Kekchi village of San Pedro Columbia. Breeding begins in mid-April and continues at least into July, for Willis saw three juveniles being fed out of the nest on July 21. Of eight nests located by Peck, seven contained eggs, and these were all found in the period of May 24 to June 7. Therefore, the height of the breeding season is probably about the first of June.

The race T. c. finitimum^{225/} ranges from Mexico to the Canal Zone.

Todirostrum sylvia (Desmarest)

◀ Slate-headed Tody-Flycatcher

SPECIMENS. ISUMZ: Two mi. W San Pedro Columbia - ♂ (7.2 g.), May 4; ♂ (6.0), May 13; ♀ (8.5), May 21. OTHER MUSEUMS (BM, CC, CM, MCZ, USNM): Eleven specimens from Orange Walk, Manatee Lagoon area, Cayo, Sittee River; Feb., Mar., Apr.

The Slate-headed Tody-Flycatcher has been recorded infrequently in British Honduras, probably because it is tiny and inconspicuous and inhabits the densest masses of scrubby second growth. I saw this species regularly only near San Pedro Columbia, in thickets dominated by wild plantain. In addition to the cited collected localities,

this species has been seen only a few times at Ycacos Lagoon, four times at Gallon Jug, and once at Hill Bank. Records are lacking in the Colony for the months of September through January, but the species is presumably a permanent resident. Specimens collected at San Pedro Columbia had enlarged gonads (the female contained an ovum 8 mm. in diameter). A nest found at Ycacos Lagoon on May 9 contained two eggs (Peck).

The race occurring in Central America is T. s.
schistaceiceps.^{256/}

Oncostoma cinereigulare (Sclater)

Bent-billed Flycatcher

SPECIMENS. USNM: Gallon Jug - ♀ (6.3 g.), Mar. 29; ♀ (7.1), May 5; ♂ (6.9), June 6; ♂ (6.3), Oct. 30; ♂ (6.7), Nov. 5. OTHER MUSEUMS (BM, CM, MCZ): Twenty-three specimens from Orange Walk, Manatee Lagoon area, Cayo, San Antonio, Augustine, Mountain Cow, Freetown, All Pines, Toledo Settlement; Apr., May, July, Aug., Oct., Nov., Dec.

The Bent-billed Flycatcher is moderately common in tall second growth and forest edges and uncommon in the lower levels of heavy forest. In addition to the specimen records, this species has been seen at Augustine, Ballerina Camp, Sittee River, Monkey River, Ycacos Lagoon, and San Pedro Columbia. As in the case of many of the other tiny resident flycatchers, its presence is more frequently noted by ear than by sight. Breeding apparently begins in late March and continues into June. Willis noted

birds carrying nest materials on March 25 and May 28. The March specimen was not in breeding condition, but most of the April, May, and June birds had fully enlarged gonads. On June 10, Peck found a Bent-bill's nest, suspended 12 inches above the ground, that contained one newly hatched bird and a spoiled egg.

Elainea flavogaster (Thunberg)

Yellow-bellied Elainea

SPECIMENS. LSUMZ: Gallon Jug - ♀ (27.3 g.), Feb. 26; ♂ (27.2), Mar. 11; ♀ (26.1), June 2; ♂ (27.8), Nov. 16. Two mi. W San Pedro Columbia - ♂ (24.8), May 6; ♂ (21.4), May 8. OTHER MUSEUMS (BM, CM, MCZ, PC, UMMZ): Thirty specimens from Orange Walk, Belize, Manatee Lagoon area, Cayo, San Felipe, Augustine, Freetown, All Pines, Toledo Settlement; all months except July.

The Yellow-bellied Elainea is a locally distributed resident in British Honduras, common as far north as the drainage of the Belize River, about extensive clearings with scattered trees and in the lowland pinelands. In the northern third of the Colony it is much less common. It is not normally a resident of the Mountain Pine Ridge; the specimen collected by Austin in April at Augustine constitutes the only record for that region. Salvin (1864: 380) listed a specimen from Half Moon Cay as Elainea subpagana, presumably the one recorded by Sclater in The Catalogue of the Birds in the British Museum (1888: 138) as Elainea pagana. Todd could not find this specimen in a search in the British Museum in 1934. There is, however, a specimen of E. martinica from Half Moon Cay in the British

Museum; so probably the specimen was originally misidentified. E. flavogaster has not been otherwise recorded from the keys. Another specimen of this elainea listed by Sclater (1888: 138) from "San Pedro, British Honduras," is actually from San Pedro, Honduras. The collector, G. m. Whitely, worked in Honduras, not in British Honduras. This same locality error appears several times in Volumes X, XI, XII of The Catalogue of the Birds in the British Museum. Peck found about 20 nests of this species, most containing two eggs or two young, but one nest contained three eggs. Nests were found from May 4 to July 29, but "most of them [were] between May 20 and June 20." Peck did not state whether the late nest on July 29 contained eggs or young.

The Central American race of this species is E. f.
^{257/}
subpagana.

Elainea martinica (Linnaeus)

Caribbean Elainea

SPECIMENS. BM, CM, UMMZ: Four specimens from Belize, Half Moon Cay, Middle Cay of Glover's Reef; Jan., May.

The Caribbean Elainea is known in British Honduras only from the specimens. The bird in the British Museum was collected by Salvin at Half Moon Cay in May 1862. Bond (1939: 4) examined this specimen and considered it "nearly if not quite identical with" the type of E. m.
^{258/}
chinchorrensis. I have not critically examined two birds

in the Carnegie Museum taken in May 1935, on Glover's Reef by Blake and Agostini. Todd compared these two birds with two specimens from Quintana Roo that had been identified as E. m. remota^{259/} by Griscom. Todd noted that the British Honduran specimens were paler and more whitish below and that the upper parts were less dark than in the Quintana Roo birds. This brief comparison suggests the Glover's Reef birds are E. m. remota, because E. m. chinchorrensis is very dark above and has a dark wash on the chest. I have examined the specimen in the University of Michigan Museum of Zoology collected January 22, 1931, in Belize by Shufeldt. This bird, a female, does not have any indication of a breast band. Although it is somewhat dark on the upper parts, it is more like E. m. remota, and I refer it to that race.

Only two individuals of E. m. chinchorrensis, the type and the specimen from Half Moon Cay, have been collected or even observed. In this particular case, the two birds collected on Glover's Reef do not share the characteristics of E. m. chinchorrensis, even though they were collected in the same season on islands in the same relative position to the coast of the Yucatán Peninsula as were the two specimens of that race. In addition, the two specimens from Glover's Reef, which is south of Chinchorro Bank (the type locality of E. m. chinchorrensis) and Half Moon Cay, are similar to specimens from islands

to the north of Chinchorro Bank. This situation is anomalous only because two specimens from the intervening area are strikingly different. I prefer to consider the two birds ascribed to E. m. chinchorrensis as merely extreme variants of E. m. remota, which is a population of the species inhabiting the islands off the eastern coast of the Yucatán Peninsula.

Myiopagis viridicata (Vieillot)

Greenish Elaenia

SPECIMENS. LSUMZ: Two mi. SW Augustine - ?, Aug. 20. Two mi. W San Pedro Columbia - ♂ (12.3 g.), May 4; ♀ (10.8), May 6; ♀ (11.1), May 7. OTHER MUSEUMS (BM, CM, MCZ, USNM): Fourteen specimens from Belize, Manatee Lagoon area, Cayo, All Pines, Toledo Settlement; Jan., Feb., Mar., Apr., May, Oct., Nov., Dec.

This small greenish flycatcher is uncommon and locally distributed in British Honduras. The only locality where this species was observed but not collected is Gallon Jug. There it was first recorded in the winter of 1958 by Lancaster, although many months of field work in the area had previously failed to reveal its presence. It has been noted only at forest-plantation borders and in second growth two or three years old. Females collected in May at San Pedro Columbia had slightly enlarged ovaries (1 mm. ova) and the male had fully enlarged testes.

British Honduran specimens are like those from Veracruz and are assignable to M. v. placens.^{260/}

Camptostoma imberbe Sclater

Beardless Flycatcher

SPECIMENS. USMZ: Hill Bank - ♀ (6.9 g.), Nov. 27.
 Seven mi. NW Belize on Corozal Road - ♀ (7.1), Apr. 5.
 OTHER MUSEUMS (CM, MCZ, UMMZ): Thirteen specimens
 from Belize, Manatee Lagoon area, All Pines; Jan.,
 Feb., Mar., Apr., June, Aug., Dec.

The Beardless Flycatcher is an uncommon resident that is confined almost exclusively to coastal scrub growth and "broken pine ridge" in the northern and coastal regions. Peck found a nest containing two eggs in May, and G. B. Thomas (Thayer, 1906: 460) found two nests, on May 7 and May 16. Each of the three nests was situated in a low palmetto. Two males collected by Van Tyne in early February at Belize weighed 7.4 and 8.0 grams.

The race ranging from southern Texas south to northwestern Costa Rica is C. i. imberbe.^{261/}

Microtriccus semiflavus (Sclater and Salvin)

Yellow-bellied Tyrannulet

SPECIMENS. BM, CM, MCZ: Seven specimens from Manatee Lagoon, Cayo District, Cayo, Freetown, Toledo Settlement; Apr., May, Aug., Sept., Dec.

The Yellow-bellied Tyrannulet is an uncommon resident of the heavier wet forest of British Honduras. A specimen collected by Holt at Cayo was collected in the forest undergrowth but Peck observed that this species stays high

in the trees. Willis saw this tyrannulet several times in the spring and summer of 1957 at Gallon Jug, which is the only place in the Colony where it has been reported but not collected.

262/

The race M. s. semiflavus ranges from southern Mexico south to Costa Rica.

Leptopogon amaurocephalus (Tschudi)

Brown-capped Leptopogon

SPECIMENS. LSUMZ: Gallon Jug - ♂ (12.2 g.), Mar. 18. Two mi. W San Pedro Columbia - ♂ (12.8), May 5. OTHER MUSEUMS (BM, CM, MCZ): Six specimens from Manatee Lagoon, Cayo, N slope Cockscomb Mts. (1300'), Toledo Settlement; Feb., Mar., Nov., Dec.

This flycatcher is a rather uncommon inhabitant of tall, wet forest, forest edges, and the vegetation over and along the banks of shaded forest streams. It is rather slow and deliberate in its actions and is difficult to observe even in areas where it is known to be present. Twenty to thirty feet above the forest floor appears to be its preferred level. The male collected March 18 had slightly enlarged gonads, and the male collected in May was in breeding condition.

263/

The race L. a. pileatus occurs in southern Mexico, British Honduras, and Guatemala.

Pipromorpha oleaginea (Lichtenstein)

Oleaginous Pipromorpha

SPECIMENS. LSUMZ: Hill Bank - ♂ (13.0 g.), Feb. 20; Gallon Jug - ♀ (11.6), Mar. 28; ♀ (10.4), Apr. 7; ♀ (12.9), Oct. 30; ♀ (13.0), Nov. 14. Two and one-half mi. SE Victoria Peak (1500') - ♀, May 7. Two mi. W San Pedro Columbia - ♀ (11.5), May 6. OTHER MUSEUMS (BM, CM, MCZ): Twenty-one specimens from Manatee Lagoon, Duck Run, Cayo, Augustine, Mountain Cow, N slope Cockscomb Mts. (1300'), Toledo Settlement; Jan., Mar., Apr., Oct., Nov., Dec. CRITICAL PUBLISHED RECORD: Belize (Sclater, 1888: 113).

The dull-colored Oleaginous Pipromorpha is widely distributed throughout the areas of high, wet forest in British Honduras, but it is not common or at least not seen regularly. Occasionally it is found in moderately tall to tall second growth where there is also considerable dense, shaded undergrowth. In addition to the areas where the bird has been collected, the Oleaginous Pipromorpha has been observed near Millionario, Sittee River, South Stann Creek, Monkey River, and Ycacos Lagoon. Skutch (1960: 561) has described its habit of nervously twitching its wings, a very characteristic motion of this species. The pendent nest, with its covering of green mosses, is exceptionally well concealed, but at Gallon Jug Willis found three, suspended about 4 to 6 feet above the ground. One found on April 16 contained three eggs; another located on August 1 held only two eggs.

The race in northern Central America and Mexico is P. o. assimilis.^{264/}

Family HIRUNDINIDAE

Progne subis (Linnaeus)

Purple Martin

SPECIMENS. LSUMZ: Eight mi. NW Belize - ♂, Aug. 28, 1960. OTHER MUSEUM (BM): One, specific locality and date unknown.

The Purple Martin is a regular transient through British Honduras, appearing inland in small flocks and migrating on the coast more abundantly. Spring migrants were seen as early as February 6, but most birds passed through in the first two weeks of March. Fall migrants were noted July 13 at Belize (Mrs. H. A. J. Evans) and Willis saw up to 50 in one day during the first week of August.

The one British Honduran specimen in the British Museum was examined by Todd and is the specimen listed in the Catalogue of Birds in the British Museum (Sharpe, 1885: 632) as Progne purpurea, specimen b'. Hellmayr (1935: 13) listed this reference in the synonymy of P. s. cryptoleuca.^{265/} This specimen is presumably the basis for inclusion of British Honduras in the range of Progne cryptoleuca as given by the Check-list of North American Birds (1957: 366). I have not examined the specimen critically, although Todd did so and labeled it "= subis AOU." I have referred a specimen collected by Lay in August to the nominate form, P. s. subis.^{266/}

Progne chalybea (Gmelin)

Gray-breasted Martin

SPECIMENS. LSUMZ: Hill Bank - ♂ (40.2 g.), Feb. 19; ♂ (43.3), Mar. 30. Gallon Jug - ♂ (38.1), Feb. 18; ♂ (39.2), Mar. 14; ♂ (36.9), May 27. OTHER MUSEUMS (CM, CC, UMMZ): Twenty-three specimens from Manatee Lagoon area, Cayo, Freetown, All Pines; Jan., Feb., Mar., Apr., May, June, Dec.

The Gray-breasted Martin is a rather common breeding bird of the larger clearings, villages, and lowland pine ridges, but moves about rather erratically during the fall and winter. At Gallon Jug this species is a conspicuous nesting bird but I saw no martins there in October and November. Peck observed few martins during the months September to February. Occupied nests have been noted between April 4 and June 29 in the eaves of houses, in holes in dead limbs and Sabal palms, and in abandoned woodpecker holes in the pine ridges.

The race of the Gray-breasted Martin ranging from Mexico into South America is P. c. chalybea.^{267/}

Petrochelidon pyrrhonota (Vieillot)

Cliff Swallow

Jared Verner observed a single Cliff Swallow on Half Moon Cay on March 10, 1958. This is the only record of the species in the Colony.

Hirundo rustica (Linnaeus)

Barn Swallow

SPECIMENS. LSUMZ: Three mi. W Belize - ♀ (14.2 g.), Apr. 4. Gallon Jug - ♀ (13.4), Nov. 12; ♂ (13.0), Nov. 14. OTHER MUSEUMS (BM, CM): Seven specimens from Manatee Lagoon, Cayo, All Pines; Apr., Aug., Sept.

The Barn Swallow is a rather common transient through British Honduras. In autumn it has been noted from August 20 to November 24 and in spring from March 28 to May 24. It has been frequently seen on and between the keys, in wet coastal areas, and on lowland pine ridges. At Gallon Jug in November, I often observed it with Rough-winged Swallows feeding over the clearings.

The specimens are assignable to the wide-ranging race, H. r. erythrogaster.^{268/}

Stelgidopteryx ruficollis (Vieillot)

Rough-winged Swallow

SPECIMENS. LSUMZ: Gallon Jug - ♂ (13.4 g.), Feb. 26; 4 ♂'s (12.4, 12.6, 13.6, 13.9), Nov. 12. Summit of Baldy Beacon - ♂ (13.5), Mar. 18. OTHER MUSEUMS (CC, CM, MCZ, UMMZ): Eighteen specimens from Belize, Manatee Lagoon area, Cayo, Augustine, Freetown; Jan., Feb., Mar., Apr., May, June.

The Rough-winged Swallow is a moderately common transient and winter visitant; it breeds locally in central British Honduras. Migration data are not available, since it is impossible to distinguish between resident and nonresident individuals in the field. Definite

evidence of nesting has been obtained only at Freetown, but a nest was observed in a cave occupied by this species near Dry Creek on the Hummingbird Highway on April 2.

Peck noted several individuals hovering about holes in the bank of the Sittee River on April 22. At Gallon Jug no indication of local nesting was noted and in spring all swallows of this species had departed by April 21.

Two mated birds feeding young at a nest in a dead coconut tree on the bank of the Sittee River at Freetown were collected on May 13 by Blake and Agostini. These two specimens represent the only definitely breeding individuals collected in British Honduras and are referable to S. r. fulvipennis.^{269/} Five of six other specimens obtained at the same locality from May 6 to 23 had enlarged gonads, but I refer all six to S. r. fulvipennis with some doubts about each one; three of these specimens are males with large wing measurements (116, 117, 119 mm.) and all lack a pronounced tinge of rufous on the throat. One of the specimens collected at Gallon Jug on November 12 and the one collected at Baldy Beacon are similar to topotypical S. r. fulvipennis.

S. r. sarripennis^{270/} has been collected at Gallon Jug (November 12), Belize (January, February, March), and Augustine (specimen collected April 25 by Austin and identified by Paynter, 1957b: 212). A female collected by Peck in a cave near Manatee Lagoon on March 5 has almost

black upper parts, very dark under parts, solidly black-tipped under tail coverts, and a white anterior loreal region; I refer it to S. r. stuarti.^{271/} Paynter (1957b: 212-13) has identified the specimen taken by Austin at Augustine on April 23 as S. r. stuarti. Austin (1929: 384) believed that the birds entering a cave near Augustine in late April were possibly breeding. Peck, however, observed that wintering birds make temporary use of caves as roosting sites.

In the process of racially identifying the Rough-wing Swallows from British Honduras, I have had to set aside several specimens as unidentifiable. These specimens are either S. r. serripennis or S. r. fulvipennis. Lowery and Dalquest (1951: 616) have commented upon the similarities between topotypical S. r. serripennis of the eastern United States and S. r. fulvipennis. Paynter (1955: 209) considers S. r. fulvipennis "doubtfully distinct" from the eastern North American population. Color changes occurring with the aging of museum specimens are notoriously difficult to evaluate in this species. I have not extensively reviewed the Mexican and northern Central American populations, and consequently I follow current practice in recognizing these two races.

Riparia riparia (Linnaeus)

Bank Swallow

SPECIMEN. MCZ: Toledo Settlement - ♀, Sept. 21, 1906.

The Bank Swallow occurs in British Honduras as an uncommon transient in August (Lay) and September (Peck, Ballance) and in April and May. Peck collected the only specimen just a few miles inland, and Lay noted a few individuals at Corozal, but all other observations were on the keys (principally Half Moon Cay, where Verner saw ten birds on six dates from April 12 to May 6).

Iridoprocne bicolor (vieillot)

Tree Swallow

SPECIMENS. CM, PC, UMMZ: Six specimens from Belize and the Manatee Lagoon area; Jan., Dec.

This swallow is an extremely abundant winter visitant in the coastal regions of the Colony. Peck estimated a flock seen on December 4 at over 100,000 birds. This species moves about considerably during its winter stay. Gerrard van Tets saw 322 Tree Swallows in a forty-minute period moving steadily in a southwesterly direction a few miles east of Belize on December 22. Most of the observations have been in December and January, but the extreme dates are November 22 to April 4. Swallows in general (and occasionally swifts) are called "Christmas birds" in British Honduras, but this species is probably most deserving of the name.

Iridoprocne albilinea (Lawrence)

Mangrove Swallow

SPECIMENS. LSUMZ: Six mi. NNE Hill Bank - ♀ (14.3 g.), Mar. 31. OTHER MUSEUMS (BM, CM, UMMZ): Eleven specimens from Belize, Manatee Lagoon area, Rio Nopan, Freetown, All Pines; Feb., Mar., Apr., May, Oct.

The Mangrove Swallow is a common resident of coastal areas, wet grassy savannahs in the coastal pine ridges, and all large rivers, often occurring far inland (Benque Viejo, Hill Bank Lagoon). This swallow was occasionally seen over small ponds in the vicinity of Gallon Jug. Nests are usually constructed in cavities in stumps or trees partially submerged in water. Peck, however, found them occupying abandoned woodpecker holes in pine trees situated in very open areas of the lowland pine ridges. Nests containing eggs have been noted in May and early June.

The nominate form of this species, I. a. albilinea,^{272/} is resident in Central America.

Family CORVIDAE

Psilorhinus morio (Wagler)

Brown Jay

SPECIMENS. LSUMZ: Hill Bank - ♀, Feb. 16; ♀ (216.5 g.), Nov. 20; ♀ (201.1), Nov. 26; ♀ (204.8), Nov. 27. Gallon Jug - ♂, Mar. 20; ♂ (209.5), Mar. 21; ♂, Apr. 5; ♀ (215.2), June 1. Augustine - ♀, Aug. 16; ♂, Dec. 16. Two mi. W San Pedro Columbia - ♂ (239.1), May 8; ♀ (190.1), May 11; ♀ (234.9), May 13. OTHER MUSEUMS (CC, CM, MCZ,

PC, UHMZ): Twenty-nine specimens from Belize, Manatee Lagoon area, Cayo, Camp VI, 12 mi. S Cayo, Freetown, All Pines, Toledo Settlement; all months except July, Aug., Sept., Dec.

The "piam-piam" as it is often called, is a ubiquitous resident of all regions of mainland British Honduras except in extensive areas of tall undisturbed rain forest (such as in the Cockscomb basin). It is especially abundant along the forest edge and in tall second growth in the northern and central regions of the Colony but is less common in all habitats in the southern sector. Although the Brown Jay normally occurs in small groups of cacophonous individuals, nesting birds are extremely difficult to detect. Peck located five nests containing eggs (four of them in the pine ridges and the fifth in an open pasture) in the period of April 21 to May 29. Males taken on February 23 and March 7 by Van Tyne were breeding, as indicated by the enlarged testes.

Selander (1959: 385) has shown that Psilorhinus mexicanus, the White-tipped Brown Jay, is a color phase of Psilorhinus morio, the Brown Jay. British Honduran specimens are monomorphic and white-tipped; subspecifically they resemble both P. m. vociferus^{273/} and P. m. cyanogenys^{274/}. Paynter (1955: 213-214) has noted that the Rio Hondo region constitutes an area of intergradation between these two races. Only three of eight specimens from Hill Bank and Gallon Jug have white thighs and a

sharp line of demarcation between the sooty and white areas of the breast. These three birds are rather typical P. m. vociferus, but the other five show tendencies toward the grayish thighs and indistinct chest line of P. m. cyanogenys. Specimens from Belize, the Manatee Lagoon area, Cayo, Augustine, Freetown and All Pines are as a whole referable to P. m. cyanogenys, although not all individuals are entirely typical. Thus the most pronounced region of intergradation includes the Rio Hondo area and northern British Honduras (Hill Bank and Gallon Jug). There is no indication of any clinal change in weight or linear measurements in the specimens from the Colony.

Xanthoura yncas (Boddaert)

Green Jay

SPECIMENS. USNM: Hill Bank - ♂, ♀ (72.2, 80.8 g.), Feb. 26; ♂ (72.6), Nov. 21; 2 ♀'s (78.3, 75.0), Nov. 27. Augustine - ♀, Aug. 24; 4 ♂'s, Dec. 14; ♂, Dec. 17. Ballerina Camp - ♀ (81.0), Apr. 25; ♂ (84.4), Apr. 27. OTHER MUSEUMS (BM, CM, MCZ, USMZ): Fifteen specimens from the Manatee Lagoon area, Cayo, Rio Makal, Camp VI, Freetown; Feb., Mar., Apr., May, July, Sept. CRITICAL PUBLISHED RECORD: Belize (Salvin and Godman, Biologia, i, 1887: 502).

The Green Jay is locally distributed in small numbers over much of British Honduras. It has been most frequently encountered below 1700 feet where tall second growth or forest border the pinelands and below

1300 feet in tall, dense thickets along watercourses. Only at Guacamallo, South Stann Creek at the junction of Sittée Branch, and on the Rio Grande and the Moho River has the "cling-cling," as it is known locally, been observed but not collected. Near Ballerina Camp and Guacamallo up to 30 individuals were seen in one day, but elsewhere it was uncommon. The only breeding information is provided by the enlarged gonad of the female collected on April 25.

British Honduran specimens are assignable to X. y. centralis^{275/} on the basis of their wing and tail measurements. Eleven males from the Colony have wings measuring from 111 to 120 mm. with a mean of 115 ± 2.3 , and ten males have tails ranging from 125 to 140 mm. with a mean of 133.5 ± 5.2 . Four females have wings measuring 112, 112, 115, and 116 mm. and tails measuring 127, 130, 130, and 138.5 mm. These measurements coincide closely with the data given for X. y. centralis by Paynter (1955: 215).

A comparison of the weights of birds of the Yucatán Peninsula with the weights of the British Honduran specimens indicate the latter are considerably heavier. Eleven males of X. y. maya^{276/} from the Yucatán Peninsula ranged from 59.3 to 79.0 grams with an approximate mean of 68.3, and five females from the same region weighed 60.5, 60.7, 63.4, 64.6, 68.0 grams (data from Paynter, 1955: 215;

and from five additional specimens in the University of Michigan Museum of Zoology). From British Honduras, six males of X. y. centralis ranged from 72.6 to 84.4 grams with a mean of 79.1 ± 4.2 , and four females weighed 77.0, 78.3, 80.8, and 81.0 grams.

Cissilopha yucatanica (Dubois)

Black-and-blue Jay

SPECIMENS. USNM: Corozal - ?, Aug. 20. Gallon Jug - 1 ? (121.2 g.), Feb. 25. Hill Bank - ? (112.7), Feb. 23; ?, Mar. 23. OTHER MUSEUMS (CC, CM, MCZ, PC, WU): Thirteen specimens from the Manatee Lagoon area, Sibun River; Jan., June, July, Nov., Dec. CRITICAL PUBLISHED RECORDS: Old River, Belize (Moore, 1859: 57).

This jay is an uncommon resident of the lowlands of the northern half of British Honduras. Densely overgrown "broken pine ridge" and the swampy regions that sometimes border these pine lands are its usual habitat. One specimen (Gallon Jug), however, was taken several miles from pine lands in dense second growth. The female taken on March 23 had a slightly enlarged ovary. Peck found two nests in the Manatee Lagoon area on May 20. Both were in pine trees. One nest contained five eggs and the other had just been completed. The specimen collected by Lay at Corozal on August 20 is a juvenile.

The British Honduran population occupies the southernmost part of the range of the species and is typical of the nominate race, C. y. yucatanica.^{277/} The only adult bird

among the four specimens from British Honduras in the LSUMZ is a female. It is smaller (wing 143 mm., tail 174 mm.) than specimens from Tabasco (C. y. rivularis^{278/}) and the blue of its back is less brilliant than that of the northern race.

[Cyanolyca pumilo (Strickland)]

Strickland's Jay

This jay is listed in the tables in the introduction to volume I of the Biologia Centrali-Americana, Aves (Salvin and Godman, 1904: xxi) as occurring in British Honduras. Todd could not find a specimen from the Colony in the British Museum in 1934. In the absence of any recent substantiating evidence, the presence of the Strickland Jay in British Honduras is only hypothetical. In Guatemala, this species occurs principally in oak forests at elevations of 7000 to 8000 feet in the western part of the country. It seems unlikely that it would be found in British Honduras.

[Cyanocitta stelleri (Gmelin)]

Steller's Jay

Salvin and Godman (1904: xxi) recorded this species from British Honduras in the tables in the introduction to Volume I of the Biologia Centrali-Americana, Aves.

Baird et al (1874: 262) include Belize within the range of Steller's Jay. I know of no specimens of Cyanocitta from British Honduras. Todd was unable to find the specimen referred to by Salvin and Godman. Todd searched for it in the British Museum in 1934. Since no specimen is known and since this jay is normally a resident of altitudes much higher than those found in the Colony, this species should be omitted from the list of British Honduran birds.

Family TROGLODYTIDAE

Cistothorus platensis (Latham)

Short-billed Marsh Wren

SPECIMENS. LSUMZ: Baldy Beacon - ♂ (8.7 g.), Apr. 21. Five mi. W Baldy Beacon - ♂ (8.6), Apr. 20. Augustine - ♂ (9.1), Mar. 9; ♂ (8.9), May 5. One mi. N Ballerina Camp - ♀ (9.6), Apr. 26; ♂ (9.8), Apr. 28. OTHER MUSEUMS (BM, CMNH, UMMZ): Ten specimens, all from the Mountain Pine Ridge; Feb., Apr.

The Short-billed Marsh Wren in British Honduras is confined to the well-drained hills of the Mountain Pine Ridge. There it may be found in moderate numbers in the short grass on the open parklike slopes, sharing this habitat with Grasshopper Sparrows. It is presumably a resident, but I did not record it during a week's work at Augustine in December. These marsh wrens were rather tame and were observed easily. Some individuals seen

in April were singing and behaving as if young were nearby. A male collected by Murie on April 25 had enlarged testes.

Hellmayr (1934: 122) referred two specimens of the Short-billed Marsh Wren from the Mountain Pine Ridge to C. p. elegans^{279/}. I have been unable to compare the recently collected material from British Honduras with specimens of C. p. elegans from Lake of Dueñas, Guatemala, the type locality. Short-billed Marsh Wrens from Chiapas and Tabasco are generally referred to C. p. elegans. I have compared the Mountain Pine Ridge birds with specimens from Chiapas and Tabasco. The British Honduran birds are decidedly darker than the Mexican specimens. In order to satisfactorily identify the specimens from southern Mexico and British Honduras, they must be compared with topotypical C. p. elegans.

Campylorhynchus zonatus (Lesson)

Band-backed Wren

SPECIMENS. LSUMZ: Ballerina Camp - ♀ (32.6 g.), Apr. 24; ♀ (32.1), Apr. 25. OTHER MUSEUMS (BM, CM, MCZ, UMMZ): Fourteen specimens from Duck Run, Cayo, Camp VI, Mountain Cow, Toledo Settlement; Mar., Apr., Sept., Oct.

This large resident wren is local in its distribution in British Honduras. Augustine and the dense forest eight miles northwest of San Pedro Columbia are the only points of record other than the specimen localities.

The habitat preferences of the Band-backed Wren are varied. In the Colony, it has been found in riverside thickets and fig trees, tall trees bordering clearings, and in undisturbed, very humid forests. Specimens taken in April possessed enlarged gonads. Three females collected at Cayo on March 16 by Van Tyne weighed, respectively, 31.2, 32.4, and 33.0 grams.

I refer the nine British Honduran specimens that I have examined to C. z. restrictus,^{280/} though they differ from typical C. z. restrictus in having a lighter and redder color on the abdomen and fewer spots on the abdomen. Wing measurements of seven females indicate they may also be smaller than C. z. restrictus, as they range from 79 to 82 mm. with a mean of 80.8 ± 1.08 . But one male has a wing measurement of 88 mm., which is well within the size range of C. z. restrictus. Friedmann (in Carriker and de Schauensee, 1935: 439-40) noted similar variant characters in four specimens from Gavilan, Guatemala, a locality only 16 miles west-southwest of Cayo. Both Friedmann and Brodkorb (1947: 242-43) have considered the possibility that the Petén and British Honduran birds may represent an undescribed race. The Gavilan and all British Honduran specimens were collected in an area less than 70 miles in length on the periphery of the range of the species, without apparent isolating factors intervening. The characters described above do not impress me as significant

enough to warrant naming these local birds as a distinct subspecies. The specimens are definitely similar to C. z. restrictus but, as Brodkorb (1947: 242-43) suggested, may have some characters of C. z. vulcanius.^{281/}

Thryothorus modestus Cabanis

Plain Wren

SPECIMENS. USUMZ: Five miles W Baldy Beacon - 2 ♂'s (17.8, 19.1 g.), Apr. 19, 1956; ♀ (16.0), Apr. 20, 1956. Augustine - ♀, Dec. 16, 1956.

This wren is an uncommon resident of the dense brush and tall grass that grows near the headwaters of streams arising in the Mountain Pine Ridge. Occasionally it is noted in a uniform habitat of 3 to 5 feet high grass. On April 19 I observed an adult feeding fledglings. This date is not early since in Costa Rica, according to Skutch (1960: 129), the breeding season spans a period extending from January into September.

The British Honduran birds are referable to T. m. modestus.^{282/} These specimens and a series from Chiapas and Guatemala exhibit a great degree of individual variation that makes them indistinguishable from Costa Rican material.

Thryothorus maculipectus Lafresnaye

Spotted-breasted Wren

SPECIMENS. USUMZ: Ten mi. NW Gallon Jug - ♀ (13.4 g.), Nov. 8. Gallon Jug - ♀ (14.0), Feb. 18; ♀ (12.6), Mar. 1;

♀ (12.7), Mar. 2; ♂ (14.3), Mar. 5; ♂ (16.2), Mar. 7.
 Seven mi. NW Belize - ♂ (16.8), Apr. 5. Pomona - ♀
 (16.2), Apr. 1. Stann Creek - ♀ (14.7), Mar. 30.
 Augustine - ♂, Dec. 10. Ballerina Camp - ♀ (13.3),
 Apr. 26. Two mi. W San Pedro Columbia - 2 ♂'s, ♀ (16.5,
 15.4, 14.6), May 3; 2 ♂'s, ♀ (15.9, 15.4, 14.6), May 4;
 ♂ (15.8), May 5; ♂, ♀ (15.5, 12.4), May 7. OTHER MUSEUMS
 (BM, CG, CM, MCNH, MCZ, USMZ): Forty specimens from
 Orange Walk, Belize, Manatee Lagoon area, Cayo, Mountain
 Pine Ridge, Mountain Cow, Freetown, All Pines, Toledo
 Settlement; all months except July, Aug., Sept., Nov.
 CRITICAL PUBLISHED RECORD: Corozal (Salvin and Godman,
Biologia, 1, 1880: 92).

The Spotted-breasted Wren is a common resident of the undergrowth and thickets in both forests and second growth. It avoids only the interior of undisturbed humid forest and pinelands. It is also common in thickets about plantation clearings and pastures and in the fringes of the pine ridges. The enlarged gonads of birds taken from late March into May indicate that breeding occurs at least during these months. Willis noted one bird carrying material to a nest on May 26, but this nest may have been constructed for use as a dormitory rather than for breeding purposes.

When British Honduran specimens are arranged in a series from north to south, the transition from a pale gray-brown and less intense spotting in specimens from the north to a richer brown and more intense spotting in southern specimens is especially conspicuous. Specimens from the Mountain Pine Ridge, Cayo, Manatee Lagoon, and more northern localities, I assign to T. m. canobrunneus. 283/

Although not entirely typical of the Peninsular race, they are definitely close to it. Birds from San Pedro Columbia and Toledo Settlement distinctly approach T. m. umbrinus^{284/} and I refer them to that race. A population intermediate between these races occupies a belt across the Colony that includes Ballerina Camp, Pomona, Stann Creek, Freetown and All Pines. The weights of the British Honduran specimens are intermediate between those given by Paynter (1957a: 268) for T. m. canobrunneus (Yucatán, Quintana Roo, Campeche) and T. m. umbrinus (Chiapas). There is no appreciable difference in weight between specimens from northern British Honduras and those from the southern part of the Colony.

Troglodytes aedon Vieillot

House Wren

SPECIMENS. USNM: Two mi. E Hill Bank - ♂ (10.3 g.), Nov. 23. Gallon Jug - ♀ (10.0), Mar. 19; ♀ (11.0), June 3; ♂, ♀ (10.9, 11.4), June 7; ♂ (12.2), Nov. 5; ♀ (10.4), Nov. 10. Two mi. W San Pedro Columbia - ♂ (11.1), May 9. OTHER MUSEUMS (CM, MCZ): Eleven specimens from Cayo, Freetown, All Pines, Sittee River, Toledo Settlement; Apr., May, Sept.

Although rather local in its occurrence in the Colony, the House Wren is common about the buildings and houses of some villages. Occasionally this resident is found in thickets in the lowland pine ridges and in the piles of unburned limbs and logs in milpas. It has been seen in Pomona and Augustine. The breeding period

is long, for specimens taken in April, May, and June had enlarged gonads and Peck found a nest at Toledo Settlement on September 1 that contained three eggs in an advanced stage of incubation. This nest was situated between the sash and shutters of an unoccupied house.

I refer the British Honduran specimens to T. a. intermedius.^{285/} These specimens exhibit a considerable degree of individual variation, but as a series they are typical of the widely ranging race.

Henicorhina leucosticta (Cabanis)

White-breasted Wood Wren

SPECIMENS. USNM: Gallon Jug - ♀, Jan. 7; ♀ (15.9 g.), Feb. 25; ♀ (12.7), Mar. 11; ♂ (17.0), May 28; ♀ (15.2), Oct. 24; ♂ (16.8), Oct. 26; ♀ (14.9), Nov. 6; ♂ (14.3), Nov. 16. Two mi. S Pomona - ♂ (16.2), Mar. 31. Two mi. NE Millionario - ♀ (14.2), Mar. 13. Two mi. W San Pedro Columbia - ♂ (16.2), May 11; ♂, ♀ (16.2, 14.6), May 21. OTHER MUSEUMS (CG, CM, MCZ): Twenty-nine specimens from the Manatee Lagoon area, Chorro, Cayo, Camp VI, Mountain Cow, Cockscomb Mts. (N slope, 1150-1400'), Freetown; Mar., Apr., May, June, Oct., Nov.

The White-breasted Wood Wren is a common resident of the undergrowth of forested areas from sea level to the uppermost slopes of the Cockscomb Mountains. It even frequents dense stands of cohune palm and tall and moderately tall second growth but avoids the relatively open pinelands. Specimens collected March 13 and 31 and in April and May have been in breeding condition.

A nest suspended 18 inches above the ground from a small palm contained three eggs on April 30. I found a fledgling on May 6 on the crest of the Cockscomb Mountains at about 2800 feet.

The 29 specimens from British Honduras that I have examined exhibit a considerable amount of individual variation. In examples from the same locality the reddish-brown color of the back ranges from a very deep red-brown to a much paler brown. In two specimens from San Pedro Columbia the pileum is dark-reddish like the back but in a third, it is slightly grayish. Since every British Honduran specimen can be matched by birds from farther north (Tabasco, Veracruz, San Luis Potosí), the Colony is within the range of H. l. prostheleuca.^{286/} The two San Pedro Columbia specimens may exhibit a tendency toward H. l. tropaea,^{287/} but even in these two birds the under parts (especially under tail coverts) are more like those of H. l. prostheleuca.

Uropsila leucogastra (Gould)

White-bellied Wren

SPECIMENS. USNMZ: Gallon Jug - ♂, ♀ (9.9, 10.5 g.), Oct. 30; ? (10.0), Nov. 5. OTHER MUSEUMS (BM, CM, MCZ): Five specimens from Duck Run, Cayo, and Mountain Cow; April. CRITICAL PUBLISHED RECORD: Orange Walk, Dec. (van Rossem, 1938a: 15).

Hill Bank is the only locality not listed above where this resident wren was observed. It inhabits

plantation edges, dense, low second growth, and lowland pinelands, especially where the pines are crowded by oaks and other low extraneous vegetation. At Gallon Jug Willis found it moderately common. Two April specimens collected by Holt had enlarged gonads, and at Gallon Jug a White-bellied Wren observed by Willis was nest building in a bullhorn acacia on April 21.

British Honduran specimens agree well with Yucatán specimens of U. l. brachyura^{288/} and I refer them to that form. The Gallon Jug and Cayo specimens do have slightly browner backs than the Yucatán birds, but not significantly so. The darker coloration of the back suggests an approach to the dorsal coloration of U. l. musica^{289/}. Two specimens collected by Van Tyne in the Petén are paler dorsally, quite unlike U. l. musica. Paynter and Vaurie (1960: 431) are correct in placing van Rossem's race, Mannorchilus leucogaster australis^{290/}, in the synonymy of U. l. brachyura. It appears van Rossem did not compare his four specimens from the Colony with a good series from the Yucatán Peninsula.

Family MIMIDAE

Melanoptila glabrirostris Sclater

Black Catbird

SPECIMENS. BM, MCZ, USNM, UMMZ: Six specimens from Back-Landing, Belize, Half Moon Cay; Jan., Apr., May.

CRITICAL PUBLISHED RECORDS: Corozal, Glover's Reef (Salvin and Godman, Biologia, 1, 1879: 27).

The Black Catbird has not been recorded in British Honduras since 1931, when Shufeldt collected three specimens in brushy second growth near Belize. Perhaps the species was once more widely distributed, for Salvin and Godman in the Biologia (1879: 27) mention Northern Two Cays, Long Cay, and Middle Cay (all of Lighthouse Reef) among the localities at which the species was seen or collected. The species is possibly no longer present on the keys, since extensive recent investigations have failed to reveal it. The Black Catbird is rather local in its distribution in the Yucatán Peninsula north of the Colony. I suspect it has been overlooked by collectors in British Honduras in recent years.

Paynter (1954: 4) referred British Honduran specimens to the nominate race, M. g. glabrirostris.^{291/}

Dumetella carolinensis (Linnaeus)

Catbird

SPECIMENS. LSUMZ: Gallon Jug - ♀ (36.5 g.), Mar. 4; ♀ (33.6), Oct. 29. Calabash Cay - ♀ (32.5), Apr. 15. Half Moon Cay, ♀, Dec. 29. OTHER MUSEUMS (BM, CM, URMZ, USNM): Eight specimens from Belize, Manatee Lagoon, Cayo, All Pines; Oct., Jan., Mar., Apr.

The Catbird is an abundant migrant and winter resident of the mainland of British Honduras, frequenting tangled second growth and to a lesser extent, the forest

undergrowth. It also occurs in small numbers on the keys as a winter resident and transient. Actual dates of arrival and peak of fall migration are not known but this species is present in late September and becomes common by mid-October. In the spring the greatest number of transients are noted during mid-April and usually the last birds have departed by May 9. The latest spring record was obtained on May 18 (Willis).

Mimus gilvus (Vieillot)

Tropical Mockingbird

SPECIMENS. USNM: Hill Bank - ♂, Mar. 22; ♀ (42.0 g.), Nov. 29. Four mi. W Belize - ♀ (41.4), Apr. 4. OTHER MUSEUMS (BM, CC, CH, MCZ, UICZ): Twenty-two specimens from Crooked Tree Lagoon, Belize, Manatee Lagoon area, Sittee River, All Pines; Jan., Feb., Apr., July, Dec. CRITICAL PUBLISHED RECORDS: Lighthouse Cay and Glover's Reef (Salvin and Godman, Biologia, i, 1879: 36).

From Corozal south through the coastal lowlands to the vicinity of All Pines, the Tropical Mockingbird is a locally common resident. It penetrates inland as far as Crooked Tree Lagoon, the Hill Bank Lagoon, Churchyard, Pomona, and Kendal, and has been found on some keys (Rendezvous Point [Bond, 1954: 7], Soldier and Calabash Cays in the Turneffe Islands, Lighthouse Reef, and Glover's Reef.) Pine ridges, swampy dense areas adjacent to the pine ridges, and clearings in the vicinity of dwellings are its customary habitats. It is a common species in the towns and villages of the area that it occupies in the

Colony, where it is known as the "nightingale." Peck found nests containing eggs on May 13 and 24 and a nest containing three young birds on June 18.

M. g. leucophaeus^{292/}, is the race of the Tropical Mockingbird to which I refer the British Honduran specimens.

Family TURDIDAE

Turdus albicollis

White-throated Robin

SPECIMENS. USNM: Gallon Jug - ♂ (63.5 g.), Mar. 3. Ballerina Camp - ♂ (57.3), Apr. 28. Cockscomb Mts. (3000') - ♂, May 6; ♂, May 9. Cubetas - ♂ (66.6), Mar. 12; ♂ (57.7), Mar. 16. OTHER MUSEUMS (BM, CM, CNHM, MCZ): Twelve specimens from Belize, Manatee Lagoon area, Duck Run, Cayo, Camp VI, Toledo Settlement; Mar., Apr., Oct., Dec.

In the vast rain forest of the Maya Mountain region, the White-throated Robin is a common breeding bird. Near the crest of the Cockscomb Mountains, about the shaded and very humid ravines, it is both an abundant and characteristic species. In the drier forests of the Gallon Jug area it is present in small numbers during the breeding season. Peck thought the birds that he saw in the Manatee Lagoon area in October and at Toledo Settlement in December were migrants, since he did not find them in the spring. Anthony (Griscom, 1932a: 306) noted that in Guatemala most

thrushes of this species had departed from Cobán and the Alta Verapaz region during October, November, and December. Perhaps the birds noted by Peck were wanderers from the mountains. Specimens that I collected in mid-March, April and May had enlarged gonads and were in breeding condition.

The six males from British Honduras in the LSUMZ are all dark slate on the upper parts. Three of the specimens have a narrow buffy edge on the greater coverts, a slight tinge of olive in the slate of the back, and slightly smaller measurements (wing: 109.5, 113.0, 117.5 mm.). These three birds are presumably first year birds, although in breeding condition. The other three specimens lack the buffy edgings of the greater coverts, have slate colored backs without an olive tinge, and have larger wing measurements (118.5, 119.5, 122.0 mm.); these are perhaps older birds. I refer these specimens to T. a. parcolor^{293/} on the basis of the dark upper parts, since smaller size may not be as diagnostic as Blake (1950: 410) thought. Austin (1929: 387) noted similarities between British Honduran birds and T. a.^{294/} oblitus of Costa Rica. The slate color of the upper parts is the most obvious similarity; I have examined one Costa Rican specimen that matches the slate back of the British Honduran material. It is of interest that the two males with the extreme wing measurements (109.5, 122.0 mm.) had practically the same weights (57.3, 57.7 grams).

Turdus grayi (Bonaparte)

Clay-colored Robin

SPECIMENS. LSUMZ: Gallon Jug - ♂ (69.2 g.), Mar. 27; ♀ (76.8), May 29; ♂ (71.5), June 8. Stann Creek - ♂ (67.2), Mar. 23. Two mi. W San Pedro Columbia - ♀ (71.3), May 6. OTHER MUSEUMS (BM, CMNH, CM, MCZ): Seventeen specimens from Belize, Cayo, Mountain Cow, Freetown, Toledo Settlement; Jan., Apr., May, June, Oct., Nov.

In and about clearings, pastures, villages, and open streambanks, the Clay-colored Robin may be very common, although extremely shy except during the nesting season. It is a resident throughout most parts of the Colony and is especially numerous in the lowland valleys along the coast. Occupied nests have been noted in May and June. Birds collected in late March did not have enlarged gonads. Willis noted a Clay-colored Robin visiting a nest on July 17 but did not see the contents.

Specimens from Gallon Jug are most like T. g.^{295/} tamaulipensis, but one of the three specimens from this locality is darker and approaches T. g.^{296/} grayi. In the central region of the Colony (Cayo, Stann Creek, Freetown), the population is intermediate between these two races, but in the extreme south (San Pedro Columbia, Toledo Settlement) three of five specimens are quite like T. g. grayi.

Myadestes unicolor Selater

Slate-colored Solitaire

SPECIMENS. LSUMZ: Cockscomb Mts. (2500-3400') - 2 ♀'s, May 6, 1958; ♂, May 9, 1958; ♀, May 29, 1959.

This species in British Honduras is restricted to the cloud-forestlike habitat near the highest elevations of the Cockscomb Mountains. There it ranges from the lichen and bryophyte covered vegetation on the crest of the mountain down into the deep, moisture soaked ravines, where it overlaps the upper range limits of Turdus albicollis. In May, the only month in which I have been on the crests of these mountains, it is fairly common and characteristic of its very limited habitat. All birds were in song.

An isolated population such as this one in British Honduras might be expected to be different subspecifically from other M. unicolor in Central America. Our four specimens are, however, not significantly different from six specimens from Honduras and Guatemala. The three females from the Cockscomb Mountains exhibit considerable individual variation in the shades of gray on the remiges and under parts. The one British Honduran male is a much paler gray, especially on the breast, than birds from Honduras; but if males are subject to as much individual variation as females, this difference is not significant. I refer these specimens to M. u. pallens.^{297/}

Hylocichla mustelina (Gmelin)

Wood Thrush

SPECIMENS. LSUMZ: Gallon Jug - ♀, Jan. 5; ♂ (51.1 g.), Apr. 5; ♀ (46.2), Oct. 30. OTHER MUSEUMS (BM, CC, CM, MCZ, PC, UMMZ): Ten specimens from Orange Walk, Belize, Manatee Lagoon, Cayo, N slope Cockscomb Mts.; Mar., Oct., Nov., Dec.

The Wood Thrush is common in wooded areas in British Honduras from October to mid-April. Undoubtedly many birds are transients and it has not been possible to distinguish between winter residents and migrants. Willis' field notes at Gallon Jug suggest that an increase in number took place between February 26 and March 14 and was followed by a gradual decline terminating April 14. On Half Moon Cay Verner noted 18 individuals on eight dates from March 26 to May 7, ten of these birds on April 19 alone. The male collected on April 5 at Gallon Jug was very fat.

Hylocichla ustulata (Nuttall)

Swainson's Thrush

SPECIMENS. LSUMZ: Augustine - 2 ♀'s (31.0, 33.3 g.), May 5. OTHER MUSEUMS (CM, MCZ, UMMZ): Twenty-two specimens from Belize, Manatee Lagoon area, Augustine; Apr., Sept., Oct.

Swainson's Thrush has been recorded in British Honduras only as a transient. Fall records are limited to one specimen collected by Peck on September 23 and to a series of twenty birds obtained by Shufeldt at

Belize on October 9, 1932. Unfortunately no notes accompanied these October specimens, but conditions must have been remarkable since these thrushes were only a few of the transients collected that day. In spring, one to six birds have been seen on 16 dates from March 26 to May 14.

The specimens are referable to H. u. swainsoni.^{298/}

Hylocichla minima (Lafresnaye)

Gray-cheeked Thrush

SPECIMENS. USNM: Half Moon Cay - ♂ (31.1 g.), May 6.
OTHER MUSEUMS (MCZ, URMZ): Fourteen specimens from Belize and Toledo Settlement; Oct., Nov. 13.

Shufeldt collected 13 of these normally uncommon transients at Belize on October 9, 1932. Verner collected a specimen on Half Moon Cay and saw two other birds of this species on May 7 and 8.

I assign specimens to H. m. minima.^{299/}

Hylocichla fuscescens (Stephens)

Veery

SPECIMENS. CM, URMZ: Belize - ♀, Oct. 9, 1932. Manatee Lagoon - ♂, Sept. 15, 1905.

These two specimens are the only ones from the Colony.
The Belize specimen is referable to H. f. fuscescens^{300/} and the bird taken by Peck in the pine ridge near Manatee Lagoon is H. f. salicicola.^{301/}

Sialia sialis (Linnaeus)

Eastern Bluebird

SPECIMENS. USNM: Five mi. W Baldy Beacon - ♀ (27.7 g.), Apr. 20; ♂ (26.6), Apr. 21. Augustine - ♂ (27.8), Mar. 17. OTHER MUSEUMS (EM, USNM): Twelve mi. S Cayo - ♀ (27.9), Mar. 1; ♂ (27.2), Mar. 4. Southern [= Mountain] Pine Ridge - ♂, Apr. 26.

This bluebird is a rather wary and uncommon resident of British Honduras, found only in the open coniferous woodlands of the Mountain Pine Ridge. The April birds were in breeding condition.

I am unable to refer the five specimens that I examined to either S. s. guatemalae^{302/} or S. s. meridionalis^{303/}. The three males have wing measurements of 96.0, 99.5, and 100.5 mm., and the wings of the females are 94.5 and 99.0 mm. S. s. guatemalae is considerably larger (wing averaging 105.5 mm.; Griscom, 1932a: 313) than the five specimens listed here. The females from British Honduras are much like Guatemalan specimens in color and pattern. The males are similar to Guatemalan males in color and extent of color on the under parts, but the upper parts of the Mountain Pine Ridge birds are slightly paler than Guatemalan ones. Thus in size the British Honduran specimens are close to S. s. meridionalis, but their coloration is more like S. s. guatemalae. I do not believe that the British Honduran population, represented by so few

examples, is distinct enough to warrant naming. I suspect the range of S. s. meridionalis may be more extensive than now recognized and may include much of northern Honduras, since the specimens that I examined from the latter country were certainly not S. s. guatemalae.

Family SYLVIIDAE

Polioptila caerulea (Linnaeus)

Blue-gray Gnatcatcher

SPECIMENS. LSUMZ: Hill Bank - 5, Mar. 23. OTHER MUSEUMS (BM, CM, MCZ, UMMZ): Eleven specimens from Orange Walk, Belize, Manatee Lagoon, Cayo, 12 mi. S. Cayo, Toledo Settlement; Jan., Feb., Mar., Sept., Dec.

No specimens of this species have been taken in British Honduras in the summer, although Willis saw ten Blue-gray Gnatcatchers on the Hill Bank pine ridge on August 3. P. c. denpei^{304/} is a resident race of parts of Mexico south into Quintana Roo, and is to be expected in the Colony as a resident. The LSUMZ specimen is small (wing and tail each 46 mm.) and probably is referable to this race. Todd identified a December specimen in the British Museum as this subspecies. Five other specimens that I have examined and three additional specimens in the British Museum checked by Todd are referred to P. c. caerulea.^{305/} In addition to Willis'

August record, this species has been noted in moderate numbers in the Colony from September 9 to April 5.

Polioptila plumbea (Gmelin)

Tropical Gnatcatcher

SPECIMENS. LSUMZ: Gallon Jug - ♂ (5.2 g.), May 3; ♂ (6.0), Nov. 1. OTHER MUSEUMS (CM, MCZ): Four specimens from Duck Run, Mountain Cow, Freetown; Apr., May.

In British Honduras, the Tropical Gnatcatcher is a moderately common resident of riverbanks, plantations, pine ridge thickets (in lowlands), second growth, and tall humid forest. In the forest it is probably more common in the canopy, although it does occasionally venture into the undergrowth. Willis saw a bird collecting nest material on March 12, and April and May specimens were in breeding condition.

The race P. p. superciliaris^{306/} ranges from Mexico to Panamá.

Ramphocaenus rufiventris (Bonaparte)

Long-billed Antwren

SPECIMENS. LSUMZ: Gallon Jug - ♀ (8.6 g.), Mar. 1; ♂, Mar. 7; ♂, Mar. 9; 2 ♂'s (8.8, 9.0), Nov. 2; ♀ (9.0), Nov. 9. Pomona - ♂ (8.6), Apr. 1. Augustine - ♀, Aug. 22. Two mi. W San Pedro Columbia - 2 ♂'s (9.1, 10.5), May 13; ♂ (10.2), May 22. Eight mi. NW San Pedro Columbia - ♂ (10.1), May 16; 2 ♂'s, ♀ (10.1, 10.6, 11.0), May 18. OTHER MUSEUMS (BM, CM, UMMZ, MCZ): Nine specimens from the Manatee Lagoon area, Cayo, Mountain Cow, Freetown; Mar., Apr., May, June, July, Dec. CRITICAL PUBLISHED RECORD: Orange Walk (Salvin and Godman, Biologia, ii, 1892: 220).

In the undergrowth of tall rain forest and moderately tall to tall second growth, the Long-billed Antwren is locally a common resident. Almost invariably, male and female forage very close to one another, their presence made known by many long trills and churrs. In medium second growth dominated by 30-foot cohune palms near San Pedro Columbia, I found a nest in the early stages of construction on May 11. It was placed in a fork of a small bush 18 inches above the ground in a rather open area. At this stage the nest was an amorphous ball of small twigs, fine bark, lichens, and moss. Ten days later it was a compact open bowl, the cavity 2 inches deep and 1.5 inches across, but it contained no eggs. The inside was lined with very fine grasses but the outside had many protruding loose ends of twigs, bark, leaves, and lichens. At Gallon Jug, Willis found two similar nests only a few inches above the ground; one contained two eggs June 12—20, and the other was under construction July 4 and still empty July 10.

All British Honduran specimens are R. r. rufiventris.^{307/} A series from the Colony was compared with the type and type series of R. r. ardeleo.^{308/} Specimens from Gallon Jug and Cayo approach the Peninsular population in paleness of their coloration but they are more like the nominate form.

Family BOMBYCILLIDAE

Bombycilla cedrorum (Vieillot)

Cedar Waxwing

SPECIMENS. USNM: Gallon Jug - ♂ (31.0 g.), Mar. 11, 1955. OTHER MUSEUM (CM): Toledo Settlement - ♀, Feb. 9, 1907.

Cedar Waxwings have been noted in only three years in British Honduras. In the vicinity of Toledo Settlement, Peck observed small flocks (less than 12 individuals) from February 9 to 20, 1907. A group of about 9 birds frequented the village of Gallon Jug between February 18 and March 11, 1955. Two individuals noted by Verner on Half Moon Cay on February 23, 1958, were certainly transients.

Family CYCLARHIDAE

Cyclarhis gujanensis (Gmelin)

Rufous-browed Peppershrike

SPECIMENS. USNM: Hill Bank - ♀ (29.3), Nov. 26. OTHER MUSEUMS (BM, ICZ): Six specimens from Orange Walk and Manatee Lagoon; Apr., May, Dec.

This uncommon resident of British Honduras has been found only in dense overgrown regions of the lowland pinelands and, according to Peck, in mangrove swamps. I have seen this species only at Hill Bank in November and Willis observed it there in August. Peck writes of collecting one "along the beach near the mouth of the

Manatee River, in March," and seeing it at Yucacos Lagoon. He also reports finding an unfinished nest on the edge of the pine ridge near Manatee Lagoon on April 10.

The back, pileum, and superciliary line of the November specimen are matched by a bird taken at Chichen Itzá in December, but the under parts of the British Honduran specimen are slightly brighter. I refer this specimen to the Peninsular race, C. g. yucatanensis.^{309/} I have not examined the other specimens from the Colony, but Todd describes the four birds in the British Museum from Orange Walk as "intermediate" between C. g. yucatanensis and C. g. flaviventris.^{310/} R. A. Paynter, Jr., informs me that the two specimens in the Museum of Comparative Zoölogy from Manatee Lagoon are intermediate between the two races.

Family VIREOLANIIDAE

Smaragdolanus pulchellus (Sclater and Salvin)

Green Shrike-vireo

SPECIMENS. USNM: Gallon Jug - ♂ (24.0 g.), Mar. 4. Cubetas - ♂ (26.1), Mar. 16. Seven mi. NW San Pedro Columbia - ♂ (24.0), May 18. OTHER MUSEUMS (BM, CM): Two specimens from Cayo District, N slope Cockscomb Mts.; Mar.

Although the Green Shrike-vireo is a very colorful species, its presence in the upper level of tall humid

forest is usually detected only by its titmouselike song. Its penetrating notes are regularly repeated throughout the day from February through July. This species is not common, but it is characteristic of the tall forest throughout British Honduras from the low-lands to the upper slopes of the Cockscomb Mountains. There are no fall or winter records, probably because of the absence of song at that time. Willis saw a female carry pale green lichens or moss strands into the treetops on March 15, while a male sang nearby. The May specimen was in breeding condition, as were three March birds.

The British Honduran specimens are typical of S. p.
311/
pulchellus.

Family VIREONIDAE

Vireo griseus (Poddaert)

White-eyed Vireo

SPECIMENS. USNM: Hill Bank - ♀ (11.1 g.), Feb. 20; 2 ♀'s (10.9, 11.7), Nov. 20; ? (11.2), Nov. 25. Gallon Jug - ♀ (9.3), Feb. 21; ♂ (11.5), Nov. 9; ? (11.9), Nov. 10. Seven mi. NW Belize - ♂ (14.7), Apr. 5. OTHER MUSEUMS (BM, CM, USNM): Twenty-two specimens from Orange Walk, Belize, Manatee Lagoon, Cayo, All Pines; Jan., Feb., Mar., Apr., Oct., Dec.

The White-eyed Vireo is a common winter visitant and probably a less common migrant throughout the Colony. In huamil and along the forest edge, this vireo is

conspicuous from mid-October (it undoubtedly arrives earlier) to about April 10. Counts made during the course of normal field work during this period total about three to six individuals daily. On Half Moon Cay, Verner recorded one or two birds on four dates from March 2 to April 9. As this species does not winter on the island, these birds must have been migrants. The presence of transients is also indicated by an exceptional count of 50 individuals at Gallon Jug on April 5, 1955. Much fat was removed from the specimen collected April 5, 1956. The latest spring date in British Honduras is April 17.

I refer 11 of the 20 specimens that I have critically examined to V. g. ^{312/}griseus and the other 9 to V. g. ^{313/}noveboracensis. There is no difference in points of record or in arrival and departure dates between the two races except that the only two April specimens examined are V. g. noveboracensis.

Vireo pallens (Salvin)

Mangrove Vireo

SPECIMENS. ISUMZ: Hill Bank - ♀ (8.9 g.), Nov. 21; ? (10.1), Nov. 25. Soldier Cay - 3 ♂'s, 2 ♀'s (12.0, 12.0, 13.2, 12.2, 13.0), Apr. 16. OTHER MUSEUMS: (BM, CM, MCZ, UICHZ, USNM): Twenty-six specimens from Belize, Manatee Lagoon, Cayo, Freetown, All Pines, Yacacos Lagoon; Feb., Apr., May, June, Aug., Oct. CRITICAL PUBLISHED RECORD: Corozal (Salvin and Godman, Biologia, i, 1882: 201); Rendezvous Point (Bond, 1954: 8).

Throughout the lowland coastal region, locally inland along watercourses, and on some of the inner keys, this diminutive vireo is a common resident wherever it occurs at all. Normally it inhabits the edge of the mangroves, lagoon borders, thickets, and low huanil. On Soldier Cay it was the most characteristic species of the sapodilla dominated woodland, yet on nearby Calabash Cay, where there are no sapodillas, V. magister was the only resident vireo. Only rarely does the Mangrove Vireo forage more than a few feet above the ground. Peck reports two nests, one containing three eggs found on April 23 and the other with two eggs located June 22. The irides of one female and two male birds taken in breeding condition were dusky brown.

I refer these British Honduran specimens to V. p. 314/
semiflavus. Bond (1954: 8) has commented upon the distinctiveness of the song of this species in comparison with that of V. ariseus, a point with which I fully agree.

Vireo huttoni (Cassin).

Hutton's Vireo

SPECIMEN. BM: Southern [= Mountain] Pine Ridge, Apr. 26, 1888.

Todd has examined this specimen and found that it is in poor condition and not racially identifiable, except that it represents "a paler race of huttoni."

Vireo flavifrons (Vieillot)

Yellow-throated Vireo

SPECIMENS. USNM: Hill Bank - ♂ (17.2 g.), Nov. 28.
 Gallon Jug - ♀ (16.6), Mar. 11; ♂ (17.5), Oct. 25.
 OTHER MUSEUMS (BM, MCZ, UMMZ): Four specimens from
 Belize, Cayo, Mountain Cow, Toledo Settlement; Feb.,
 Apr., Dec.

The Yellow-throated Vireo occurs in British Honduras as a migrant and winter resident in very small numbers. Second growth may be its preferred habitat, but it has been observed in huamil, pine-lands, and tall humid forest. Verner saw five birds on Half Moon Cay on March 26, the highest one-day count of known transients in the Colony. The earliest fall date is October 25 and the latest spring date is April 19. The adult male collected November 28 was in full song in a pine tree.

Vireo solitarius (Wilson)

Solitary Vireo

SPECIMENS. USNM: Augustine - ♂ (12.4 g.), May 5.
 OTHER MUSEUMS (CM, UMMZ): Seven specimens from 12
 mi. S Cayo, All Pines; Feb., Mar., Apr.

Extensive field work in December near the type locality of this rare vireo failed to reveal its presence. Thus, it has not been confirmed as a year-round resident. Blake and Agostini collected a pair of breeding birds on April 23 in a palmetto thicket in the pine ridge near All Pines, evidence that this

species is not confined to the Mountain Pine Ridge. Van Tyne (1933: 2) thought that the five birds he collected between February 16 and March 4 were "about to breed." The May 5 adult male had only slightly enlarged testes.

The endemic British Honduran population of the Solitary Vireo is V. s. notius^{315/}, and all specimens from the Colony are referable to it.

Vireo olivaceus (Linnaeus)

Red-eyed Vireo

SPECIMENS. USNM: Hill Bank - ♂ (17.2 g.), Nov. 20. Gallon Jug - ♂ (16.6), Oct. 24; ♀, ? (17.0, 15.4), Nov. 12. Half Moon Cay - ♂, Mar. 23. Fifteen mi. NW Middlesex on Hummingbird Hwy. - ? (19.9), Mar. 27. OTHER MUSEUMS (BM, CM, MCZ, UMMZ): Sixteen specimens from Belize, Manatee Lagoon area, San Antonio, Camp VI, Mountain Cow, Freeport; Mar., Apr., May, Aug., Sept., Oct.

The Red-eyed Vireo is a moderately common transient through British Honduras over an extended period in the fall and spring. Peck noted arrivals from the north as early as July 25 and collected a specimen August 8. The species continues to be present in numbers into October and a few individuals have lingered as late as November 26. The last week of March is the usual date of arrival of north-bound migrants. Verner noted 30 individuals of this species on March 26 at Half Moon Cay after a storm the night before. It is common until late April. The latest spring birds were collected May 14.

Vireo flavoviridis (Cassin)

Yellow-green Vireo

SPECIMENS. LSUMZ: Hill Bank - ♂ (18.5 g.), Mar. 30. Gallon Jug - ♂ (16.6), Apr. 5; ♀ (17.1), June 8. Ballerina Camp - ♂, ♀ (17.3, 17.0), Apr. 26. Two mi. W San Pedro Columbia - ♂ (16.2), May 4; ♀ (16.7), May 6. OTHER MUSEUMS (BM, CM, HCB): Eleven specimens from Duck Run, Cayo, Sittee River, Freetown; Mar., Apr., May.

Unlike most breeding birds of the Colony, this vireo migrates southward for the winter. It arrives in spring in late March (March 20-30) and is common by the first week of April. The semi-open and the forest edge provide its favorite habitat. This species has not been recorded above an elevation of 1600 feet or in the heart of extensive forests, although it does enter the lowland pine ridges. Only specimens taken in late April, May, and June were in breeding condition. Peck found a nest containing eggs in the pine ridge near Manatee Lagoon on June 20, and Willis noted two nests containing young at Hill Bank in the first week of August. The fall departure date is undetermined.

The race of the Yellow-green Vireo breeding from Mexico to Panamá is V. f. flavoviridis.^{316/}

Vireo magister (Lawrence)

Yucatán Vireo

SPECIMENS. LSUMZ: McNabb's Water Cay - ♂, May 17. Calabash Cay - 2 ♂'s (21.0, 21.0 g.); Apr. 9; ♂, ♀

(20.7, 20.7), Apr. 13. OTHER MUSEUMS (CM, MCZ, USMZ, USNM): Seven specimens from Belize, Manatee Lagoon, South West Cay; ?, May, Dec. CRITICAL PUBLISHED RECORD: Besante Point (Bond, 1954: 8).

In British Honduras this vireo is a locally common resident of mangroves and adjacent habitats near Belize and on many of the keys. In the mangroves and thickets on Calabash Cay I noted as many as 16 individuals in a two-hour period. Peck collected one bird in December in a thicket in the pine ridge near Manatee Lagoon. Four of the eight adult birds I collected in April and May were in breeding condition.

I refer these specimens to V. n. magister.^{317/}

Vireo altiloquus (Vieillot)

Black-whiskered Vireo

SPECIMEN. CM: Half Moon Cay - ♂, March 22.

The specimen listed above was found dead by Ernest G. Holt in a pool of water at the base of the Half Moon Cay lighthouse. This bird, a male with enlarged testes, has a well-defined subalar line and is typical of V. a. barbatulus.^{318/}

Vireo philadelphicus (Cassin)

Philadelphia Vireo

SPECIMEN. USMZ: Gallon Jug - ♀ (12.8 g.), Nov. 10, 1956.

This bird was collected as it apparently picked army ants from the crown of an eight-foot trumpet tree. It fell to the ground when shot and became black with ants in the few seconds that elapsed before I retrieved it.

Hylonphilus ochraceiceps (Sclater)

Tawny-crowned Greenlet

SPECIMENS. USNM: Gallon Jug - ♂ (9.7 g.), Mar. 10; ♂ (10.8), Mar. 16; ♀ (10.7), Apr. 7; ? (10.2), June 6. Seven mi. NW San Pedro Columbia - ♀ (11.2), May 18. OTHER MUSEUMS (BM, CM, MCZ): Twenty-three specimens from Manatee Lagoon, Duck Run, Cayo, Augustine, Mountain Cow, Freetown, Toledo Settlement; all months except Mar., June, July, Sept.

In tall humid forest and occasionally tall second growth, the Tawny-crowned Greenlet is a common resident. It has been noted in the forests (1600 feet) fringing the Mountain Pine Ridge and high in the Cockscomb Mountains (3000 feet). Willis found a nest containing two eggs on April 1 and on July 7 he observed two nests, one containing young birds and the other under construction. The three nests discovered by Willis were 6, 11, and 23 feet above the ground.

The race of this greenlet ranging through Central America is H. o. ochraceiceps.^{319/}

Mylophilus decurtatus (Bonaparte)

Gray-headed Greenlet

SPECIMENS. USNM: Ten mi. NW Gallon Jug - ♂ (7.8 g.), Nov. 8. Gallon Jug - ♂ (7.9), Feb. 28; ♂ (8.2), Mar. 28; ♂ (8.9), Nov. 5. Seven mi. NW Belize - ♂ (9.8), Apr. 5. Seven mi. NW San Pedro Columbia - ? (10.3), May 18. OTHER MUSEUMS (BM, CM, MCE, USMZ): Twenty-five specimens from Orange Walk, Belize, Manatee Lagoon area, Duck Run, San Antonio, Mountain Cow, N slope Cockscomb Mts. (1300', 1850'), Freetown, All Pines, Toledo Settlement; Jan., Mar., Apr., May, Sept., Oct., Nov.

The Gray-crowned Greenlet frequents nearly all forest areas from the coastal scrub to the very humid forests of the Cockscomb Mountains. It is most conspicuous on the forest edges and in taller second growth. In the heavier forest where M. ochraceiceps also occurs, M. decurtatus usually forages much higher. This common species may begin to nest in March, since the four specimens collected in March had fully enlarged gonads. The bird collected May 18 was a fledgling just out of the nest. Near Gallon Jug, Willis saw a female collecting nest material on June 27.

The population in northern Central America is
H. d. decurtatus. ^{320/}

Family COEREBAE

Chlorophanes spiza (Linnaeus)

Green Honeycreeper

SPECIMENS. USNM: Ballerina Camp - ♂ (19.3 g.), Apr. 30. Cubetas - ♂, ♀ (20.8, 21.9), May 15. OTHER MUSEUMS

(CM, UMMZ): Sixteen specimens from Mountain Cow, N slope Cockscomb Mts. (1300'), Toledo Settlement; Mar., Apr., Dec.

In the extensive and relatively undisturbed tall forests to the south of the Mountain Pine Ridge and in the drainage of the Cockscomb Mountains, the Green Honeycreeper is a moderately common inhabitant of the middle and upper forest levels. Near the crest of the Cockscomb range, where the trees are not so tall, this species was frequently observed. Its status as a resident is open to some question. Peck first saw it at Toledo Settlement in early December and states that it became common before it completely disappeared in mid-February. He saw one other bird, at Manatee Lagoon in December. These observations suggest that a seasonal shift may occur in the local population from the rain forests at elevations above 1200 feet into the lowland forests. Three of the eight March specimens from the Cockscomb Mountains had enlarged gonads as did all three March and April birds from Ballerina Camp and Cubetas.

The specimens are examples of C. s. guatemalensis.^{321/}

Cyanerpes cyaneus (Linnaeus)

Blue Honeycreeper

SPECIMENS. LSUMZ: Gallon Jug - ♂ (11.5 g.), Feb. 18. Ten mi. NW Middlesex on Hummingbird Hwy. - ♂ (12.3), Mar. 26. One-half mi. W Baldy Beacon (2900') - ♂ (12.7), Apr. 21. Kendal - ♀, Aug. 31. OTHER MUSEUMS (BM, CM, MCZ, UMMZ): Twenty-three specimens from Belize, Manatee Lagoon area, Cayo, Mountain Cow, N slope Cockscomb Mts.

(1300'), Freetown; Mar., Apr., May, July, Aug., Nov.
 CRITICAL PUBLISHED RECORD: Corosol (Salvin and Godman,
Biologia, i, 1883: 242).

The Blue Honeycreeper is a fairly common resident throughout nearly all British Honduras. In addition to the above specimen localities, this species has been observed at Augustine, Pallarina Camp, Sittee River, Monkey River, Toledo Settlement and west of San Pedro Columbia. It forages about the flowers and fruits of the treetops in the rain forest, tall second growth, and pine ridges and is especially noticeable on occasions at the forest edge and in the scattered trees of pastures, plantations, and villages. No definite evidence of seasonal wanderings was noted in the Colony such as has been described by Skutch (1954: 387) in Guatemala and by Dickey and van Rossem (1938: 478) in El Salvador. Specimens with enlarged gonads have been collected in late March, April, and May.

The populations of this species ranging from western Panamá northward into Mexico are C. c. carneires.^{322/}

Cyanerpes lucidus (Selater and Salvin)

Shining Honeycreeper

SPECIMENS. USNM: One and one-half mi. E Victoria Peak (2600') - 2 ♂'s, ♀, May 8. OTHER MUSEUM (OM): N slope Cockscomb Mts. - ♂, Mar. 27.

On the very narrow ridge at the crest of the Cockscomb Mountains, the vegetation is predominantly a mass

of trees less than 25 feet tall with much low undergrowth. Limbs and branches are completely covered by epiphytic bryophytes and ferns. In this habitat in May the shining honeycreeper is the most common bird. If individuals are not actually in sight, flitting about the ends of the branches, their high cricketlike zee zee may be heard continuously. This species ranges at least from the highest point that I have reached (3400 feet) down the slopes to 1300 feet, although not commonly below 2200 feet. The May specimens had enlarged gonads.

I refer specimens to C. l. lucidus.^{323/}

Coereba flaveola (Linnaeus)

Mananaquit

SPECIMENS. BM: Two, without date or specific locality. CRITICAL PUBLISHED RECORD: Cayo (Lantz, 1899: 223).

Todd has examined the British Museum specimens from an unspecified locality in British Honduras. The published Cayo record refers to a pair of Mananaquits collected by Goss. To my knowledge these two specimens are no longer extant and this reference may therefore be considered with skepticism.

Presumably the specimens are referable to C. f.^{324/}
mexicana.

Family PARULIDAE

Mniotilta varia (Linnaeus)

Black-and-white Warbler

SPECIMENS. USNM: Gallon Jug - ♀ (9.1 g.), Feb. 21. Half Moon Cay - ♀, Mar. 21. OTHER MUSEUMS (BM, CC, CM, UMMZ): Ten specimens from Belize, Manatee Lagoon, Cayo, Mountain Pine Ridge, All Pines; Jan., Apr., Aug., Sept., Dec.

The Black-and-white Warbler is distributed throughout the country as a migrant and winter visitor. July 28 is the earliest arrival date. Two or three may be seen each day regularly during the winter. Only five other species of warblers are more numerous. The number of individuals observed increases slightly in early March, and is highest in late March and very early April. Practically all have departed before the last week of April. The latest transient was recorded by Verner on Half Moon Cay on May 7. He had not observed any black-and-white warblers on the island since April 19.

Protonotaria citrea (Boddaert)

Prothonotary Warbler

SPECIMENS. USNM: Half Moon Cay - ♂ (12.0 g.), Mar. 26; ? (9.5), Mar. 28. Hummingbird Gap - ♂ (15.7), Mar. 26. OTHER MUSEUMS (CM, UMMZ): Four specimens from Belize, Manatee Lagoon; Mar., Sept., Oct.

This warbler is an uncommon transient, recorded in British Honduras from August 3 to November 22 and in the

spring from February 28 to April 19. There are not sufficient records to permit detection of a peak southward movement, but 12 of 14 spring observations have been in the period March 26 to April 11. The Prothonotary Warbler may be seen in any habitat during its movement through the Colony.

Limnothlypis swainsonii (Audubon)

Swainson's Warbler

SPECIMENS. USNM: Hill Bank - ♀ (13.7 g.), Feb. 20, 1956. OTHER MUSEUM (CM): Manatee Lagoon - ♀, Sept. 2, 1905; ♀, Dec. 18, 1905.

These three specimens and one sight record at Hill Bank on November 22, 1956, constitute the only known data on the occurrence of this species in the colony.

The Hill Bank bird was captured in a fine mist net suspended in tall second growth over a narrow dry gully. The Manatee Lagoon birds were collected in a similar habitat. The Swainson's Warbler that I saw November 22 was in a thicket on the edge of the pine ridge.

Helminthophila vermivorus (Gmelin)

Worm-eating warbler

SPECIMENS. USNM: Gallon Jug - ♀ (12.3 g.), Mar. 3. Half Moon Cay - ♂, Dec. 30. OTHER MUSEUMS (BM, CM, MCZ, USNM): Seven specimens from Belize, Manatee Lagoon, Cayo, Toledo Settlement; Jan., Feb., Mar., Sept., Dec.

The Worm-eating Warbler is an uncommon migrant and winter visitant and has been recorded as early as

September 13 and as late as April 19. No more than two individuals have been seen by LSUMZ personnel in a day. The species winters on the keys, as well as on the mainland, for van Tets captured one in a mist net in the booby colony on Half Moon Cay on December 30 and Verner saw two there in mid-February. On nine dates from March 8 to April 19, Verner recorded a total of ten individuals; it seems likely some birds were transients. Worm-eating Warblers are usually seen in the undergrowth of the rain forest on the mainland.

Vermivora chrysoptera (Linnaeus)

Golden-winged Warbler

SPECIMENS. LSUMZ: Half Moon Cay - ♂ (10.2 g.), Mar. 26, 1958. OTHER MUSEUM (UMMZ): Belize - ♂, ♀, Oct. 9, 1932.

The Golden-winged Warbler is a rare migrant and possibly a winter visitor, for Lancaster saw one individual at Gallon Jug on February 13. Two individuals on Half Moon Cay on March 26 (one collected), another there April 2, and one at Gallon Jug on May 7 supply the only other records of this warbler from the colony.

Vermivora pinus (Linnaeus)

Blue-winged Warbler

SPECIMENS. LSUMZ: Gallon Jug - ♀ (7.5 g.), Mar. 5, 1955. OTHER MUSEUM (CM): Manatee Lagoon - ♂, Dec. 22, 1905.

In addition to the two specimens listed above, twenty-two individuals have been seen on as many dates from October 30 to April 24. Most observations of the Blue-winged Warbler were made in February, March, and April, undoubtedly because most of the field work by LSUMZ personnel was conducted in these months.

Vermivora peregrina (Wilson)

Tennessee Warbler

SPECIMENS. LSUMZ: Hauger Cay - ♂, Feb. 12. Gallon Jug - ♀ (10.0 g.), Oct. 22. Calabash Cay - ♂ (8.2), Apr. 13. Half Moon Cay - ♂ (8.7), Mar. 26. Five mi. W Baldy Beacon - ♀ (8.3), Apr. 19. OTHER MUSEUMS (CM, UMIZ): Two specimens from Cayo and All Pines; Mar., Apr.

The Tennessee Warbler is an uncommon transient and, on the basis of three February records, a rare winter visitor. In the fall it has been observed only in the last third of October. In spring most individuals passed through from March 26 to April 20, with a straggler on April 27.

Vermivora ruficapilla (Wilson)

Nashville Warbler

Lancaster observed a Nashville Warbler at Gallon Jug on February 7 and 8, 1958. These are the only records of the occurrence of this warbler in British Honduras.

Parula americana (Linnaeus)

Parula Warbler

SPECIMENS. LSUMZ: Six mi. NNE Hill Bank - ? (9.5 g.), Feb. 25. Gallon Jug - ♂ (8.1), Feb. 19; ♀ (6.0), Nov. 7. OTHER MUSEUMS (BM, CM, MCZ, UMMZ): Six specimens from Belize, Manatee Lagoon area, Cayo; Feb., Oct., Nov. CRITICAL PUBLISHED RECORD: Turneffe (Bond, 1954: 8).

The Parula Warbler has been recorded in the Colony from early October to April 18. It is uncommon as a winter resident (one January record) and only moderately common during the northward migration. During the last half of February it appears in its greatest numbers, especially on the keys. Verner saw as many as five individuals in one day on Half Moon Cay in late February.

Dendroica petechia (Linnaeus)

Yellow Warbler

SPECIMENS. Nonresident races. LSUMZ: Hill Bank - ♂, ♀ (8.5, 9.4 g.), Mar. 30; ♀ (7.8), Nov. 23. Gallon Jug - ♂ (8.6), Nov. 12. Soldier Cay - ♀ (9.8), Apr. 16. Calabash Cay - ? (9.4), Apr. 9. Half Moon Cay - ♀, Apr. 21. Hunting Cay, ♂ (10.3), Apr. 27. OTHER MUSEUMS (BM, CM, MCZ, UMMZ): Thirty-one specimens from Belize, Manatee Lagoon area, Cayo, Freetown, All Pines, Toledo settlement; every month except June. Resident race. LSUMZ: Six mi. SW Belize - 2 ♂'s (11.2, 11.7), Apr. 4; ♂, Apr. 6. Calabash Cay - 2 ♂'s (11.2, 11.3), Apr. 9; ♀ (10.9), Apr. 10; 3 ♂'s (11.3, 11.3, 11.9), Apr. 11; 2 ♂'s (12.1, 13.0), Apr. 14. Hatchet Cay - ♂, May 14. OTHER MUSEUMS (CM, CMNH, MCZ, UMMZ, USNM): Thirty-six specimens from Belize, All Pines, Glover's Reef (Northeast, Middle, Southwest Cays); Jan., Apr., May, Dec. CRITICAL PUBLISHED RECORD: Half Moon Cay (Salvin, 1864: 380).

The North American races of this species are moderately common as transients and winter visitants on the mainland and the keys. Southward-bound individuals have been noted as early as July 21 and late spring migrants were on Half Moon Cay on May 8. Too few specimens have been racially identified to provide migration data on the various subspecies. Numbers of migrants have been noted in early August, late February, mid-April, and early May.

Specimens that I referred to D. p. ^{325/}aestiva were taken in January, March, April, and December. Other birds, collected in April and November, I identified as D. p. ^{326/}annicola. Some March, April, and November specimens I referred to D. p. ^{327/}rubiginosa, and an April 27 bird I assigned to D. p. ^{328/}morcomi.

The resident race of the Yellow Warbler, D. p. ^{329/}bryanti, is a common inhabitant of the mangroves of the coast and islands. Although Salvin (1864: 380) collected what was presumed to be the local race on Half Moon Cay, it has not been recorded there subsequently, though it is common on the islands of Glover's Reef. Birds taken in April and May have been in breeding condition. D. p. bryanti is distinguishable in the field from all wintering or transient Yellow Warblers of other races.

Dendroica magnolia (Wilson)

Magnolia warbler

SPECIMENS. LSUMZ: Gallon Jug - ♀ (6.3 g.), Feb. 18; ? (6.8), Feb. 25; ♀ (9.0), May 5. Calabash Cay - ? (9.1), Apr. 14. OTHER MUSEUMS (CM, CMEM, MCZ, UMMZ, USNM): Twenty-two specimens from Orange Walk, Belize, Manatee Lagoon area, Cayo, All Pines; Jan., Feb., Mar., Apr., Oct., Nov., Dec.

This warbler is widely distributed in the colony as an abundant migrant and winter resident. Peck recorded the earliest fall migrants on September 1. During the winter it is the commonest warbler of the mainland and is present in all types of wooded habitat. There daily counts of 10 birds are average and 25 are the maximum. It is less common on the keys. The number of individuals decreases gradually in April, and the last magnolia Warblers were seen in 1956, 1957, 1958 on May 9, 8, and 7, respectively. During the spring of 1958, Verner noted one to three individuals on April 16 - 19 and May 5 and 7 on Half Moon Cay. The female collected May 5 had considerable fat along the pterylae and in the mesenteries, and its ovary was enlarged (> by 7 mm.).

Dendroica tigrina (Gmelin)

Cape May warbler

SPECIMENS. UMMZ: Belize - ♂, Apr. 7, 1931. CRITICAL PUBLISHED RECORD: Rendezvous Point (Bond, 1954: 9).

According to Shufeldt's notes, the specimen in the University of Michigan Museum of Zoology was collected

from "several seen in bunch" at the Botanical Station on the Belize River. Bond saw only one Cape May Warbler — the bird taken at Rendezvous Point on January 23, 1954.

Dendroica caerulescens (Gmelin)

Black-throated Blue Warbler

SPECIMENS: LSUMZ: Gallon Jug - ♀ (8.2 g.), Nov. 12, 1956. Half Moon Cay - ♂, Feb. 24, 1958. CRITICAL PUBLISHED RECORD: Rendezvous Point, Jan. 23, 1954 (Bond, 1954: 9).

This warbler is a rare winter visitant in British Honduras. I saw one individual at Gallon Jug on February 19; Willis observed another there on March 15; and Verner found this species on Half Moon Cay on February 18, 19, 22, 24, and April 13, 16. I refer the two LSUMZ specimens to D. c. caerulescens.^{330/}

Dendroica coronata (Linnaeus)

Myrtle Warbler

SPECIMENS: LSUMZ: Hill bank - ♀, Mar. 22; ♀ (9.9 g.), Nov. 27. Gallon Jug - 2 ♂'s (13.0, 13.3), Feb. 8; ♀ (10.0), Mar. 2. OTHER MUSEUMS (BM, CM, CNHM, MCZ): Six specimens from Manatee Lagoon, Cayo, Mountain Pine Ridge, Middlesex, Toledo Settlement; Jan., Feb., Nov., Dec. CRITICAL PUBLISHED RECORD: Belize (Salvin and Godman, Biologia, i, 1880: 127).

Myrtle warblers are sporadic winter visitants to the Colony, appearing in flocks of up to 20 individuals in some years or as single individuals in others. They

are most frequently found on the keys or lowland pine ridges and less often about clearings at the edge of the rain forest. November 17 is the earliest fall date. In spring, most individuals depart in late February and March. April 9 is the latest spring date.

A male collected February 8 has a wing measurement of 76 mm. and I refer it to D. c. hooveri^{331/}. All other USNM specimens are typical of the nominate form, D. c. coronata^{332/}.

Dendroica auduboni (Townsend)

Audubon's Warbler

The only individual of this species recorded from British Honduras was carefully observed by Lancaster at Gallon Jug on January 21, 1958.

Dendroica virens (Gmelin)

Black-throated Green Warbler

SPECIMENS. USNM: Hill Bank - ♀ (8.5 g.), Apr. 2; ♂ (8.6), Nov. 22. Gallon Jug - ♂, Feb. 20; ♂ (8.3), Nov. 12. OTHER MUSEUMS (BM, CM, USNM): Eight specimens from Orange Walk, Belize, Manatee Lagoon, Cayo, Mountain Pine Ridge; Jan., Feb., Apr., Sept., Oct., Dec.

The Black-throated Green warbler is a moderately common transient and winter visitant in British Honduras. The earliest individuals in the fall were noted on September 14. During the winter, birds of this species

may be seen in any wooded area, but most frequently in the pinelands. Migrants pass northward from late February into April, and in one year unusual numbers were seen during the last week of April. The latest spring bird was seen in the top of a tree on the summit of one of the peaks of the Cockscomb Mountains on May 9. Unlike many transients, the Black-throated Green Warbler apparently avoids the keys. Bond (1954: 9) saw one on northern Two Cays on January 22, 1954, for the only insular record.

I refer the specimens from British Honduras to the nominate form, D. v. virens^{333/}.

Dendroica cerulea (Wilson)

Cerulean Warbler

SPECIMENS. USNM: Half Moon Cay - ♂ (8.9 g.), Mar. 26, 1958. OTHER MUSEUM (CM): Manatee Lagoon - ♂, Aug. 28, 1905.

On March 26, Verner noted three Cerulean warblers on Half Moon Cay in addition to the specimen listed above. He saw one other bird on April 16. Peck, who collected the other specimen in the forest near Manatee Lagoon, states that this bird was the first he had seen but that more were observed during the following two weeks.

Dendroica fusca (Müller)

Blackburnian Warbler

SPECIMENS. LSUMZ: Half Moon Cay - ♂ (13.3 g.), Mar. 26. OTHER MUSEUMS (MCZ, UMMZ): Six specimens from Belize and Augustine; Oct., Apr.

The Blackburnian Warbler is a seldom recorded migrant in British Honduras. The only fall record is that of five specimens collected along with many other migrants in the town of Belize by Shufeldt on October 9, 1932. On the mainland in spring it was collected at Augustine on April 21 by Austin (1929: 388), who commented that it was "migrating in large numbers." The species was seen on the pine ridge east of Hill Bank on April 1 (Lancaster), and at Toledo Settlement on May 4 (Peck). On Half Moon Cay, Verner recorded one or two birds on each of the following dates: March 26, April 16, 17, 19, 20; May 6, 8. On English Cay on April 21, I saw one exploring palm leaves that had fallen into the sand. It remained on the key for only a few minutes before flying off.

Dendroica dominica (Linnaeus)

Yellow-throated Warbler

SPECIMENS. LSUMZ: Hill Bank - ♂ (11.3 g.), Apr. 1; ♂ (9.8), Nov. 24. Gallon Jug - ♀ (8.9), Mar. 2; ♂ (9.3), Mar. 3. Augustine - ♂, Aug. 24; ♂, ?, Dec. 11. OTHER MUSEUMS (CM, UMMZ, USNM): Twenty-five specimens from Belize, Moho Cay, Manatee Lagoon, Cayo, 12 mi. S Cayo; Jan., Feb., Mar., Aug., Nov.

In the pinelands and in the vicinity of habitations, the Yellow-throated Warbler is moderately common as a migrant and winter visitor. In the vicinity of tall, humid forest and on the keys, this warbler does occur in small numbers during migration, but it is rare in winter. Early arrivals have been noted on July 16 (Evans) and by August the species is not uncommon. Most individuals have departed by late March and the Yellow-throated Warbler has not been recorded later in spring than April 1. This species is quite tame and is often found in towns and villages.

The specimens from British Honduras are all referable to D. d. albilora.^{334/}

Dendroica graciae (Baird)

Grace's Warbler

SPECIMENS. LSUMZ: Two mi. E Hill Bank - ♀ (6.5 g.), Apr. 1; ? (7.8), Nov. 28. Augustine - ♀ (8.4), May 5; ♂, Aug. 24. One mi. N Ballerina Camp - ♂ (6.9), Apr. 19; ♂ (8.1), Apr. 28. OTHER MUSEUMS (BM, CM, MCZ, UMMZ, USNM): Thirty-six specimens from Belize, Manatee Lagoon, Duck Run, Cayo, 12 mi. S Cayo, Freetown, All Pines, Yacacos Lagoon; Feb., Mar., Apr., May, June, Sept., Nov.

Grace's Warbler is a moderately common resident of the pinelands at all elevations in British Honduras. Shufeldt observed that birds were beginning to breed in mid-February. Breeding certainly continues at least into May, since specimens collected in May by Blake and Agostini had enlarged gonads. I have heard Grace's

Warblers singing in late November. During the months that the Yellow-throated Warbler is present in the Colony, these two species may often be seen in the same tree.

British Honduran specimens are representative of D. g. decora^{335/}, a race endemic to the Colony (Webster, 1961: 265). Although the type locality is Belize, all specimens so labeled must have been taken in the pine ridges a few miles from town. To my knowledge, this species has not been observed away from pine trees in British Honduras.

Dendroica pensylvanica (Linnaeus)

Chestnut-sided Warbler

SPECIMENS. USNM: Calabash Cay - ♂ (9.9 g.), Apr. 14. Half Moon Cay - ♀ (9.5), Apr. 19. Augustine - ♂, ♀ (10.5, 10.0), May 5. OTHER MUSEUMS (BM, CN, MCE, UMMZ): Six specimens from Belize, Manatee Lagoon, San Antonio, All Pines, Toledo Settlement; Apr., Sept., Oct.

This warbler is an uncommonly recorded transient in the Colony. Fall dates range from September 20 to October 12. Willis saw single birds on February 25, 27, 28 and March 14; I saw one near Millionario on March 15. Since the species is not known to winter regularly north of Nicaragua, these birds were probably early migrants and not winter visitants. Fourteen birds have been noted on eleven dates from April 10 to April 25 at Gallon Jug, Calabash and Half Moon Cays, and the

Mountain Pine Ridge. Austin (1929: 388) saw them "migrating in large numbers" on the Mountain Pine Ridge on April 27 and two of the LSUMZ specimens were collected there May 5. There are no other records.

Dendroica castanea (Wilson)

Bay-breasted Warbler

SPECIMENS. LSUMZ: Gallon Jug - 2 ♀'s (12.0, 14.9 g.), May 7. McNabb's water Cay - 3, Apr. 17. Half Moon Cay - ?, Apr. 20. OTHER MUSEUMS (BM, CM, MCZ, UMMZ): Six specimens from Orange Walk, Belize, San Antonio, Sittee River, All Pines; Apr., Oct., Dec.

The Bay-breasted Warbler is an uncommon transient in the Colony and has been recorded only one time in winter (Orange Walk, 1887). Shufeldt collected two in Belize on October 9, 1932, for the only fall date. Three specimens (recorded above) from San Antonio, All Pines, and Sittee River were collected on April 24 or 25 in different years. Twenty-nine additional individuals have been noted on seven occasions from April 17 to 27, all but one on the keys (one at Gallon Jug). Birds in a flock of four seen on English Cay were very tame and pursued flies onto the steps and porches of the houses there without apparent regard for the people present. Others persistently sought insects attracted to the flowers of the palms. On May 7, Verner saw two birds on Half Moon Cay. The two females collected on May 7 at Gallon Jug were very fat.

Dendroica discolor (Vieillot)

Prairie Warbler

SPECIMEN. USNM: Half Moon Cay - ♂, Apr. 1, 1958.

The Prairie Warbler has been recorded only on Half Moon Cay, where Verner saw thirteen individuals on as many dates from February 22 to April 18 and collected one on April 1. In the catalogue of Birds in the British Museum, Sharpe (1885: 648) records a specimen taken "At sea between Jamaica and British Honduras" in September. This specimen should not be considered a British Honduran record for its exact locality is unknown.

The Half Moon Cay bird is typical of the nominate race, D. d. discolor.^{336/}

Dendroica palmarum (Gmelin)

Palm Warbler

SPECIMEN. USNM: Half Moon Cay - ♀ (8.1 g.), Apr. 18, 1958.

This warbler is perhaps a regular late winter and spring visitant on the keys of British Honduras but is not plentiful. On Half Moon Cay, Verner collected a Palm Warbler and saw 20 others on 17 dates from February 16 to April 22. Bond (1954: 9) saw one "in northern Turneffe" about January 21 and I saw a total of four on Calabash Cay on April 8, 9, and 10.

The specimen is referable to D. p. palmarum.^{337/}

Seiurus aurocapillus (Linnaeus)

Ovenbird

SPECIMENS. LSUMZ: Gallon Jug - ♀ (18.0 g.), Feb. 26. Half Moon Cay - ♂, Dec. 30. OTHER MUSEUMS (CM, UMMZ, USNM): Eight specimens from Belize, Manatee Lagoon, Duck Run, Cayo, N slope Cockscomb Mts., All Pines; Feb., Mar., Apr., Oct.

The Ovenbird is moderately common as a spring and fall migrant and also occurs, perhaps in moderate numbers, during the winter. Lay saw and netted several on the outskirts of Belize on August 27; apparently these birds were members of a "wave" of transients. Most individuals of this species have departed by the end of March but a few migrants continue through until early May. The latest date is May 9. Wintering birds prefer the forest floor but are not restricted to it; the only December specimen was taken by van Tets in a mist net in the booby colony on Half Moon Cay.

I refer the LSUMZ specimens to the nominate form, S. a. aurocapillus,^{338/} with reservations regarding the certainty of the identification. I did not critically examine the other specimens.

Seiurus noveboracensis (Gmelin)

Northern Waterthrush

SPECIMENS. LSUMZ: Six mi. NNE Hill Bank - ♂ (17.1 g.), Mar. 31. Hill Bank - ♀ (18.1), Nov. 22. Calabash Cay -

♀ (18.2), Apr. 14. Ballerina Camp - ♀ (16.6), Apr. 25. Two mi. W San Pedro Columbia - ♀ (17.1), May 13. OTHER MUSEUMS (BM, CM, MCG, UMMZ, USNM): Six specimens from Belize, Cayo, Freetown; Apr., May, Dec.

This warbler is a moderately common migrant and winter visitant, preferring low wet forested areas near the coast and on the keys. Lay mist-netted several near Belize on August 27, the earliest date of record. Bond found this species to be common in January on Turneffe and Northern Two Cays, although on the mainland daily counts in winter seldom exceed two birds. The numbers of individuals increase during late March and remain high until nearly the end of April. Transients continue to pass through the Colony in reduced numbers during the first week in May. One specimen was obtained on the late date of May 17.

The studies by Eaton (1957: 229-239) indicate that recognition of geographical variation in the Northern waterthrush is impracticable because of the exceptional amount of individual variation. Although I have examined three March, April, and November specimens that are "typical" of S. n. noveboracensis^{339/} and one April specimen that is apparently S. n. notabilis^{340/}, these identifications are possibly in error.

Seiurus motacilla (vieillot)

Louisiana Waterthrush

SPECIMENS. USUMZ: Half Moon Cay - ?, Mar. 26, 1958 (preserved in alcohol). OTHER MUSEUMS (CM, UMMZ):

Manatee Lagoon - ♂, Aug. 7, 1902; ♀, Aug. 26, 1902.
Twelve mi. S Cayo - ♂ (16.0 g.), Feb. 21, 1931.

Willis saw eight Louisiana waterthrushes on seven dates in the period of July 21 to August 1 at Gallon Jug and Hill Bank. No other observations supplement the specimen records of this species. The specimen from the Mountain Pine Ridge was captured by van Dyne in a mist net suspended over a small stream.

Oporornis formosus (Wilson)

Kentucky Warbler

SPECIMENS. LSUMZ: Gallon Jug - ♂, Jan. 8; ? (12.6 g.), Mar. 8; ♀ (12.7), Mar. 11. Half Moon Cay - ♂ (13.1), Mar. 26. OTHER MUSEUMS (CM, MCZ): Four specimens from Manatee Lagoon, Mountain Cow, and Toledo Settlement; Apr., Aug., Sept., Dec.

The Kentucky Warbler arrives in late August (first collected August 31) and is present in moderate numbers until mid-April. Wintering individuals frequent the forest undergrowth but transients may occur anywhere, even on the keys. Unusually high daily counts, suggesting the passage of transients, have been made on March 14 and 26, April 16, and October 24. The latest spring bird was observed on April 18.

Oporornis agilis (Wilson)

Connecticut Warbler

On May 7, 1958, Verner observed a typical Connecticut Warbler under ideal conditions on Half Moon Cay. An effort to collect the bird was unsuccessful. Although the possibility of misidentification always exists, I feel that this observation is correct; the observer was aware of the rarity of this species and he also saw a Mourning Warbler on the same day. Eisenmann (1955b: 207) stated that there "seems to be no Middle American record of the Connecticut Warbler."

Oporornis philadelphia (Wilson)

Mourning Warbler

SPECIMENS. USNM: Half Moon Cay - ? (9.3 g.), May 6. Hatchet Cay - ?, May 14. OTHER MUSEUM (MCZ): One specimen from Mountain Cow; Apr.

The Mourning Warbler is a rarely recorded migrant through British Honduras, unknown in Fall. On Half Moon Cay, Verner saw two individuals on May 6 and one bird on the succeeding two days. Willis recorded one at Gallon Jug on May 12. In addition to the observations and specimens cited above, the only reference to this species in the Colony is that by Austin (1929: 388) who considered it "common everywhere." This statement is misleading, for Austin was in the Colony for six weeks

and worked in several areas. I suspect his comment was the result of a lapsus or was made in reference to a wave of migrants on April 14, the date on which he collected a specimen.

Geothlypis trichas (Linnaeus)

Yellowthroat

SPECIMENS. USNM: Gallion Jug - ♂ (10.7 g.), Feb. 6; ♂ (9.7), Feb. 28. Calabash Cay - ♀ (8.2), Apr. 9. Two mi. W San Pedro - ♀ (9.4), May 11. OTHER MUSEUMS (CM, BM, UMMZ): Twenty-two specimens from Belize, Manatee Lagoon, 12 mi. S Cayo, Freetown, All Pines, South West Cay; all months except June - Sept.

The yellowthroat is one of the commonest of the transient and wintering warblers, outnumbered only by the Magnolia Warbler. It arrives in late August (August 27 is the earliest date) and is abundant by October. It is found in brush and undergrowth on the keys and the mainland. The numbers of individuals seen per day increase slightly in late February and early March, then decline very gradually until mid-May. The latest spring date is May 29, when a specimen was collected by Blake and Agostini on South West Cay, Glover's Reef.

I refer thirteen specimens that I critically examined to G. t. brachidactylus.^{341/} Two other specimens are probably referable to either G. t. brachidactylus or G. t. trichas.^{342/}

Chamaethlypis poliocephala (Baird)

Ground-chat

SPECIMENS. USNM: Two mi. E Hill Bank - ♂, Mar. 23; ♀ (14.6 g.), Apr. 1; ♂ (15.2), Nov. 29. Five mi. W Baldy Beacon - 2 ♀'s (13.9, 14.1), Apr. 19; ♂ (14.2), Apr. 20. Augustine - ♂ (14.2), Mar. 19; ♂ (13.9), Apr. 5. OTHER MUSEUMS (BM, CM, MCZ, PC, USNM): Twenty-seven specimens from the Manatee Lagoon area, 12 mi. S Cayo, Freetown, All Pines; all months except Jan., July, Dec.

The Ground-chat is a common resident in the thickets of the pine ridges at all altitudes. It is found locally in moderate numbers in tall grass and low second growth. The species has not been recorded south of Yacacos Lagoon. I did not collect individuals with enlarged gonads before mid-April. Each of the five birds collected by Blake and Agostini in late April and May were in breeding condition.

I refer British Honduran specimens to C. p. palpebralis.^{343/}

Icteria virens (Linnaeus)

Yellow-breasted Chat

SPECIMENS. USNM: Gallon Jug - ♀ (25.0 g.), Feb. 21; ♀ (23.7), Feb. 25. OTHER MUSEUMS (BM, CM, MCZ, USNM): Ten specimens from Belize, Manatee Lagoon, Cayo, San Felipe, 12 mi. S Cayo, Mountain Cow; Jan., Feb., Mar., Apr., Oct., Dec.

The Yellow-breasted Chat is a retiring but rather common transient and winter visitant, frequenting thickets and second growth on the mainland. Early fall

migrants have been seen on September 4. In spring, most individuals have departed by early April but some have lingered until April 20. Although usually shy, birds of this species sometimes forage about houses and remain in the open for some time. One individual at Augustine was observed consuming the entire small, but exceedingly hot, fruit of a cultivated red pepper plant. The Yellow-breasted Chat has never been recorded on the keys.

The nine specimens from the Colony that I have critically examined are referable to I. v. virens.^{344/}

Granatellus sallaei (Bonaparte)

Gray-throated Chat

SPECIMENS. BM, USNM: Western [= Cayo] District - two undated specimens. Cayo - 5, Mar. 27, 1923.

This warbler is a rare resident of British Honduras. Willis saw one or two individuals on a number of occasions from February through July at Gallon Jug and presumed that the species nested in the area.

Van Tyne examined the Cayo specimen in the U.S. National Museum and referred it to G. s. boucardi.^{345/} The two specimens in the British Museum were reported by van Rossem (1934: 404) as intermediate between G. s. boucardi and G. s. griscomi.^{346/} As the latter race is probably untenable (Paynter, 1977a: 273), it can only be assumed that the two British Museum specimens are not typical of G. s. boucardi.

Wilsonia citrina (Boddaert)

Hooded Warbler

Wilsonia citrina (Boddaert)

SP1

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spe

Hooded Warbler

CASPECIMENS. LSUMZ: Gallon Jug - ♂ (8.2 g.), Mar. 3.
 14 OTHER MUSEUMS (BM, CM, MCZ, UMBZ, USNM): Nineteen
 Dec specimens from Belize, Manatee Lagoon, Cayo, 11 mi. S
 max Cayo, Mountain Cow, N slope Cockscomb Mts. (1200',
 1400'), All Pines; Jan., Feb., Mar., Apr., Aug., Sept.,
 Dec. CRITICAL PUBLISHED RECORD: Orange Walk (Hell-
 The Hooded warbler becomes common shortly after

the arrival of the earliest fall migrants (earliest
 date, August 13). It continues to be common through-
 out the winter and until early April (latest date,
 April 20). Daily counts of individuals rise somewhat
 in late February and in March with the passage of birds
 that wintered farther south. Winter visitants are
 most often seen in the undergrowth of tall forest and
 second growth on the mainland, but Bond (1954: 10)
 noted one on Northern Two Cays on January 22.

Wilsonia pusilla (Wilson)

Wilson's warbler

SPECIMENS. LSUMZ: Gallon Jug - ? (6.0 g.), Mar. 16,
 1955. ♀ (6.8), Oct. 21, 1956. OTHER MUSEUM (CM):
 Toledo Settlement - ♂, Nov. 1, 1906.

The Wilson's Warbler is a rather uncommon transient
 and winter visitant in the Colony, although in the late
 winter in 1957, Willis saw four to six birds daily at
 Gallon Jug from February 18 to March 12. In number,
 Willis' observations during this period exceed all other

observations of the species in British Honduras combined. No evidence indicates the passing of numerous migrants, unless this species begins its northward movement very early and the birds noted by Willis were migrants. This species has not been seen earlier than October 21 or later than May 7. Most birds have disappeared by the end of March. The individual seen on May 7 was on Half Moon Cay and was undoubtedly a belated migrant.

The specimens are small and have greenish backs.
 I refer them to W. p. pusilla.^{347/}

Wilsonia canadensis (Linnaeus)

Canada Warbler

SPECIMEN. LSUMZ: Hunting Cay - ♂ (9.8 g.), Apr. 26, 1956.

There are few records of this species from British Honduras. Single birds were seen at Gallon Jug on January 22, March 2, and April 26, and at Cubetas on March 15. Verner noted two on Half Moon Cay, one of them on February 17 and the other on March 26. The February individual is presumably a very early migrant, but the bird seen at Gallon Jug in January (by Lancaster) may have been wintering.

Setophaga ruticilla (Linnaeus)

American Redstart

SPECIMENS. LSUMZ: Gallon Jug - ♂ (7.1 g.), Mar. 10.
 OTHER MUSEUMS (BM, CM, MCZ, UMMZ, USNM): Nineteen specimens from Belize, Manatee Lagoon, Cayo, San Felipe,

Mountain Cow, All Pines; all months except May, June, July, Sept.

In practically all habitats on the keys and the mainland, the American Redstart is one of the commonest warblers from early August until the following May. Conspicuous peaks in daily counts of individuals occur in late October and early November and for a month beginning with the last week of March. Extreme dates are August 2 and May 11. Redstart migration is especially noticeable on the keys.

Wetmore (1949: 138-39) has identified both S. r. ruficilla ^{348/} and S. r. tricolora ^{349/} among specimens from Belize and Cayo.

Basileuterus culicivorus (W. Deppe)

Golden-crowned Warbler

SPECIMENS. USNMZ: Gallon Jug - ♀ (8.5 g.), Nov. 7. Ballerina Camp - ♀ (9.9), Apr. 27; ♀ (9.3), Apr. 29. OTHER MUSEUMS (BM, CM, MCZ): Seven specimens from Manatee Lagoon, Chorro, Cayo, Mountain Cow, N slope Cockscomb Mts. (1850'); Mar., Apr., Sept.

This warbler is an uncommon and rather locally distributed resident in British Honduras, where in addition to the localities listed above it has been noted only near Millionario and Hummingbird Gap. It has been observed most frequently in tall, humid forest, occasionally at the forest edge. Enlarged gonads have been noted in birds collected in late

March and April, and Willis noted an adult chipping and carrying food at Gallon Jug on June 30.

Golden-crowned Warblers from Puebla south to Costa Rica are referred to B. c. culicivorus.^{320/}

Basileuterus rufifrons (Swainson)

Rufous-capped Warbler

SPECIMENS. LSUMZ: Baldy Beacon - 2 ♂'s, ♀ (10.5, 10.6, 12.2 g.), Apr. 21. Augustine - ♂ (10.4), Mar. 9; ♀ (10.1), May 2; ♂, Aug. 23; ♀, Dec. 12. OTHER MUSEUMS (BM, MCZ, UMMZ): Eleven specimens from Mountain Pine Ridge, 12 mi. S Cayo, Augustine; Feb., Apr.

In British Honduras, this resident warbler is restricted to the region of the Mountain Pine Ridge. There, it is found only in the grass- and palmetto-filled ravines and in the scrub growth that occurs where rain forest intrudes into the pinelands; but in such habitat, it is moderately common. The LSUMZ April specimens were in breeding condition.

Specimens from British Honduras have completely yellow under parts, bright, greenish-olive backs, and an olive, not buffy, tinge on the flanks and crissum. I refer them to B. c. salvini.^{321/}

Family ICTERIDAE

Zarhynchus wagleri (Gray and Mitchell)

Wagler Oropendola

SPECIMENS. LSUMZ: Seven mi. NW San Pedro Columbia - 2 ♂'s (195.9, 205.4 g.), May 14; ♀ (109.2), May 18. OTHER MUSEUMS (BM, CM, MCZ): Six specimens from Eastern Branch Belize River, Camp VI, Toledo Settlement; Mar., Dec.

In British Honduras, the Wagler Oropendola has been found only at the localities listed above, which are in areas of tall, humid forest in the southern and western parts of the Colony. It is a resident species and is much less common than the Montezuma Oropendola. I found an active colony of these birds in mid-May near San Pedro Columbia. The 28 nests were suspended between 80 and 130 feet above the ground from a tree that was prominent because of its location on a slight hill. The area was one of unbroken forest some distance from any stream or river. A freshly fallen nest below the tree contained two eggs and most of the other nests were occupied.

From Mexico south to Honduras, the populations of this species are Z. w. wagleri.^{322/}

Gymnostinops montezuma (Lesson)

Montezuma Oropendola

SPECIMENS. LSUMZ: Hill Bank - 2 ♀'s (212.0, 231.1 g.), Feb. 16; 2 ♀'s, Aug. 14; ♂, ♀ (353.2, 226.6), Nov. 20;

♂ (381.1), Nov. 27. Ballerina Camp - ♀ (197.3), Apr. 25. Two mi. W San Pedro Columbia - ♂, May 20. OTHER MUSEUMS (BM, CC, CM, MCZ, UMMZ): Twenty-four specimens from the Manatee Lagoon area, Cayo, Mountain Cow, Freetown, Toledo Settlement; Jan. to July, inclusive.

The Montezuma Oropendola is one of the more conspicuous and characteristic resident species of the lowlands of the Colony. Nest trees, some containing as many as 50 nests, are usually situated near a pond or running stream at elevations below 1500 feet.

"Yellow-tails," as they are often called, forage over an extensive area but do not share the preference of the Wagler Oropendola for tall forest. Their wanderings become more extensive in fall and winter, as some individuals even enter the edge of the Mountain Pine Ridge. Nests containing eggs have been noted from early April to July.

Amblycercus holosericeus (W. Deppe)

Yellow-billed Cacique

SPECIMENS: USNM: Hill Bank - ♀ (47.5 g.), Feb. 24; ♀ (57.9), Nov. 20; ♀ (48.6), Nov. 27. Gallon Jug - ♀, Jan. 5; ♀ (62.3), Mar. 4; ♀ (52.1), June 1; ♀ (67.6), Nov. 14; ♀ (54.5), Nov. 15. Two mi. W San Pedro Columbia - ♂ (68.6), May 3; ♀ (49.8), May 5; ♂ (67.4), May 10; ♀ (65.4), May 19. OTHER MUSEUMS (BM, CC, CM, MCZ, UMMZ, USNM): Thirty-five specimens from Belize, Sibun River, Manatee Lagoon area, Cayo, Freetown; Jan., Mar., Apr., May, June, July.

The Yellow-billed Cacique is a common resident of dense shaded undergrowth throughout the Colony. It seems to be most abundant in the more humid regions.

There it is found in dense cane thickets and in the low tangled growth along streambanks, at forest edges, and amid high huamil. In these habitats, daily counts may range as high as 20 individuals. The sound of tearing or splitting vegetation (which has led to its local name of "bamboo cracker") and whistles and churrs are the most frequent indications of the bird's presence. Birds in breeding condition have been noted only in May, although Skutch (1954: 284) notes a nesting season in Costa Rica extending from January into June.

The Central American race is A. h. holosericeus. ^{323/}

Scaphidura oryzivora (Gmelin)

Giant Cowbird

SPECIMENS. USNMZ: Gallon Jug - ♂ (210.5 g.), Mar. 8; ♀, Mar. 15. OTHER MUSEUMS (BM, CC, CM, MCZ): Seven specimens from Manatee Lagoon area, Cayo, San Felipe, Freetown, Toledo Settlement; Feb., Apr., May.

The Giant Cowbird, or "tickbird," is a moderately common resident of British Honduras, although somewhat local in its occurrence. It is a bird of open fields and pastures, especially those actually occupied by livestock, at lower elevations in the vicinity of rain forest. Hill Bank and the North Stann Creek valley are the only two additional areas where this species has been observed. At Gallon Jug this cowbird was seen regularly, yet the Montezuma Oropendola, the nests of which are the most frequent recipients of the eggs of this parasitic

species, did not nest in the immediate region. The two males collected in March had fully enlarged testes. Presumably the breeding season is coincident with that of the oropendolas.

The northern race of the Giant Cowbird, ranging from Mexico to Panamá, is S. o. ^{354/}imacifus.

Tangavius aeneus (Wagler)

Red-eyed Cowbird

SPECIMEN. BM: Cayo.

The Red-eyed Cowbird ranges from the United States to Panamá and is fairly common in some areas. In British Honduras, however, it is known from only a single undated specimen in the British Museum. This specimen, examined some years ago by Poud, presumably would be referable to the nominate race, T. a. ^{355/}aeneus. Paynter (1955: 262) has recorded this cowbird at Chetumal, Quintana Roo, Mexico. It seems likely that it will be noted at other localities in British Honduras.

Cassidix mexicanus (Gmelin)

Great-tailed Grackle

SPECIMENS. LSUMZ: Calabash Cay - 2 ♂'s (188.6, 214.3 g.), Apr. 8; 2 ♂'s, ♀ (199.0, 206.1, 129.5), Apr. 9; ♂ (188.5), Apr. 11. OTHER MUSEUMS (BM, CC, CM, MCZ, USMZ): Twenty specimens from Crooked Tree Lagoon, Belize, Manatee Lagoon, Half Moon Cay, Freetown, All Pines; all months except Feb., July, Aug., Oct.

In all coastal areas and on most of the keys, the Great-tailed Grackle is a common and noisy resident. It is less common inland, although it does follow the major watercourses and has been recorded as far inland as San Antonio in Toledo District and Hill Bank. With the exceptions of Glover's Reef, where it has not been recorded, and Half Moon Cay, where it occurs sporadically, this grackle is common on all keys where there are coconut palms in which to nest. In Belize and the coastal settlements, this species is probably the most characteristic bird. The female collected in early April on Calabash Cay contained an egg in the oviduct. Willis noted a female carrying food to a nest in an epiphyte in a Eucida tree at Hill Bank on August 5. The breeding season is probably more extensive than is suggested by these few observations.

I refer specimens from British Honduras to C. m.
356/
mexicanus.

Dives dives (Deppe)

Melodius blackbird

SPECIMENS. LSUMZ: Augustine - ♂, ♀ (98.3, 33.4 g.), Mar. 19. OTHER MUSEUMS (BM, CM, MCZ, UMN): Thirteen specimens from Orange Walk, Belize, Cayo, Duck Run, 12 mi. S Cayo, Mountain Cow, Freetown; Feb., Apr., May.

The Melodius Blackbird is a common resident of British Honduras, occurring almost everywhere except

on the keys and in the heart of the tall, humid forest. It is especially common near habitations in the second growth of old clearings, and in the low brushy growth of riverbanks. When clearings are made in the rain forest as a result of logging operations, this is one of the first species to populate them. Specimens with enlarged gonads have been taken in April and May; but the two birds collected March 19 did not have enlarged gonads.

The Central American form of this species is the nominate race, D. d. dives^{357/}.

Icterus spurius (Linnaeus)

Orchard Oriole

SPECIMENS. USNM: Gallon Jug - ♂ (23.5 g.), Feb. 18; ♀ (19.3), Nov. 5. OTHER MUSEUMS (BM, CC, CM, USNM): Thirty specimens from Orange Walk, Belize, Manatee Lagoon, Cayo, San Felipe, All Pines, Toledo Settlement; Jan., Feb., Mar., Apr., Dec.

In winter and spring this oriole is abundant in the vicinity of clearings and plantations. Although Willis noted 15 individuals on August 6, the next earliest fall date of record in British Honduras is November 5. Perhaps early fall migrants continue south and the winter visitants consist of the latest migrants to leave the United States. Birds that were definitely transients were noted on Half Moon Cay from March 26 to April 20. The latter date is also the extreme spring

date. Orchard Orioles occur in noisy flocks, sometimes numbering as many as 70 birds, during their stay in the Colony.

Icterus prosthemelas (Strickland)

Black-cowled Oriole

SPECIMENS. USNM: Ten mi. NW Gallon Jug - ♀ (22.9 g.), Nov. 8. Gallon Jug - ♀ (26.5), May 27; ♂ (29.8), May 30; ♀, Aug. 17; ♂ (27.1), Oct. 26; ♀ (26.1), Nov. 1. Hill Bank - ♀ (28.0), Nov. 25. Two mi. E Hill Bank - ♂, ♀ (26.2, 29.1), Nov. 23. Seven mi. NW Belize on Corosal Rd. - ♂ (30.6), Apr. 5. Stann Creek - ♂ (32.1), Mar. 24. Bullerina Camp - ♂ (29.4), Apr. 24. Two mi. W San Pedro Columbia - ♂ (30.7), May 5; ♂ (28.7), May 11; ♀ (26.6), ♂ (31.2), May 23. OTHER MUSEUMS (BM, CC, CM, MCZ, JMMZ, USNM, WU): Sixty-two specimens from Orange Walk, Belize, Manatee Lagoon area, Cayo, San Antonio, Mountain Pine Ridge, Mountain Cow, Freetown, All Pines; all months except Mar., Aug., Sept. CRITICAL PUBLISHED RECORD: Corosal (Salvin and Godman, Biologia, i, 1883: 467).

The Black-cowled Oriole is a common and widely distributed resident throughout British Honduras. It is likely to be found in coastal mangroves, lowland pine forests, towns, and in areas once cleared by man that are in any stage of second growth. Although not primarily a bird of tall, undisturbed forest, it is found in and around clearings within rain forest. It occurs in the Mountain Pine Ridge only where rain forest is present, yet it may venture a short distance into the pine lands. Gonads of birds taken in March, April, and May indicate that breeding occurs in those months and continues at least into June.

358/

I. p. prothemelas is the race to which I refer the British Honduran birds.

Icterus cucullatus (Swainson)

Hooded Oriole

SPECIMENS. USNMZ: Four mi. W Belize - ♂ (26.7 g.), Apr. 4. Calabash Cay - ♂ (24.8), Apr. 9; 4 ♂'s (25.1, 25.3, 26.1, 26.5); Apr. 10; 3 ♂'s (23.2, 24.0, 24.1), Apr. 11; ♀, ♂ (—, 25.3), Apr. 13; ♂ (27.7), Apr. 14. Soldier Cay - ♂ (28.0), Apr. 16. OTHER MUSEUMS (BM, CC, UMNZ, USNM): Seven specimens from Orange Walk, Belize, Cayo; Jan., Feb., Mar., Apr., Dec. CRITICAL PUBLISHED RECORDS: Manatee (Griscom, 1926: 18), Turneffe Cays (Bond, 1954: 10).

On the larger of the Turneffe Cays, especially those with extensive coconut "walks," the Hooded Oriole is common. Griscom (1926: 19) observed a "flock" on Ambergris Cay. On the mainland this oriole has been noted in moderate numbers in the coastal scrub growth near Belize and it has been collected at Orange Walk and Cayo. Most of the individuals taken on Turneffe had fully enlarged gonads.

Paynter (1955: 268) has reported on the variability of the population of this species occupying the Yucatán Peninsula and its islands. He was able to recognize only one race from the Peninsula, I. c. igneus,^{359/} and he considered I. c. masoni^{360/} a synonym of I. c. igneus. A critical examination of the Belize and Turneffe specimens confirms Paynter's convictions. British Honduras birds are highly variable, but may be matched by specimens

from Chichén Itzá. Insular and mainland specimens from the Colony are similar. Consequently, I refer all British Honduran specimens to I. c. igneus.

Icterus mesomelas (Wagler)

Yellow-tailed Oriole

SPECIMENS. USNM: Gallon Jug - ♂ (44.9 g.), Mar. 7; ♂ (43.0), May 6; ♂ (47.7), Oct. 23. Four mi. W Belize - ♀, Apr. 4. Augustine - ♀ (47.5), May 5; ♂, Aug. 13. Three mi. S Augustine - ♀ (37.5), Mar. 11. OTHER MUSEUMS (BM, CM, MCZ, UMMZ): Twenty-four specimens from Orange Walk, Belize, Cayo, 12 mi. S Cayo, Camp VI, Rio Grande; Jan., Feb., Mar., Apr. CRITICAL PUBLISHED RECORD: Corozal (Sclater, 1886: 379).

I have seen this resident oriole only at Ballerina Camp and Kendal in addition to the localities listed above; Peck saw it on the Moho and Temash Rivers. Although it may be seen regularly in the suitable habitats where it does occur, it is somewhat local in its distribution, being absent from many apparently usable areas. The Yellow-tailed Oriole prefers riverside tangles, the second growth thickets that spring up in man-made clearings, and the edge of the rain forest that borders the Mountain Pine Ridge. It is not very abundant in any habitat. The gonads of some of the birds taken in March, April, and May were at least slightly enlarged.

The race of this species of oriole in the northern part of Central America is I. m. mesomelas.^{361/}

Icterus chrysater (Lesson)

Yellow-backed Oriole

SPECIMENS. USNM: Two mi. S Hill Bank - ♂ (50.3 g.), Nov. 22; 2 ♂'s (48.1, 50.6), Nov. 29. Five mi. W Baldy Beacon - ♀ (50.1), Apr. 19; ♀ (46.2), Apr. 20. Augustine - ♀ (49.8), Mar. 19; ♂ (53.9), May 5; ♂, Dec. 10; 3 ♀'s, Dec. 12; ♂, ♀, Dec. 13. OTHER MUSEUMS (BM, CM, MCZ, URMZ): Twenty-seven specimens from Belize, Manatee Lagoon area, Mountain Pine Ridge, 12 mi. S Cayo, Augustine, Camp VI; all months except July, Oct., Dec.

Yellow-backed orioles are moderately common residents of the pinelands at all elevations throughout the Colony, and occasionally they may wander into thickets that adjoin the pine ridges. In the fall and winter, especially, these orioles band into noisy groups of six to eight individuals, adults and immatures, that forage through the pine ridges. Birds in breeding condition have been collected as early as March, and Peck reports two nests containing young that were found in May and June. These nests were attached to the underside of palmetto leaves about 8 to 10 feet above the ground in the pine ridge.

I refer the British Honduran population of this species to the nominate form, I. c. chrysater.^{362/} The population of the Yucatán Peninsula has been named I. c. mayensis^{363/} by van Rossem, solely on the basis of the smaller size of the Yucatán birds in comparison with all other races. van Rossem (1938b: 137) gives the range of the wing measurements of eight adult males

of I. c. mayensis as 95-99 mm., but does not state the mean. Seven adult males from British Honduras have wings ranging from 96.0 to 102.0 mm., with a mean of 98.4 mm. The British Honduran specimens are intermediate in size between the two races, for a series of eight adult males from Guatemala and Chiapas (I. c. chrysater) included individuals with wings as short as 99 mm. since five of the seven males from the Colony have wing measurements of 99 mm. or over, I feel that they should be assigned to the nominate race. An adult male collected in February by Van Ryn at Chichén Itzá, Yucatán weighed only 40.8 grams. The fact that the minimum weight of adult males from British Honduras was 50.3 grams suggests that the body weights of the two races may be substantially different.

Icterus gularis (Wagler)

Black-throated Oriole

SPECIMENS. USNM: Hill Bank - ♂ (58.6 g.), Feb. 23.
OTHER MUSEUM (BM): One specimen from Corozal; no date.

Lay observed several Black-throated Orioles at Corozal in August 1960, Lancaster saw one individual at Gallon Jug in January, and I saw two others (one collected) at Hill Bank in February.

I refer the male from Hill Bank to I. g. yucatanensis and Griscom (fide Todd) considered the female from Corozal "close to yucatanensis."

Icterus galbula (Linnaeus)

Baltimore Oriole

SPECIMENS. LSUMZ: Four mi. E Hill Bank - ♂ (37.0 g.), Feb. 28. Gallon Jug - ♂ (32.4), Nov. 10. Half Moon Cay - ♂ (30.1), Apr. 17. OTHER MUSEUMS (BM, CM, MCZ, UMMZ): Ten specimens from Belize, Cayo, Mountain Cow, All Pines; Jan., Feb., Apr., Sept., Nov.

The Baltimore Oriole is an uncommon transient and winter visitant in the Colony. It has been observed most frequently in the open pine ridges and in scattered trees in clearings. Migrants from the north were recorded as early as September 29 (Peck) and have been noted on the return flight as late as May 5, when I saw six on the Mountain Pine Ridge. Peck's notes suggest that this species is more common in the southern third of British Honduras than elsewhere in the Colony.

Agelaius phoeniceus (Linnaeus)

Red-winged Blackbird

SPECIMENS. LSUMZ: Hill Bank - ♂ (51.6 g.), Feb. 22; ♂ (50.1), Mar. 30; ♂ (47.5), Nov. 21. OTHER MUSEUMS (BM, UMMZ): Twenty-two specimens from Orange Walk, Crooked Tree Lagoon, Belize; Jan., Feb., Dec.

The Red-winged Blackbird, or "soldier bird" as it is often called, is extremely local in its distribution in British Honduras and has been recorded only at the localities listed above. I have seen this species only in the marshes bordering the Hill Bank Lagoon, where a flock of less than 25 individuals is resident. No data

are available to indicate the breeding season except that the specimen collected March 30 had only slightly enlarged gonads.

I refer the British Honduran specimens to A. p.^{365/} richmondi with misgivings and the conviction that populations from southern Mexico and northern Central America are in need of a more thorough study. A. p. richmondi has a heavier bill than the Yucatán race, A. p. pallidulus.^{366/} Paynter (1955: 270) found that this character is the only one useful in distinguishing between the two races. I am unable to note any indication of consistently slender bills in the series from the Colony that would affiliate these birds with A. p. pallidulus. The race A. p. matudae^{367/} described by Brödkorb from the Usumacinta valley of Mexico is not marked distinctly enough to be distinguished from A. p. richmondi and is considered a synonym by Wetmore (1942: 326), by the Mexican Check List (Miller et al, 1957: 293), and by Paynter (1955: 269).

Sturnella magna (Linnaeus)

Eastern Meadowlark

SPECIMENS. LSUMZ: Two mi. E Hill Bank - ♀, Mar. 23; ♂ (94.6 g.), Nov. 22; ♂, ♀ (80.5, 68.7), Nov. 28. OTHER MUSEUMS (CC, CM, MCZ, UMMZ): Thirty-eight specimens from pine ridges near Belize, Manatee Lagoon, Freetown, All Pines, Monkey River, Ycacos Lagoon; all months except July, Sept., Dec.

Eastern Meadowlarks are rather uncommon but widely distributed residents of the grassy areas in the low-land pine ridges from Hill Bank and Maskalls south to Ycacos Lagoon. They are usually wary and difficult to approach and are more silent than meadowlarks in the eastern United States. Examination of the gonads of birds collected reveals that breeding begins in late March. The breeding season continues into June, for Peck reports a nest containing three eggs found June 29.

British Honduran specimens are typical of the small race S. m. inexpecta^{368/} inhabiting pinelands at low elevations from the Petén, Guatemala, to northeastern Nicaragua.

Dolichonyx oryzivorus (Linnaeus)

Bobolink

SPECIMENS. LSUMZ: Gallon Jug - ♀ (31.3 g.), June 1.
CRITICAL PUBLISHED RECORD: Northern Two Cays (Salvin, 1864: 386).

The Bobolink is a rather rare transient through British Honduras. Salvin collected a pair on Northern Two Cays on May 20; Peck noted a flock flying overhead on April 28 or 29; and Verner saw single individuals on Half Moon Cay on April 18 and 19.

Family THRAUPIDAE

Tanagra musica (Bonaparte)

Blue-hooded Euphonia

SPECIMEN. MCZ: Mountain Cow - ♂, Apr. 12, 1928.

Austin (1929: 391) collected the only specimen of this species from British Honduras. The population ranging from Sinaloa and Tamaulipas south to Panamá is T. m. elegantissima.^{369/}

Tanagra minuta (Cabanis)

White-vented Euphonia

SPECIMENS. CM, MCZ, UMMZ: Four specimens from Belize, Mountain Cow, Cockscomb Mts. (approx. 1400'); Feb., Mar., Apr.

The White-vented Euphonia is rare in British Honduras, and its occurrence in the Colony is known only from the specimens listed above. According to the notes of Shufeldt who collected two birds in an old pasture on the outskirts of Belize, one was feeding on the fruit of the trumpet tree and the other was eating mistletoe berries in company with other euphonias.

The nominate form has a wide distribution in South America, and the race T. m. humilis^{370/} ranges from Ecuador north to Guatemala and British Honduras.

Tanagra affinis Lesson

Scrub Euphonia

SPECIMENS. LSUMZ: Seven mi. NW Belize on Corozal Rd. - 2 ♂'s (10.3, 10.8 g.), Apr. 5. OTHER MUSEUMS (CM, UMMZ): Twenty specimens from Belize, Manatee Lagoon area, Duck Run, Cayo; Jan., Feb., Apr., June, Aug., Sept.

The few sight records in addition to the specimens listed above indicate that this bird is a rather uncommon resident of the lowlands of British Honduras. Most observations of this species have been made in the low dense growth along the coast and in low second growth further inland. Like other euphonias, it frequently feeds upon mistletoe berries. The two adult males taken on April 2 were not in breeding condition but Holt noted that the two specimens he collected (Cayo, Duck Run) on April 7 and 19 had enlarged gonads.

The British Honduran birds are assignable to the typical race, T. a. affinis.^{371/}

Tanagra lauta Bangs and Penard

Yellow-throated Euphonia

SPECIMENS. LSUMZ: Gallon Jug - 2 ♂'s (15.0, 12.2 g.), Feb. 26. Hill Bank - ♀ (13.8), Nov. 26. Augustine - ♂, ♀, Aug. 18; ♂, Aug. 27. Two mi. W San Pedro Columbia - ♂ (12.6), May 3; ♂ (12.2), May 22. OTHER MUSEUMS (BM, CC, CM, MCZ, UMMZ): Forty-two specimens from Belize, Manatee Lagoon area, Duck Run, Camp VI, Mountain Cow, Freetown, All Pines; Jan. - June, Aug. CRITICAL PUBLISHED RECORDS: Corozal (Salvin and Godman, Biologia, 1, 1883: 261).

This resident species occurs in all parts of British Honduras except on the keys. Mistletoe in the taller

trees of abandoned milpas and Cecropia trees are favorite haunts, as are also high second growth and forest edges. Sometimes the species is found in low-land pine forest areas. The Yellow-throated Euphonia is perhaps the commonest member of the genus in the Colony. Groups of two or four can be noted daily in the field, although the quiet nature of this euphonia may result in its being overlooked. Breeding has been indicated by the enlarged gonads of specimens taken during the last half of April and throughout May.

At Gallon Jug, Willis noted birds constructing nests in mid-June. Peck found a nest of the Royal Flycatcher occupied by this tanager in June. This nest, containing five euphonia eggs, was suspended by a liana over a stream in dense forest. Skutch (1954: 250) described nests constructed in the tops of decaying fence posts, in cavities in banks, and in the axil of a coconut palm leaf.

The populations of this species north of Nicaragua are referable to T. l. lauta.^{372/}

Tanagra gouldi (Sclater)

Gould Euphonia

SPECIMENS. USNM: Gallon Jug - ♀ (11.8 g.), Mar. 4; ♀ (13.1), Mar. 21; ♀ (14.4), Oct. 24. Seven mi. NW San Pedro Columbia - ♂ (13.4), May 16; ♀ (14.4), May 18. OTHER MUSEUMS (BM, CC, CM, CNHM, MCZ): Fourteen specimens from the Manatee Lagoon area, San Antonio, Mountain Cow, Twelve Mile Station, Cockscomb Mts. (1300'),

Toledo Settlement; all months except Jan., May, June, Sept. CRITICAL PUBLISHED RECORD: Belize (Salvin and Godman, Biologia, i, 1883: 273).

This inconspicuous resident euphonia is distributed throughout the mainland of the colony except in the extreme northeastern corner. It is most frequently found in the lower level of tall forest and high second growth. In such habitats one or two pairs may be seen nearly every day in the field. Specimens with enlarged gonads have been taken in late March, and in May a domed nest was found suspended from the tip of a branch about 6 feet above the forest floor. It contained no eggs but two adult birds were close by.

The nominate race, T. g. ^{373/}gouldi, ranges north from Costa Rica into Mexico.

Tangara nigro-cincta (Bonaparte)

Golden-masked Tanager

SPECIMENS. USNM: Gallon Jug - ♀ (18.7 g.), Mar. 10. Hummingbird Gap - ♂ (18.1), Mar. 26. Two mi. W San Pedro Columbia - ♀ (18.9), May 5. OTHER MUSEUMS (BM, CM, MCZ): Fourteen specimens from Cayo, Manatee Lagoon, Freetown, Mountain Cow, Cockscomb Mts. (1300'), Toledo Settlement; Mar., Apr., May, June, Sept., Dec. CRITICAL PUBLISHED RECORD: Belize (Salvin and Godman, Biologia, i, 1883: 274).

The Golden-masked Tanager is a resident from the Gallon Jug area in northwestern British Honduras southeast to the vicinity of Belize and then southward throughout the colony. Rarely singly, frequently in

pairs or groups of several individuals, they forage high in the trees of forest clearings, tall and moderately tall second growth, and occasionally in the scattered trees of pastures and cultivated land. In tall forest, these small tanagers go almost unnoticed in the canopy. This species is not frequently seen in the northern part of its range in the Colony. It is most numerous in the humid regions of Toledo District. Birds in breeding condition have been taken from early March to late May.

The northern race in Central America, to which these birds are referable, is T. n. larvata.^{374/}

Thraupis virens (Linnaeus)

Blue-gray Tanager

SPECIMENS. USNM: Gallon Jug - ♂, Feb. 28. Two mi. W San Pedro Columbia - ♂ (37.0 g.), May 3. OTHER MUSEUMS (BM, CC, CN, UMMZ): Nineteen specimens from Belize, Manatee Lagoon, Cayo, Freetown, All Pines, Toledo Settlement; Jan., Feb., Apr., May, June, July, Dec.

This resident tanager, locally known as the "blue-bird," is found throughout the lowlands of British Honduras. It is most often seen in the trees of villages and large clearings, more rarely in the forest edge and pinelands. It is not numerous in the northern third of the Colony, but in the extreme southern and central coastal areas, it is a common and characteristic species of the semi-open. Nesting has been noted in April, May, and June. At other seasons several individuals may forage together in the treetops over a wide area.

The race of the Blue-gray Tanager recognized in central America is T. v. diaconus.^{375/}

Thraupis abbas (W. Deppe)

Yellow-winged Tanager

SPECIMENS. LSUMZ: Gallon Jug - ♂, ♀ (44.8, 47.2 g.), Feb. 22; ♀ (43.5), Mar. 4; ♂ (46.5), May 29. Two mi. W San Pedro Columbia - 2 ♂'s (44.5, 48.9), May 4; ♀ (54.8), May 12. OTHER MUSEUMS (CU, CM, ICB, UMZ): Thirty-five specimens from Belize, Manatee Lagoon area, Duck Run, Cayo, Camp VI, Mountain Cow, Free town, All Pines, Toledo Settlement; all months except July, Sept., Oct.

Yellow-winged Tanagers are more frequently seen than Blue-gray Tanagers and occupy more diverse habitats and areas. Villages, river banks, clearings, tall second growth, lowland pinelands, and the edge of the rain forest are suitable habitats wherever they occur below an elevation of about 1200 feet. At Gallon Jug, Willis saw birds carrying nest building material as early as late February and found a parent bird feeding a nearly grown juvenile on April 28. At Hill Bank on August 4, he noted juveniles fluttering after their parents. A nest found by Peck on May 29 contained two eggs.

Ramphocelus passerinii Bonaparte

Scarlet-rumped Tanager

SPECIMENS. LSUMZ: Two mi. W San Pedro Columbia - ♂ (30.8 g.), May 3; ♂ (31.2), May 4; ♂, ♀ (28.1, 32.1),

May 8; ♂ (30.2), May 12; ♂ (32.7), May 13. OTHER MUSEUMS (BM, CM, CHNM, MCZ): Twelve specimens from Cayo, San Felipe, Freetown, Middlesex, Toledo Settlement; Jan., Feb., Mar., May, Sept. CRITICAL PUBLISHED RECORDS: Duck Run (Moore, 1879: 59), Belize River and Belize (Salvin and Godman, Biologia, 1, 1883: 281).

This vivid tanager is a resident of the lowland valleys of the humid two-thirds of the Colony. It ranges north as an abundant and conspicuous inhabitant of low, dense growth of riverbanks, roadsides, brushy pastures, and abandoned fields only to North Stann Creek. In the drainage of the Belize River it is less common. In 1957 at least one pair nested at Gallon Jug, a locality where intensive field work in the preceding two years had not revealed the presence of this species. Fourteen years earlier the Gallon Jug area was unbroken rain forest with no large streams in the vicinity and it still remains surrounded by forest. Since this tanager does not frequent tall forest, its presence at Gallon Jug may be interpreted as the result of a northward dispersal into a habitat made available strictly through the clearing done by man.

Skutch (1954: 123-165), in his excellent discussion of the life history of this species, has indicated a breeding season in Costa Rica beginning with the first rains in late February or March. In British Honduras, nesting has been noted only in May, when the rains usually begin in that country. However, this difference may be attributable to limited observations rather than to a

correlation with the start of the rainy season at a later date.

The short song is repeated over and over from a low but exposed perch, often with the wings held down at the sides, exposing the fluorescent brilliance of the lower back, rump, and upper tail coverts. The song consists of an ascending buzzy zweet followed after a slight pause by a slightly descending tēē-ū.

According to Skutch (1954: 159) young male scarlet-rumped Tanagers acquire the mature plumage as a result of the postjuvinal molt. An adult male that I collected on May 4 was in a plumage like that of the female. Its gonads were very slightly enlarged and its plumage was fresh. British Honduran specimens are not different from those of the nominate race, R. o. passerinii.^{376/}

Phlogothraupis sanguinolenta (Lesson)

Crimson-collared Tanager

SPECIMENS. USNM: Gallon Jug - ♂ (39.6 g.), Feb. 26; ♂ (39.2), Mar. 25; ♂ (37.2), June 1. Two mi. W San Pedro Columbia - ♂ (38.0), May 4; ♂ (38.5), May 9; ♂ (34.7), May 12; ♂ (40.2), May 18; ♀ (48.1), May 20; ♂ (40.9), May 22. OTHER MUSEUMS (BM, CC, CM, MCZ): Ten specimens from Cayo, Freetown, Toledo Settlement; Mar., Apr., May, Sept., Oct., Dec. CRITICAL PUBLISHED RECORDS: Belize and Belize River (Salvin and Godman, Biologia, i, 1883: 285).

This rather uncommon resident occurs throughout lowland wooded areas but prefers the high second growth of the more humid regions and the edges of tall rain

forest. Thus, it is more frequently seen in the southern part of the Colony. I have found the Crimson-collared Tanager in June in the tall grass bordering the Sittee River in company with Ramphocelus passerinii, although usually the present species is not seen far from shaded woods. Birds with slightly enlarged gonads have been taken in early May, but full reproductive activity is apparently not attained until late May, when nests have been found. Few tanagers possess a song that can surpass that of this species. Its many whistled phrases, some similar to those of a Catbird, are uttered with an oriolelike quality. Favored perches are upon exposed lines ranging up to 30 feet above the ground.

British Honduran specimens are typical of the race
F. s. sanguinolenta.^{377/}

Piranga rubra (Linnaeus)

Summer Tanager

SPECIMENS. USNM: Gallon Jug - ♂ (27.6 g.), Mar. 22; ♂ (28.6), Nov. 2. Galabash Cay - ♂ (30.9), Apr. 10. Augustine - ♂ (29.3), Mar. 19. OTHER MUSEUMS (BM, CM, MCZ, UMNZ): Twenty-nine specimens from Belize, Manatee Lagoon, Cayo, Mountain Pine Ridge, Mountain Cow, N slope Cockscomb Mts. (1300'), All Pines, Toledo Settlement; Jan., Mar., Apr., Aug., Sept., Oct., Dec.

Fall migrants of this species have been collected in British Honduras as early as August 24, but most summer Tanagers apparently do not arrive until October. Although most individuals winter farther south, this

tanager is present in small numbers during the winter months. On the basis of transients noted on Half Moon Cay by Verner, the bulk of the spring migration passes northward between late March and the last week of April. The latest spring date is May 1. No habitat preference has been noted; the birds occur wherever there are trees.

All specimens that I critically examined are referable to the nominate race, P. r. rubra.^{378/}

Piranga flava (Vieillot)

Hepatic Tanager

SPECIMENS. LSUMZ: Two mi. E Hill Bank - ♂ (36.7 g.), Nov. 22; ♀ (35.0, 32.2), Nov. 23; ♂, ♀ (32.0, 32.7), Nov. 29. Five mi. W Baldy Beacon - ♂, ♀ (36.6, 38.1), Apr. 19; ♀ (47.4), Apr. 20; ♂ (39.7), Apr. 21. Augustine - ♂ (39.2), Mar. 19; ♂, ♀, Aug. 25; ♀, Dec. 11; ♀, Dec. 14. One mi. N Ballerina Camp - ♂ (37.1), Apr. 26; ♂ (33.5), Apr. 30. OTHER MUSEUMS (CM, MCZ, UMMZ, USNM): Forty specimens from pine ridges near Belize, Manatee Lagoon area, 12 mi. S Cayo, Augustine, Freetown, All Pines, Ycacos Lagoon; all months except June, Aug.

In the pinelands of British Honduras at all elevations, the Hepatic Tanager is a moderately common resident. Usually it forages in pairs or in groups of four or six over extensive areas in the pine ridges. At Augustine I have seen it consume the tiny hot red fruit of domestic red peppers that grow about some houses. Perhaps this habit has led to the colloquial name of "pepper bird." Breeding begins by mid-March and continues at least into August, for Willis noted a female building a nest in a

pine east of Hill Bank on August 3. The exceptionally heavy female collected on April 20 was weighed when an egg was ready for laying.

A specimen collected on the Manatee River is the type of P. f. figlina,^{379/} and the population in the area from the Petén south to Nicaragua is generally referred to this race. The extensive series from British Honduras exhibits a considerable range in the degree of redness in the males, although the redness does not overlap the coloration of the other races. Since the color of the males is an important taxonomic criterion in this species, a few comments concerning the color variation in the British Honduran males seems pertinent. Some are pinkish (Brazil Red x Dragons-blood Red) and others are a deep brick red (Brazil Red x Brick Red) or Burnt Sienna. Color may intensify with the maturity of the bird, older birds becoming darker (Dickey and van Rossem, 1938: 555). A male collected April 21 had fully enlarged gonads but was attired in the yellow plumage of a female.

Piranga roseo-gularis (Cabot)

Rose-throated Tanager

No specimens of this tanager have been taken in British Honduras, although Paynter (1955: 275) recorded several specimens from Chetumal, Quintana Roo. On July 14, Willis saw a tanager almost certainly a female of

this species foraging in the undergrowth and saplings at the edge of the rain forest near Gallon Jug. He particularly noted its typically Piranga activities and its pale yellow throat and under tail-coverts. Willis had been studying tanagers during the preceding several months and was especially well prepared to recognize unusual species in the Gallon Jug area.

Piranga olivacea (Gmelin)

Scarlet Tanager

SPECIMENS. USNM: Seven mi. NW Belize on Corozal Rd. - ♂ (57.8 g.), Apr. 2, 1956. OTHER MUSEUM (USNM): Twenty-two specimens, all collected at Belize on Oct. 9, 1932.

Scarlet Tanagers are rare transients through British Honduras. Their occurrence in the Colony is known only by the specimens listed above and by Verner's observations of single individuals on Half Moon Cay on April 13 and 18, 1958. The phenomenal number of specimens collected on October 9 in Belize by Shufeldt is probably due to unfavorable climatic conditions at the time. Since this tanager has been recorded only rarely in any part of Mexico in fall, the possibility exists that individuals may not only fly across the Gulf of Mexico, but also across the Yucatán Peninsula and Gulf of Honduras in one nonstop flight. The specimen collected in April was rather fat.

Piranga leucoptera Trudeau

white-winged Tanager

SPECIMENS. LSUMZ: Gallon Jug - ♂ (15.6 g.), May 1.
 Ten mi. NW Middlesex on Hummingbird Hwy. - ♂ (14.4),
 Mar. 26. Two mi. NE Millionario - ♂, ♀ (14.1, 15.4),
 Mar. 13. OTHER MUSEUMS (BM, MCZ): Ten specimens from
 Mountain Pine Ridge, Augustine, Mountain Cow; Jan.,
 Feb., Apr. CRITICAL PUBLISHED RECORD: Belize (Salvin
 and Godman, Biologia, 1, 1883: 295).

To the west of the Maya Mountains, this vivid little
 tanager is a moderately common resident of the tall
 forest and clearings within the forest. In this region
 it also occurs in the hardwood forest up to the edge of
 the pines of the Mountain Pine Ridge. In the Cockscomb
 Mountains, I found this species only on the high upper
 slopes above 2000 feet. Elsewhere in the Colony the
 white-winged Tanager is an uncommon resident, occurring
 in rain forest. It is undoubtedly often overlooked in
 tall trees, for it tends to forage high in the treetops
 and its inconspicuous song is high-pitched and warbler-
 like. The specimens collected in March possessed greatly
 enlarged gonads but the testes of the male obtained on
 May 1 were only slightly enlarged.

I refer these specimens to P. l. leucoptera. ^{380/}

Habia rubica (Vieillot)

Red-crowned Ant-Tanager

SPECIMENS. LSUMZ: Ten mi. NW Gallon Jug - ♂ (28.2 g.),
 Nov. 8. Gallon Jug - ♂, Jan. 11; ♂ (36.1), Mar. 3; ♀
 (30.2), May 23; ♀, May 26; ♂ (30.4), May 28; ♀ (29.0),

May 29; ♂ (31.8), June 6; ♀ (30.0), Nov. 2. Two mi. NW Augustine - ♂, Dec. 12. Seven mi. NW San Pedro Columbia - ♀ (33.1), May 14; 2 ♂'s (37.3, 37.4), May 18; ♂ (32.0), May 19. Two mi. NW San Pedro Columbia - ♂ (34.3), May 3; ♂ (38.1), May 21; ♂ (36.3), May 22. OTHER MUSEUMS (BM, CC, CM, MCZ, UMMZ): Sixteen specimens from Manatee River, Cayo, 12 mi. S Cayo, Mountain Cow, N slope Cockscomb Mts. (1300-1400'); Feb., Mar., Apr., May, June.

This moderately common ant-tanager is a resident at all altitudes in the interior of tall, humid forest and more rarely the forest edge and tall second growth. One specimen from an unknown locality on the Manatee River is the only record of the occurrence of this species in the area from Sittée River north to Quintana Roo and west to Hill Bank. Peck did not record it during many months work in the Manatee Lagoon area. I presume this hiatus is due to the absence of extensive areas of undisturbed rain forest. Willis (1958; 1960a, b, c; 1961) has conducted detailed studies of the two species of Habia in British Honduras, especially of various aspects of their behavior. According to his observations, nest building commences in late March and nesting continues into August.

The series of Red-crowned Ant-Tanagers from British Honduras is tentatively referred to H. r. rubicoides.^{381/} It lacks consistency of characters that would definitely affiliate it with this race. Actually the British Honduran population exhibits a combination of the characters of H. r. nelsoni,^{382/} H. r. confinis,^{383/} and H. r. rubicoides, for there are specimens that resemble each of these races.

In general, however, the series is neither as light in color as H. r. nelsoni nor as large as H. r. confinis but is near H. r. rubicoides in size and color. Paynter (1955: 278; 1957a: 277) has suggested that weights may vary geographically and presents data indicating that H. r. rubicoides may be heavier than H. r. nelsoni. Birds from the Colony are intermediate with respect to this criterion, also.

Habia gutturalis (Scoter)

Red-throated Ant-Tanager

SPECIMENS. LSUMZ: Ten mi. NW Gallon Jug - ♀ (37.1 g.), Nov. 8. Mill Bank - ♂ (39.9), Nov. 27. Gallon Jug - ♀, Jan. 11; ♂ (39.2), Feb. 18; ♀ (30.0), Feb. 22; ♂ (32.5), Feb. 24; 2 ♂'s (32.3, 33.5), Feb. 26; ♂ (40.2), May 23; 2 ♂'s (31.4, 42.4), May 29; ♂ (39.2), May 30; 2 ♂'s (37.2, 40.9), June 2; ♂ (36.1), June 6; ♂, ♀ (39.4, 33.4), Oct. 29; ♀ (36.9), Oct. 30; ♀ (34.0), Nov. 6; ♂ (37.6), Nov. 7; ♀ (32.4), Nov. 9; ♀ (36.1), Nov. 12; ♂, ♀ (41.3, 34.7), Nov. 15. Augustine - ♀, Aug. 16; ♂, Dec. 10; ♂, ♀, Dec. 17. Seven mi. NW San Pedro Columbia - ♂, ♀ (42.9, 33.1), May 14; ♂ (40.9), May 18; ♂, ♀ (40.7, 33.1), May 19. Two mi. NW San Pedro Columbia - 2 ♂'s, ♀ (40.2, 40.5, 33.9), May 7; ♂ (39.8), May 14; 2 ♂'s (40.1, 43.8), May 22. OTHER MUSEUMS (CC, CM, MCZ, PC, UMMZ, USNM): Forty-four specimens from Belize, Manatee Lagoon area, Cayo, 12 mi. S Cayo, Camp VI, Freetown, Toledo Settlement; all months except June, Aug., Nov., Dec. CRITICAL PUBLISHED RECORDS: Corozal (Berlepsch, 1883: 488); Ambergris Cay (Carriker and de Schauensee, 1937: 451); Orange Walk Dist. (Hellmayr, 1936: 310).

Red-throated Ant-Tanagers reside in wooded areas throughout British Honduras. Except in the heart of undisturbed tall forest, this species of ant-tanager is more frequently seen than Habia rubica. Willis (1958, 1960a)

has presented evidence that Habia gutturalis not only forages through the forest border and humil of various heights (which Red-crowned Ant-Tanagers do not) but also occupies a slightly lower stratum of the forest than does its sibling species. Red-throated Ant-Tanagers are the habitual followers of the insects that flee before ant swarms; Red-crowned Ant-Tanagers are almost constant members of the wandering flocks of small insectivorous forest species, and rarely follow ant swarms (Willis, 1960c: 102). Nesting begins in late April and extends into August. The weight of the heavy female collected May 29 includes two large ova (11 and 13 mm.).

Few species exhibit as much variation in Mexico and Central America as Habia gutturalis. Yet these variations are highly inconsistent geographically. The British Honduran population is wedged between the humid Guatemalan lowlands and the more arid Yucatán Peninsula. Forest types change gradually in this area. The intermediacy of the geographical position of the Colony is reflected in the great amount of individual variation in the sample. I do not wonder that Griscom recognized the birds in British Honduras and Quintana Roo by name, H. g. rooensis^{384/}, especially since he based the race on only six specimens. Paynter (1955: 279) has synonymized this race with H. g. peninsularis^{385/}, and I agree with him in considering H. g. rooensis untenable.

I refer specimens from all sections of the Colony to H. g. littoralis.^{386/} In general, males from British Honduras are similar to males of H. g. salvini,^{387/} but some have a distinct purplish cast, a character supposedly typical of H. g. littoralis. Females from the Colony are not so dark as H. g. salvini, especially on the under parts, and have a less conspicuous breast band than H. g. salvini. Both males and females from the Colony are less pale and gray than H. g. peninsularis, and the color characters of the females in particular relate the British Honduran population to H. g. littoralis. But in the sizeable series from the Colony are specimens that match topotypical material of each of the three currently recognized races mentioned above.

Lanio aurantius Lafresnaye

Shrike-Tanager

SPECIMENS. USNMZ: Ten mi. NW Gallon Jug - ♂ (32.4 g.), Nov. 3. One mi. S Ballerina Camp - ♂ (36.0), Apr. 28. Two mi. NE Millionario - ♀ (29.8), Mar. 16. Seven mi. NW San Pedro Columbia - ♂, ♀ (40.6, 40.1), May 18. OTHER MUSEUMS (BM, CC, CM, MCZ, PC): Twenty-four specimens from the Manatee Lagoon area, San Antonio, Mountain Pine Ridge, Mountain Cow, N slope Cockscomb Mts. (1300'), Toledo Settlement; all months except June, July, Aug. CRITICAL PUBLISHED RECORD: Belize (Salvin and Godman, Biologia, 1, 1883: 304).

The lower and middle levels of tall rain forest are preferred by the Shrike-Tanager. There, it is a not uncommon resident, especially in the southern half of

the Colony. This species is easily alarmed and its notes often arouse many other "bush" birds. Specimens in breeding condition have been taken on April 28 and May 16.

The race occupying the area from Mexico to Caribbean Guatemala and Honduras is L. a. aurantius.^{388/}

Eucometis penicillata (Spix)

Gray-headed Tanager

SPECIMENS. USNM: Gallon Jug - ♀ (23.4 g.), Feb. 26. Four mi. W Stann Creek - ♂ (29.2), Mar. 28; ♂ (31.6), Mar. 30. OTHER MUSEUMS (BM, CM, HCE, UICZ, USNM): Fourteen specimens from the Manatee Lagoon area, Duck Run, Cayo, Sittee River, Freetown; Mar., Apr., May, July, Aug. CRITICAL PUBLISHED RECORDS: Belize (von Berlepsch, 1888: 452).

In British Honduras this tanager is a generally uncommon resident and rather local in its distribution. In addition to the localities listed above this species has been seen at Corozal, Pomona, South Stann Creek, Monkey River, and the upper Moko River. It has been found in rain forest, forest edge, and in tall second growth. In the North Stann Creek valley, it was seen several times in dense growth on the edge of cultivated fields and stream beds, some distance from dense forest. As noted by various authors, the Gray-headed Tanager frequently follows ant swarms (Skutch, 1954: 183; Paynter, 1955: 282; Willis, 1960a: 159). The male collected March 30 had enlarged testes, although one collected two

days earlier in the same locality did not. A nest with two eggs containing well-developed embryos was found on April 26 by Peck.

British Honduras lies within the range of E. p.
^{389/}
pallida.

Chlorospingus ophthalmicus (DuBus)

Brown-headed chlorospingus

SPECIMEN. LSUMZ: ~~One~~ and one-half mi. E Victoria Peak (2600') - ♀, May 8, 1958.

I found this tanager on the crest of the Cockscomb Mountains. The female (collected), her mate and their fledgling young were the only individuals seen.

It is difficult to refer this somewhat worn specimen to any of the races that I have examined. It most nearly resembles three females from San Juancito, Honduras.

The under parts of the Cockscomb Mountain bird are a bit paler and its back is slightly darker and grayer.

I, therefore, tentatively refer this bird to C. o. hon-

^{390/}
duratus. The British Honduran specimen differs from two females taken eight miles northwest of Usumatlan,

Zacapa, Guatemala, in having a smaller, less white, postocular streak, a lighter throat, and no lateral black line along either side of the pileum. These Guatemalan

specimens may be topotypical material of C. o. richardsoni,^{391/}

the most adjacent population to the Cockscomb Mountains.

The type locality of the latter race is not precisely known.

Family FRINGILLIDAE

Saltator atriceps (Lesson)

Black-headed saltator

SPECIMENS. USNM: Hill Bank - ♂ (82.2 g.), Nov. 24. Gallon Jug - ♀ (81.7), Mar. 3; ♀ (86.4), Nov. 2; ♂ (80.3), Nov. 15. Pomona - ♀ (88.1), Apr. 1. Augustine - ♀ (93.4), Mar. 19; ♂, Aug. 21; ♀, Dec. 10. Two mi. W San Pedro Columbia - ♀ (88.8), May 6. OTHER MUSEUMS (BM, CM, MCZ, URMZ): Fifteen specimens from Belize, Manatee Lagoon, Duck Run, Cayo, San Felipe, 12 mi. S Cayo, Mountain Cow; all months except Jan., Sept., Oct.

Black-headed Saltators are rather common residents of dense huamil, tall second growth, and the edge of tall rain forest throughout British Honduras. Dense bushy vegetation along riverbanks also provides a favored habitat. In most regions this species is the most frequently observed member of the genus, yet it is highly suspicious of human intruders and usually darts into a dense thicket when alarmed. Birds with enlarged gonads have been taken in March, April, and May, and Peck found two eggs in a nest on July 26.

I refer the British Honduran specimens to S. a.^{392/} atriceps. One specimen from Gallon Jug and another from Belize are almost devoid of any olivaceous tinge on the thighs and approach S. a. raptor^{393/} in this respect.

Saltator maximus (P.L.S. Muller)

Buff-throated Saltator

SPECIMENS. USNM: Gallon Jug - ♀ (46.8 g.), Mar. 20. Two mi. W San Pedro Columbia - ♂, May 3; ♂ (43.2), May 4;

♀ (48.4), May 18; ♀ (52.3), May 22. OTHER MUSEUMS (BM, CM, MCZ, UMMZ): Eight specimens from Cayo, San Felipe, Sittee River, Toledo Settlement; Jan., Mar., Apr., Oct. CRITICAL PUBLISHED RECORD: Belize (Sclater, 1886: 287).

A rather uncommon resident of British Honduras, the retiring Buff-throated Saltator has been found only where tall thickets occur near extensive rain forest and in the margin of heavy forest. Only near San Pedro Columbia have I seen it in numbers. There it frequented the brushy borders between plantations or humail and the narrow strips of original forest that persist in the nonarable valleys. Ballerina Camp is the only locality where the species has been observed but not collected. A female collected in March had a slightly enlarged ovary and one obtained on May 18 contained an egg in the oviduct. Females taken at Cayo March 16 and 20 by Van Tyne weighed 48.2 and 52.5 grams.

I assign the specimens to S. n. macnoides.^{394/} Three specimens from Cayo and Gallon Jug approach S. n. riantodes^{395/} in having a considerable amount of black on the pileum.

Saltator coerulescens (Vieillot)

Grayish Saltator

SPECIMENS. USNM: Gallon Jug - ♀ (55.7 g.), Feb. 26; ♀ (54.5), Mar. 20; ♀ (51.4), Apr. 5; ♂, June 15; ♂ (53.7), Oct. 22; ♂ (59.6), Oct. 29. Four mi. W Belize on Cayo Rd. - ♀ (58.7), Apr. 4. Two mi. W San Pedro Columbia - ♂ (56.3), May 6. OTHER MUSEUMS (BM, CM, MCZ): Eleven specimens from Cayo, San Felipe, Sittee River; Apr.

Huamil, thickets along the edge of fields and pastures, and densely overgrown riverbanks offer suitable habitats for the locally distributed Grayish Saltator. This resident species has been recorded only at the localities listed above and at Hill Bank and Pomona. Even in these areas fewer than four individuals are ordinarily noted in a day in the field. The start of the breeding season is indicated by the slightly enlarged gonads of specimens taken in early April. A nest and two eggs were found by Peck on April 27 near the Sittee River.

I refer all British Honduran specimens to S. c.^{396/} grandis, though many exhibit a degree of paleness that approaches S. c. yucatanensis.^{397/} The northern half of the Colony should be considered an area of intergradation between the two races. The darkest bird is from the southernmost locality (San Pedro Columbia).

Caryothraustes polioraster (DuBus)

Black-faced Grosbeak

SPECIMENS. USNMZ: Gallon Jug - ♂, Jan. 4; ♂ (41.1 g.), Mar. 11; ♂ (43.4), May 1; ♂ (43.8), Nov. 17. Ten mi. NW Middlesex on Hummingbird Hwy. - ♀ (41.4), Mar. 26. Four mi. W Augustine - ♂, Aug. 17. Seven mi. NW San Pedro Columbia - ♀ (46.7), May 18; ♂ (41.3), May 19. Two mi. W San Pedro Columbia - ♀ (44.7), May 12; ♂ (38.9), May 20; ♂, ♀ (34.9, —), May 22. OTHER MUSEUMS (BM, CC, CM, MCZ, UMMZ): Twenty-six specimens from the Manatee Lagoon area, Cayo, Mountain Pine Ridge, Augustine, Free-town, Cockscomb Mts. (about 1400'), Toledo Settlement; all months except Feb., June, July, Oct. CRITICAL PUBLISHED RECORDS: Belize (Salvin and Godman, Biologia, 1, 1883: 333).

The Black-faced Grosbeak is a common resident of the tall rain forest throughout British Honduras. It is most common in the luxuriant forest of the central and southern areas, and in the Cockscomb Mountains it is an abundant bird at all elevations to 3200 feet. It prefers middle and upper levels of the forest but infrequently comes as low as 10 feet. Only rarely does it leave the dense forest to forage in second growth. It moves about in small groups of four to eight individuals, repeatedly uttering a short buzz followed by a whistled tweet-tweet. Nearly all specimens taken from early March to late May were in breeding condition, as indicated by enlarged gonads.

Racially, these specimens are examples of the nominate form, C. p. polioaster.^{398/}

Richmondia cardinalis (Linnaeus)

Cardinal

SPECIMENS. LSUNZ: Two mi. E Hill Bank - ♂ (38.3 g.), Nov. 29. OTHER MUSEUMS (BM, CM, USMZ): Seven specimens from Corozal, Orange Walk, Crooked Tree Lagoon, Belize, Manatee Lagoon area; June, Aug., Nov.

In northeastern British Honduras as far south as Manatee Lagoon, the Cardinal is a shy and uncommon resident. The sometimes wet thickets that border the pine ridges and second growth that occurs in an irregular fashion in old plantations provide favored

habitats. A nest containing three eggs was found by Peck near Manatee lagoon on June 17.

I refer the British Honduran population of this species to R. c. flammigera^{399/}. Recently Paynter (1955: 287) critically examined this race and found that it is "slightly darker, more vermillion" than the Yucatán race, R. c. yucatanensis^{400/}. Xcoopen, the type locality of R. c. flammigera, is situated on the Quintana Roo bank of the Rio Mondo.

Pheucticus ludovicianus (Linnaeus)

Rose-breasted Grosbeak

SPECIMENS. USNMZ: Gallon Jug - ♂, Feb. 20. Calibash Cay - ♂ (29.2 g.), Apr. 16. Half Moon Cay - ♂, Apr. 18. OTHER MUSEUMS (BM, CM, USNMZ): Fourteen specimens from Belize, Manatee lagoon area, Cayo, San Felipe; Mar., Oct.

Though it is infrequently recorded, the Rose-breasted Grosbeak is a migrant and winter visitant. The earliest fall arrival date was obtained by Chufeldt in 1952 when he collected seven grosbeaks along with many other North American migrants on October 9. One to six birds have been recorded in a day's field work sporadically throughout the winter months. There is no noticeable increase in numbers in the spring, and most birds have departed by the first week of April. It is noteworthy that the three observations after April 2 have been of migrants seen on small keys. Verner, who kept a daily record of migrants

on Half Moon Cay in the spring of 1958, saw this species only on April 18 (two birds, one collected) and May 8, the latest date of record for the Colony. I captured a male in a mist net on Calabash Cay on April 16. In winter the Rose-breasted Grosbeak seems to prefer abandoned milpas and the edges of clearings.

Guiraca caerulea (Linnaeus)

Blue Grosbeak

SPECIMENS. USNM: Gallon Jug - ♂ (23.5 g.), Mar. 15.
OTHER MUSEUMS (BM, CM, MCZ, UNMZ): Seven specimens from Crooked Tree Lagoon, Cayo Dist., Cayo, 12 mi. S Cayo, Toledo Settlement; Feb., Mar., Apr., Oct.

Early fall visitants have been noted in late September, but Blue Grosbeaks are uncommon until early December. They are then moderately common until the end of March, occurring in flocks of 4 to 50 birds. One spring transient has been noted as late as April 17 (Half Moon Cay). Brushy fields and pastures and low, second growth offer preferred habitats.

Three males that I critically examined are presumably referable to G. c. caerulea^{401/} on the basis of color and measurements. This species does not breed in the Colony. Van Tyne collected two males (Feb. 25, Mar. 4) that weighed 26.0 and 27.6 grams.

Cyanocompsa cyanoides (Lafresnaye)

Blue-black Grosbeak

SPECIMENS. LSUMZ: Gallon Jug - ♂ (29.7 g.), Feb. 29; ♂ (31.3), Mar. 19; ♀ (30.1, 31.0), Mar. 20; ♂ (32.7), May 8; ♂ (29.5), Nov. 1; ♂ (31.4), Nov. 15. Augustine - ♀, Dec. 10. Two mi. W San Pedro Columbia - ? (32.1), May 3; ♂ (31.3), May 8; ♀ (36.2), May 22. OTHER MUSEUMS (BM, CM, MCZ, UMMZ): Twenty-one specimens from Orange Walk, Manatee Lagoon area, Cayo, San Antonio, 11 mi. S Cayo, Camp VI, Freetown, Toledo Settlement; Jan., Mar., Apr., May, June, July, Dec.

In undergrowth of undisturbed humid forest, tall second growth, the forest edge, and often cultivated plantations, this grosbeak is a moderately common resident. Its unusually melodious song attracts an observer's attention, although the singer is often hidden in a dense thicket and not easily seen. Blue-black Grosbeaks are partial to spine-bearing palms for support of their nests, which may be occupied during the period extending from mid-March until July. The oviduct of the female collected May 22 enclosed an ovum.

The majority of the specimens collected in British Honduras are rather dark bluish-black without conspicuously bright throats or foreheads and consequently the population is referred to C. c. concreta.^{402/} A few specimens, however, show a decided approach to C. c. caerulescens.^{403/} These birds are much brighter than C. c. concreta, and the brightest specimen from the Colony is very similar to the type of C. c. caerulescens. Todd (1923: 61), with a smaller series, noted that "... British Honduras birds are not typical"

of C. c. concreta. The intergradation between these two races does not appear to be clinal. A Peck specimen from the extreme southern portion of the Colony and of the same museum age as the type of C. c. caerulea is distinctly darker than the latter specimen.

Cyanocompsa parellina (Bonaparte)

Blue Bunting

SPECIMENS. LSUMZ: Hill Bank - ♂ (14.1 g.), Feb. 23. Gallon Jug - ♂ (14.6), Feb. 19; ♀ (13.4), Feb. 22; ♂ (12.7), May 7; ? (12.5), Oct. 25; ♂ (12.0), Nov. 6; ♀ (12.4), Nov. 7. Augustine - ♂, Dec. 13; ♀, Dec. 17. OTHER MUSEUM (BM): Two specimens from Orange Walk, Crooked Tree Lagoon; no dates.

Blue Buntings are uncommon residents in British Honduras and have been recorded only from the localities listed above. They are birds of humid and the undergrowth of tall forest and its edge. At Gallon Jug their habit of foraging into small rice plantations in the fall of the year has led to their local name "rice bird." The specimen collected in May had enlarged gonads and was in breeding condition.

I refer these specimens to C. p. parellina,^{404/} although some specimens in this small and variable series are similar to C. p. dearborni.^{405/} Two adult males from the Colony are darker than males of the latter race. I am unable to distinguish satisfactorily between females of the two races with the material I have examined. Van

Tyne (1935: 39) assigned four males from the Petén, Guatemala, to C. p. dearborni; and Prodkorb (1943: 85) thought specimens from Tabasco were similar to C. p. dearborni, although he called them C. p. parellina. The population ranging east from southern Tabasco through the Petén into British Honduras is apparently highly variable and intermediate between the two races.

Passerina cyanea (Linnaeus)

Indigo Bunting

SPECIMENS. USNM: Gallon Jug - ♂ (12.7 g.), Feb. 22; ♀ (13.1), Feb. 25. Five mi. W Baldy Beacon - ♂ (17.7), Apr. 19. OTHER MUSEUMS (BM, CM, USNM, USNM): Twenty specimens from Manatee Lagoon, Cayo, San Felipe, San Antonio, 12 mi. S Cayo, N slope Cockscomb Mts. (1300'), All Pines; Jan., Feb., Mar., Apr., Oct. CRITICAL PUBLISHED RECORD: Belize (Salvin and Godman, Biologia, i, 1886: 364).

Individuals of this North American species first arrive in mid-September and by late October they are common. Numerous Indigo Buntings remain as winter visitants. Grassy areas, low huamil, and brushy plantation edges throughout the Colony provide its selected habitat and there flocks of 10 to 30 birds are often found. On the mainland winter visitants and migrants are difficult to distinguish. Extremely fat individuals (such as the one obtained April 19) collected in non-typical habitats are likely to be migrants. Data obtained by Verner on Half Moon Cay during the spring provide useful information, since the species does not

winter there. Verner noted numbers of transients from April 16 to 24 and single individuals on February 23 and March 26. Most Indigo Buntings have departed from the Colony by April 20, and there are only two later records (April 23, May 5).

Passerina ciris (Linnaeus)

Painted Bunting

SPECIMENS. LSUMZ: Gallon Jug - ♀ (13.9), Feb. 20. OTHER MUSEUMS (BM, CM, USNM): Five specimens from Belize, Cayo, Toledo Settlement; Feb., Apr., Dec.

There are only three additional records of this species from British Honduras. Willis saw two birds at Gallon Jug on February 20 and Verner saw single individuals on March 26 and April 19 on Half Moon Cay. On the basis of these few specimens and observations, I consider Painted Buntings rare winter visitants and transients.

The three specimens that I have subspecifically identified are referable to P. c. ciris.^{406/}

Spiza americana (Gmelin)

Dickcissel

SPECIMENS. LSUMZ: Soldier Cay - ♂ (20.0 g.), Apr. 16. Five mi. W Baldy Beacon - 2 ♂'s (30.9, 32.1), Apr. 20. Ballerina Camp - ♂ (22.6), Apr. 27. OTHER MUSEUMS (BM, CC, CM, MCZ): Twelve specimens from San Felipe, Manatee Lagoon area, Augustine, Southern [= Mountain] Pine Ridge, All Pines, South West Cay; Mar., Apr. CRITICAL PUBLISHED RECORDS: Half Moon Cay, May 9 (Salvin, 1864: 380).

The Dickcissel has been observed in British Honduras only from the end of February to May 14 with the majority of the observations occurring in the period of April 12 to 27. Migrants may stop in any open area, especially on the keys and the grassland of pine ridges at all elevations. Flocks of 15 to 30 individuals of this common transient are often seen. Some birds are extremely fat (compare weights above). The gonads of birds taken in late April were slightly enlarged and Peck states that in May many Dickcissels were singing.

Sporophila torqueola (Bonaparte)

White-collared Seedeater

SPECIMENS. LSUMZ: Hill Bank - ♂ (8.5 g.), Nov. 20. Gallon Jug - ♀ (5.7), Feb. 21; ♂ (7.6), Feb. 22; ♂ (8.6), Oct. 26. Two mi. W San Pedro Columbia - ♂ (9.2), May 12. OTHER MUSEUMS (BM, CM, MCZ, PC, UMMZ, USNM): Forty-five specimens from Orange Walk, Belize, Manatee Lagoon area, Cayo, San Felipe, 12 mi. S Cayo, Freetown, All Pines, Toledo Settlement; all months except July, Aug. CRITICAL PUBLISHED RECORD: Corozal (Salvin and Godman, Biologia, 1, 1887: 353).

Wherever grass or weed patches occur on the mainland of the Colony — in or near villages and plantations, on stream banks, and in pinelands — the gregarious White-collared Seedeaters are usually rather common residents. Nesting begins in mid-April and continues at least until September 10, when the latest nest was recorded. Skutch (1954: 36) reports that two nests out of five found on the Pacific slope of Guatemala

contained sets of three eggs, but all other nests that he found contained sets of two eggs. In British Honduras sets of two eggs are normal, but both Peck and Willis have each found at least one set of three eggs.

I refer the specimens to S. t. morelleti.^{407/}

Sporophila americana (Gmelin)

Variable Seedeater

SPECIMENS. LSUMZ: Two mi. W San Pedro Columbia - ♂ (10.6 g.), May 12. OTHER MUSEUMS (BM, CM, MCZ): Ten specimens from Cayo, Freetown, Toledo Settlement; Jan., May.

In British Honduras, Variable Seedeaters have been recorded only at the localities where specimens were collected. The specimen from Cayo is an old undated skin in the British Museum. The species has not been observed at Cayo in recent years. This seedeater was rather uncommon in the low vegetation of abandoned plantations near San Pedro Columbia. The male collected in May had enlarged testes, and Peck found a nest containing one egg on September 4.

^{408/}
S. a. corvina is the distinct race of the Variable Seedeater to which I refer the British Honduran specimens.

Oryzoborus funereus Solater

Lesser Rice Grosbeak

SPECIMENS. LSUMZ: Two mi. E Hill Bank - ♂ (13.9 g.), Nov. 21. OTHER MUSEUMS (BM, CM, UMMZ): Fourteen

specimens from Manatee Lagoon area, San Felipe, Free-town, All Pines; Feb., Mar., Apr., May, June, July, Oct.

This small finch is rather local in its occurrence in the Colony and may be consid red common only in the vicinity of Manatee Lagoon, All Pines, and Toledo Settlement. Gallon Jug and Ycacos Lagoon are additional localities where it has been seen. This species frequents brushy plantation edges, low humil, and thickets on the edge of the lowland pine ridges. Peck found numerous nests of the Lesser Rice Grosbeak between February 20 and August 5. Some individuals may nest even later, for the male I collected on November 21 had fully enlarged gonads and was singing its quite melodius song in its entirety.

Volatinia jacarina (Linnaeus)

Blue-black Grassquit

SPECIMENS. USNM: Gallon Jug - ♂, Feb. 25; ♀ (10.0 g.), Mar. 3. OTHER MUSEUMS (BM, CM, MCZ, UMMZ, USNM): Eleven specimens from Belize, Manatee Lagoon area, Cayo, 12 mi. S Cayo, Augustine, Mountain Pine Ridge, All Pines; Feb., Mar., Apr.

Blue-black Grassquits are moderately common residents of grass and weed patches in clearings and of low second growth, throughout the Colony. They frequently associate with Sporophila torqueola but are less abundant than the latter species. Peck found three nests, one in April and two on June 1, at Toledo

Settlement; and Willis observed a female incubating two eggs on August 2 at Gallon Jug. Each of these nests was within 4 feet of the ground.

The Central American race of this species is V. j. splendens.^{409/}

Spinus notatus (DuBus)

Black-headed Siskin

SPECIMENS. USNM: Five mi. W Baldy Beacon - ♂ (10.0 g.), Apr. 19; ♀ (10.3, 10.6), Apr. 21. One mi. N. Ballerina Camp - ♂ (11.4), Apr. 28. OTHER MUSEUMS (BM, UMZ): Four specimens from the Mountain Pine Ridge and 12 mi. S Cayo; Feb., Apr., May.

All records of this species in British Honduras are from the Mountain Pine Ridge. In the scattered pines of this area, Black-headed Siskins are wary and uncommon, occurring singly and in flocks of four to ten individuals. Two of the four specimens at the USNM that were collected in April had enlarged gonads. Van Tyne secured two females in late February. One possessed an enlarged ovary and weighed 8.9 grams. I did not see siskins in December during two weeks spent on the Mountain Pine Ridge.

I have critically examined the six British Honduran specimens in the museums in this country. This series resembles specimens of S. n. olaceus^{410/} from Honduras and is unlike Mexican and Guatemalan individuals of S. n. notatus.^{411/} Birds from the Colony do differ from Honduran

specimens in the color of the under parts. The palest British Honduran specimen is more golden-yellow below than the brightest Honduran one. The wings of the three males from British Honduras are short, measuring 62, 62, 64 mm., and agree in length with the 11 birds from Honduras (63-64.2, one 66.0 mm.). Griscom's (1932b: 61) description of the race from Honduras includes the confusing phrase, "upper parts appreciably less yellowish, more olive-green," in comparison with S. n. notatus. The 11 males from Honduras (El Matillo, San Esteban, Sigautepaque) that I have examined are only slightly more olive-green and appear more yellow than the northern birds.

Loxia curvirostra (Linnaeus)

Red Crossbill

SPECIMENS. LSUMZ: Two mi. E Hill Bank - ♀ (33.7 g.), Nov. 22, 1956. Five mi. W Baldy Beacon - ♂, ♀ (33.2, 38.2), Apr. 19, 1956.

Crossbills have been noted only in pinelands. The specimens listed above and single individuals observed in the Mountain Pine Ridge on March 20 and April 20 constitute the only definite records of this species from the Colony. Hellmayr (1938: 304) lists two specimens from British Honduras in the Chicago Natural History Museum. These two birds were collected in November, 1886, at Trunilaca by E. Witthugel. I have been unable to

locate a locality by this name. Mr. James A. Waight, Director of Surveys in British Honduras, who has been most helpful in checking various localities for me, informs me that "no place bearing the name 'Trumilaca' is known in British Honduras, and the name does not appear on old maps." Since the Trumilaca specimens are from a questionable locality, it is best to exclude them from the list of specimens.

The female collected April 19 was in breeding condition, but the male collected on the same day had only slightly enlarged gonads.

The three specimens are not adequate for satisfactory racial determination of the British Honduran population. I have compared them with Mexican specimens of L. c. ^{412/} stricklandi and Honduran specimens of L. c. ^{413/} mesamericana and provisionally refer them to the latter race. The plumage of the male bird from the Mountain Pine Ridge is slightly worn, and its wing measures 88 mm.; the wings of the females measure, respectively, 82 and 87 mm. These measurements are within the range of L. c. mesamericana, but are below the lower limits of the range of L. c. stricklandi. The male has many red and yellow feathers on the under parts, pileum, and rump; the tips of the feathers of the back are edged with yellow or red, and the back appears rather sooty. This specimen is unlike most Honduran birds, which are a deep rich red, but one Honduran male

matches it closely. The two females from the Colony are within the range of plumage variation noted in the Honduran material.

Arremon aurantirostris (Lafresnaye)

Orange-billed Sparrow

SPECIMENS. USNM: Panama - ♂, ♀ (37.3, 37.4 g.), Mar. 30. Two mi. S San Pedro Columbia - ♂ (33.2), May 5; ♂ (35.6), May 11; ♂ (36.3), May 21. OTHER MUSEUMS (BM, CC, CM, SMNH, USNM): Twelve specimens from Manatee Lagoon, Cayo, Middlesex, Camp VI, Preetown, Toledo Settlement; Jan., Feb., Mar., May, Dec. CRITICAL PUBLISHED RECORD: Belize (Salvin and Godman, Biologia, 1, 1884: 324).

The range of the Orange-billed Sparrow in British Honduras lies to the south of the Belize River in dense, humid forest. In this area it is a widely distributed and moderately common resident of the forest floor and its low undergrowth. I have seen this retiring species most frequently near streams or ravines as it hopped about in the damp ground litter. The male collected on March 30 had fully enlarged testes, although the gonads of the female collected on the same date were not enlarged. All specimens collected in May had enlarged gonads. Peck found a nest on May 14 and another on June 1, each with two eggs. These nests were similar in appearance and composition to those described by Skutch (1954: 95-96) and contained green sedges and ferns. When Peck attempted to dry these nests in the sun, they fell apart as the result of the curling of the nest materials.

On the basis of their larger size, I refer the British Honduran specimens to A. a. saturatus^{414/}, rather than to A. a. rufidorsalis^{415/}. The wings of the four males measure 73., 81, 82, 82.5 mm.; a female has a wing measurement of 75.5 mm.

Arremonops rufivirgata (Lawrence)

Olive Sparrow

SPECIMENS. USNM: Corozal - 1, Aug. 14, 1960; 2, Aug. 20, 1960.

This species is a rather common resident at Chetumal, Quintana Roo (Paynter, 1955: 194), but it has been found in British Honduras only in the vicinity of Corozal. In August of 1960 Day, who collected the two specimens, saw this species more frequently than A. conirostris near Corozal. Paynter noted that where both species occur in the same area, A. rufivirgata is usually found in abandoned fields and A. conirostris is found in the undergrowth of high forest. The absence of such undisturbed forest near Corozal accounts for the relative scarcity of A. conirostris there, and the apparent preference of A. rufivirgata for a drier habitat is presumably the factor that confines it to the northern tip of the Colony.

I place the two specimens in the race endemic to the Yucatán Peninsula, A. r. verticalis^{416/}.

Arremonops conirostris (Bonaparte)

Green-backed Sparrow

SPECIMENS. LSUMZ: Hill Bank - ♂, ♀ (27.6, 25.0 g.), Nov. 20; ? (27.4), Nov. 30. Gallon Jug - ♂ (27.1), Feb. 21; ? (24.2), Mar. 2; ♂, Mar. 7; ? (24.4), Mar. 8; ♂ (29.6), Oct. 29. Two mi. W San Pedro Columbia - ♂ (29.1), May 5; ♂ (26.2), May 6; ♂, ♀ (31.2, 29.4), May 11. OTHER MUSEUMS (CM, ICZ, USNM): Seven specimens from Manatee Lagoon, Cayo; Jan., Feb., Mar., Apr.

Green-backed Sparrows have been recorded in moderate numbers at Corozal and the localities listed above. In British Honduras, the species is most frequently found in the margin of tall forest or in brushy clearings at the edge of tall forest. I have never seen this sparrow deep in the forest and I have failed to find it in many localities where favorable habitat exists. Three of the LSUMZ specimens were snared in a mist net and one was caught in a snap trap set for small animals. One female collected in April had an enlarged gonad, but most birds were not in breeding condition until May. At Gallon Jug, Willis noted females nest building between May 24 and June 30.

I assign the population of this species that inhabits British Honduras to A. c. chloronotus.^{417/}

Passerculus sandwichensis (Gmelin)

Savannah Sparrow

SPECIMENS. LSUMZ: Gallon Jug - ♀ (14.5 g.), Nov. 9; ♂ (16.4), Nov. 14. OTHER MUSEUMS (BM, USNM): Three specimens from Belize, Cayo; Feb.

This species occurs in British Honduras as an occasional winter visitant. Only one observation supplements the records represented by the specimens listed above. On March 28, 1956, I saw four individuals in a grassy field near the beach at Stann Creek.

I refer the two specimens from Gallon Jug to P. s. savanna^{418/} and the one specimen in the University of Michigan Museum of Zoology, which was collected by Shufeldt at Belize, to A. s. nevadensis^{419/}. Todd examined the two birds from Cayo in the British Museum and thought that they were probably A. s. anthinus^{420/}.

Ammodramus savannarum (Gmelin)

Grasshopper Sparrow

SPECIMENS. Nonresident races. LSUMZ: Two mi. NE Hill Bank - ♀ (15.5), Apr. 1. Gallon Jug - ♀ (14.5), Mar. 1; ♀ (10.2), Mar. 4. OTHER MUSEUMS (BM, CM, MCZ): Five specimens from Orange Walk, Manatee Lagoon area, All Pines, Toledo Settlement; Apr., Dec. Resident race. LSUMZ: Two mi. E Hill Bank - ♂, Mar. 23; ♀ (12.8), Apr. 1; ♀ (14.5), Nov. 21; ♀ (12.9), Nov. 28. Three mi. W Baldy Beacon - ♀ (14.9), Mar. 17. Augustine - ♂ (13.8), May 5. OTHER MUSEUMS (BM, CC, CM, MCZ, UMMZ): Seventeen specimens from pine ridges near Belize, Manatee Lagoon, 12 mi. S Cayo, Mountain Pine Ridge, Freetown; All Pines, Yacacos Lagoon; Feb., Mar., Apr., May, June, Aug.

Northern populations of the Grasshopper Sparrows are regular winter visitants in British Honduras and are present in small numbers from an undetermined date in the fall until late April. A single bird noted by Verner on April 18 on Half Moon Cay suggests that this

species also occurs in the Colony as a transient.

Wintering Grasshopper Sparrows frequent grassy fields and the grassland of the pine ridges where the local race resides. Todd considered the two British Museum specimens from Orange Walk as examples of A. s. pratensis,^{421/} and I find the remaining six nonresident birds referable to this race also.

The very dark, short-winged and short-tailed form, A. s. cracens,^{422/} is a moderately common resident of the short grass in the pinelands throughout the British Honduran lowlands and is resident but less common in the Mountain Pine Ridge. Like other "grass sparrows," it is shy and flushes only when approached to within a few feet. Then it flies away low over the grass, drops to the ground, and runs some distance. Gonads enlarge in late April and nesting begins in May. Peck found three eggs in a nest near Mullins River on May 27. On the pine ridge east of Hill Bank, Willis noted a nest containing one egg attended by an adult on August 3.

Aimophila rufescens (Swainson)

Rusty Sparrow

SPECIMENS. USNM: Five mi. W Baldy Beacon - ♀ (31.4 g.), Apr. 19; ♀ (28.2), Apr. 20. Augustine - ♂ (35.9), Mar. 9; ♂ (37.6), May 2; ♀, Aug. 20; ♂, Aug. 23; ♂, Dec. 11; ♀, Dec. 12. One mi. N Ballerina Camp - ♂, Apr. 19; ♂ (32.2), Apr. 25; ♂ (31.7), Apr. 26; ♂ (32.6), Apr. 28. OTHER MUSEUMS (BM, MCZ, UMMZ): Thirty-five specimens from 12 mi. S Cayo, Augustine, Mountain Pine Ridge, Yoccos Lagoon; Feb., Mar., Apr.

In the extensive grassy areas of the pinelands of the Mountain Pine Ridge, especially near brush filled ravines and small thickets, Rusty Sparrows are common, conspicuous residents. I have never seen this sparrow in the lowland pinelands, but Peck reported them in this habitat at Monkey River and at Ycacos Lagoon, where he collected three specimens. The gonads of only one-half the birds collected in late April and May were enlarged.

I refer the specimens of the Rusty Sparrow from British Honduras to A. r. pyrgitoides^{423/}. Bangs and Peck (1908: 46) assigned the three specimens from Ycacos Lagoon to A. r. discolor^{424/} of southern Honduras, on the basis of their small size and plumage characters. I have not seen specimens of the latter race and cannot comment on its validity. I have, however, compared the British Honduran specimens with a series of A. r. pyrgitoides from eastern Mexico (Veracruz, San Luis Potosí) and I do not find them different. Fourteen male birds from the Mountain Pine Ridge have wing measurements in millimeters ranging from 66 to 72 with a mean of 70.0 ± 2.14 . The tails of these specimens range from 72.5 to 80.5 with a mean of 75.8 ± 2.35 . These measurements are not significantly shorter than those of seven males from eastern Mexico, which have wings ranging in millimeters from 67 to 73 with a mean of 71.4 ± 2.0 and tails ranging

from 71.5 to 79 with the mean 75.4 ± 3.0 . There are no consistent differences between the two series in respect to the color of the under parts and sides of the head. The British Honduran specimens do exhibit a reduction of the black shaft stripes of the back but the extreme in the reduction is within the range of variation in the Mexican material.

Aimophila botteri (Schluter)

Botteri's Sparrow

PECIMENS. USUM: Three mi. E Hill Bank - ♀, ? (21.5), Feb. 26; ♀, Mar. 23; ? (18.3), Apr. 1; ♀, 2 ♀'s (20.1, 20.4), Nov. 21; ♂ (16.9), Nov. 23.

In British Honduras, this sparrow is an uncommon resident of the lowland pine ridges east of Hill Bank, and it has been observed once in the pinelands along the Belize-Cayo highway. Although it is sometimes found in the same grass as the resident Grasshopper Sparrows, the Botteri's sparrow is more often found in tall rather than short grass. When flushed, it characteristically flies to a palmetto and perches conspicuously for a few moments. The ovary of the female collected in late March was slightly enlarged. On August 3, 1927, Willis observed a streak-breasted juvenile fluttering its wings near an adult.

The extremely dark population of this sparrow residing in the Petén, Guatemala, and originally described

by Salvin as Ammodramus ^{425/}notenicus, has undergone a series of nomenclatorial changes. In 1898, Ridgway transferred it to the genus Aimophila, and in 1901 Ridgway concluded that it was a race of Aimophila ^{426/}botteri. Its taxonomic position during the following five decades was much discussed, most authors considering it a distinct species. Recently, Webster (1959: 135-146) presented additional evidence indicating that A. notenica and A. botteri are conspecific. His conclusion, while not entirely final, is based principally on specimens presumed intermediate between the two forms and on the similarity of the juveniles. I do not believe that there is adequate ground for maintaining both species and I refer the British Honduran specimens to A. b. notenica. The range of this race is now known to be quite extensive in southeastern Mexico.

The intensification of the dark pigment in this form is paralleled by the same phenomenon in Ammodramus savannarum cracens and to a lesser degree in Cistothorus platensis elegans. The three races are all residents in the grassland of the pine ridges in British Honduras and adjacent areas, though not occurring in exactly the same areas.

Spizella passerina (Reichstein)

Chipping Sparrow

SPECIMENS. USNM: Two mi. E Hill Bank - 2 ♂'s (11.3, 12.0 g.), Apr. 1; ♀ (12.2), Nov. 22. Five mi. W Baldy Beacon - ♂ (11.8), Apr. 10. Augustine - ?, Dec. 12. One mi. N Ballerina Camp - ♂ (11.6), Apr. 30. OTHER MUSEUMS (BM, CM, MCZ, USMZ): Forty-four specimens from Belize, Manatee Lagoon area, Duck Run, 12 mi. S Cayo, Augustine, Mountain Pine Ridge, Camp VI, Freetown, All Pines, Sittee River; all months except June, July, Nov., Dec.

Chipping Sparrows are moderately common residents of the pinelands at all elevations throughout British Honduras. Infrequently, they are found in clearings in tall rain forest adjacent to the pine ridges. Specimens in breeding condition have been taken in April and May, and Peck found a nest containing three eggs in a pine tree near Manatee Lagoon on May 15, 1906.

The British Honduran material is clearly referable to S. p. pinetorum^{427/}, which was described from a single specimen collected at Poctun, Guatemala, a locality about 40 miles southwest of the Mountain Pine Ridge. The type, an adult male, has a wing measurement of 71 and tail measurement of 62 mm. The specimens from the Colony agree with it in plumage characteristics but are smaller. Fifteen males have wings ranging from 66 to 69 mm. with an average of 67.7 ± 1.20 . The tails of these males range from 51 to 59 mm. with a mean of 55.3 ± 1.90 .

On April 8, 1958, Jared Verner identified a sparrow on Half Moon Cay as S. passerina. Since this bird was not collected, its subspecific identity is not known.

Melospiza lincolni (Audubon)

Lincoln's Sparrow

SPECIMEN. MCZ: Yacacos Lagoon - ♀, Mar. 6, 1907.

This specimen, which was collected by Peck, has not been racially identified satisfactorily. There are no other records of the species from British Honduras.

DISCUSSION AND CONCLUSIONS

Four hundred and sixty-three species of birds have been definitely recorded from British Honduras. Of this total, 308 species definitely or probably nest in the Colony and another 20 species may possibly nest. Winter visitants and transients amount to 126 species, of which 50 are predominantly transients. Another four species are stragglers. Five forms are present throughout much of the year but do not breed.

The rain forests of the Colony are continuous with the forests of the Caribbean slopes of Central America to the south and with those of Guatemala and southern Mexico to the west. The birds that inhabit the tall, humid forests in British Honduras are consequently typical of the forests of the Caribbean lowlands of northern Central America.

The avifauna of the tall forests of the Colony is rather uniform from south to north. This uniformity is surprising, for rainfall ranges from an annual 175 inches in the south to only 59 inches at Gallon Jug, a locality less than 20 miles from the state of Quintana Roo, Mexico. A total of 216 breeding species are associated in or near rain forest habitats in

British Honduras. Only 13 of these species (Table 1, Sect. A) have not been recorded in the vicinity of Gallon Jug and in other more northerly parts of the Yucatan Peninsula (Quintana Roo, Campeche, or Yucatan). Seven other species are listed in Table 1, Sect. B, that have been recorded fewer than four times at Gallon Jug, but are more common to the south and unrecorded farther north on the Peninsula. Ciccaba nigrolineata, Dysithamnus mentalis, Pachyramphus major, and Campylorhynchus zonatus are the only rain forest species in the Colony that have not been recorded at Gallon Jug but are known from Quintana Roo, Campeche, or Yucatan. On the other hand, 24 species (Table 1, Sect. C) occur at Gallon Jug but are unrecorded from the Mexican portion of the Peninsula. I believe rainfall, per se, is less of a limiting factor to bird distribution than is commonly believed. The forests at Gallon Jug are scarcely less tall or luxuriant than the forests in southern British Honduras. While at Gallon Jug, I always felt that the humidity was high, even in the dry season, and I suspect the humidity has much to do with maintenance of the forest. The birds are undoubtedly there because no barriers have prevented their spread.

Some response has occurred to the drier conditions in the northern part of the Colony, and it can be noted in an analysis of the endemic element shared by British Honduras and the northern Peninsula. Two hundred and

TABLE 1
SPECIES RECORDED IN RAIN FOREST OR
ASSOCIATED HABITATS

- A. Occurring in southern British Honduras but unrecorded at Gallon Jug and in Quintana Roo, Campeche, and Yucatan.

Leptotila cassinii
Thalurania furcata
Heliothryx barroti
Electron carinatum
Taraba major
Thamnophilus punctatus
Thamnistes anabatinus

Gymnocichla nudiceps
Zarhynchus wagleri
Tanagra musica
Tanagra minuta
Sporophila americana
Arremon aurantirostris

- B. Occurring in southern British Honduras and rarely at Gallon Jug but unrecorded in Quintana Roo, Campeche, and Yucatan.

Phaethornis superciliosus
Campylopterus hemileucurus
Florisuga mellivora

Colibri delphinae
Cotinga amabilis
Terenotriccus erythrurus
Ramphocelus passerinii

- C. Occurring at Gallon Jug but unrecorded in Quintana Roo, Campeche, or Yucatan.

Leucopternis albicollis
Pulsatrix perspicillata
Phaeochroa cuvierii
Malacoptila panamensis
Centurus pucherani
Glyphorhynchus spirurus
Xiphocolaptes promeropirhynchus
Automolus ochrolaemus
Laniocera rufescens

Rhytipterna holerythra
Lipagus unirufus
Pachyramphus cinnamomeus
Onithion semiflavum
Leptopogon amaurocephalus
Smaragdolanus pulchellus
Tanagra nigrocincta
Piranga leucoptera
Oryzoborus funereus

thirty-eight species nest on the mainland in both British Honduras and more northern parts of the Peninsula (Quintana Roo, Campeche, and Yucatan). Four of these species are endemic to the Peninsula: Meleagris ocellata, Otophanes yucatanicus, Myiarchus yucatanensis, and Dumetella glabrirostris. Forty-six of the 238 species have endemic subspecies on the Peninsula, and of these endemic races, 32 occur in British Honduras, or show their influence in birds from the Colony (Table 2). Endemic Peninsular races are generally paler and smaller than contiguous races.

Only five forms collected in British Honduras have close affinities with the West Indies. Columba leucocephala and Elaenia martinica occur in British Honduras, the islands of the northeastern part of the Yucatan Peninsula, and in the West Indies. Vireo altiloquus has a similar distribution but has been recorded in the Colony only once. Pelecanus o. occidentalis and Pandion haliaetus ridgwayi are races represented by breeding birds in British Honduras and also various parts of the Antilles.

The keys are small and numerous and are situated close to one another. Many are near the mainland. Nonpelagic species found on the keys are not different from those on the mainland. The 31 species that have nested on the islands are listed in Table 3. Seven of these species have not been recorded nesting since

TABLE 2

RACES ENDEMIC TO THE YUCATAN PENINSULA THAT OCCUR IN
BRITISH HONDURAS OR WHOSE CHARACTERISTICS ARE APPROACHED
BY BRITISH HONDURAN BIRDS.

Buteo magnirostris conspectus
Ortalis vetula intermedia
Caprimulgus salvini badius
Campylopterus curvipennis pampa
Amazilia yucatanensis yucatanensis
Pteroglossus torquatus erythrozonus
Centurus aurifrons dubius
Centurus pygmaeus rubricornis
Sittasomus griseicapillus gracileus
Xiphorhynchus flavigaster yucatanensis
Thamnophilus doliatus yucatanensis
Attila spadiceus gaumeri
Platypsaris aglaiae yucatanensis
Myiarchus tuberculifer platyrhynchus
Platyrinchus mystaceus timothei
Psilorhinus mexicanus vociferus
Cissilopha san-blasiana yucatanica
Thryothorus maculipictus canobrunneus
Uropsila leucogastra brachyura
Mimus gilvus leucophaeus
Ramphocaenus rufiventris ardeleo
Cyclarhis gujanensis yucatanensis
Granatellus sallaei boucardi
Icterus chrysater mayensis
Icterus gularis yucatanensis
Icterus cucullatus igenus
Habia rubica nelsoni
Habia gutturalis peninsularis
Saltator atriceps raptor
Saltator coerulescens yucatanensis
Richmondia cardinalis flammigera
Arremonops rufivirgatus verticalis

TABLE 3

SPECIES BREEDING ON THE KEYS

Pelecanus occidentalis
Sula sula
Phalacrocorax auritus *
Fregata magnificens
Leucophoyx thula *
Cochlearius cochlearius
Eudocimus albus *
Pandion haliaetus
Rallus longirostris
Charadrius wilsonia *
Sterna dougallii *
Sterna anaethetus *
Sterna fuscata
Sterna albifrons *
Thalasseus sandvicensis *
Anous stolidus
Anous tenuirostris
 [Columba leucocephala]
 [Crotophaga sulcirostris]
Anthracothorax prevostii
Amazilia rutila
Centurus aurifrons
Tyrannus melancholicus
 [Elaenia martinica]
 [Melanoptila glabrirostris]
Mimus gilvus
Vireo pallens
Vireo magister
Dendroica aestiva
Cassidix mexicanus
Icterus cucullatus

* breeding based on records made by
 Salvin; brackets indicate nesting is
 presumed.

Salvin found them in 1862. Four species are presumed to be nesting birds. In addition Rallus longirostris belizensis, a race known from one specimen, occurs in the mangroves of the mainland and on many keys. I am skeptical of the validity of races named from only one specimen, but the species is a highly polymorphic one and many geographic races have been described in its range.

Four species (Myadestes unicolor, Cyanerpes lucidus, Chlorospingus ophthalmicus, and Eupherusa exima) occur in the Cockscomb Mountains but not elsewhere in the Colony. Only Chlorospingus ophthalmicus has a number of distinctive races in the various parts of its range. It is possible that the Cockscomb Mountain population is subspecifically distinct, but the one specimen that I collected is not adequate evidence. The area of the unique habitats in the highest mountains is not extensive enough to support additional isolated species.

The pinelands constitute the only extensive areas that are isolated to any degree from other similar regions in Central America. The lowland pine ridges in British Honduras are separated from the pines of the Mountain Pine Ridge by rain forest. Pines do occur in southeastern Guatemala but rain forest intervenes there also. Twenty-four species of birds are found in the pinelands but not in other habitats in the Colony

(Table 4). Additional species reside in pinelands but elsewhere in the Colony as well. The only subspecies other than Rallus longirostris belizensis that are endemic to British Honduras are limited to the pinelands. These birds are Dendrocopus scalaris leucoptilurus, Vireo solitarius notius, and Dendroica graciae decora. They represent highly plastic species, divided into many subspecies, ranging from the United States south to northern Central America.

Thryothorus modestus and Basileuterus rufifrons are the only species in the list of birds limited to the Mountain Pine Ridge that Griscom (1932a: 66-67) does not include in his list of Temperate Zone species in Guatemala. These two species are characteristic of brushy or grassy areas in Guatemala, and it is this habitat that they frequent in the pinelands of British Honduras. Vireo solitarius and Ammodramus savannarum are the only species occurring in pinelands at all elevations in British Honduras that are not included by Griscom among Guatemalan Temperate Zone species. Only one species, Sturnella magna, of the seven restricted to lowland pine areas in the Colony is considered a temperate zone species by Griscom. Thus 14 species, which are considered Temperate Zone forms in Guatemala, also occur in British Honduras and there they reside only in the pine ridges. These factors suggest that the majority of the pine ridge birds are

TABLE 4

SPECIES OCCURRING IN PINELANDS BUT NOT IN
OTHER HABITATS IN BRITISH HONDURAS

A. Species occurring in pinelands at all elevations.

Amazilia cyanocephala	Piranga flava
Melanerpes formicivorus	Loxia curvirostra
Vireo solitarius	Ammodramus savannarum
Dendroica graciae	Aimophila rufescens
Icterus chrysater	Spizella passerina

B. Species occurring only in the pinelands at low elevations.

Colinus nigrogularis	Pyrocephalus rubinus
Columbina minuta	Sturnella magna
Amazona xantholara	Aimophila botterii
Dendrocopus scalaris	

C. Species occurring only in pinelands of the Mountain Pine Ridge.

Buteo jamaicensis	Sialia sialis
Contopus pertinax	Basileuterus rufifrons
Cistothorus platensis	Spinus notatus
Thryothorus modestus	

derived from the avifauna of greater elevations in Guatemala. However, Contopus pertinax and Spinus notatus bear a greater resemblance to subspecies occurring in the mountains of Honduras than to races in the Guatemalan highlands.

The birds that are confined to the lowland pine ridges of British Honduras are species that are typical of low elevations in parts, if not all, of their ranges. Colinus nigrogularis and Columbina minuta are species common in the coastal lowlands of the Yucatán Peninsula and regions to the south. Amazona xantholora is usually considered a Peninsular endemic, but a specimen has been collected in Honduras. Dendrocopus scalaris ranges from the United States to Honduras, usually in light forest. Pyrocephalus rubinus occurs in open areas from the United States to Argentina, but it is absent in some parts of Central America. Sturnella magna ranges from the United States to Brazil in open grassy areas. The race present in the Colony is found also in Honduras and Nicaragua. Aimophila botterii is a grasslands species occurring in Mexico, Guatemala, and British Honduras.

APPENDIX A

PRIMARY CITATIONS MENTIONED IN THE TEXT

1. Tinamus major percautus Van Tyne, Misc. Publ. Univ. Michigan, Mus. Zool., 27, 1935: 8 (Uaxactun, Petén, Guatemala).
2. Tinamus meserythrus Sclater, Proc. Zool. Soc. London, 27, 1859 [1860]: 392 (Playa vicente, Oaxaca, Mexico).
3. Tinamus boucardi Sclater, Proc. Zool. Soc. London, 27, 1859 [1860]: 391 (Teotalcingo, Oaxaca, Mexico).
4. Crypturus sallaei goldmani Nelson, Proc. Biol. Soc. Washington, 14, 1901: 169 (Chichén Itzá, Yucatán, Mexico).
5. Colymbus dominicus brachypterus Chapman, Bull. Amer. Mus. Nat. Hist., 12, 1899: 256 (Lomita Ranch, Lower Rio Grande, Texas).
6. [Colymbus] Podiceps Linnaeus, Syst. Nat., ed. 10, 1, 1758: 136 (in America septentrionali [= South Carolina]).
7. [Pelecanus] occidentalis Linnaeus, Syst. Nat., ed. 12, 1, 1766: 215 (in America [= Jamaica]).
8. [Pelecanus] carolinensis Gmelin, Syst. Nat., 1, pt. 2, 1789: 571 (in sinu urbis Charlestown [= Charleston Harbor, South Carolina]).
9. [Pelecanus] Sula Linnaeus, Syst. Nat., ed. 12, 1, 1766: 218 (in Pelago indico [= Barbados, Lesser Antilles]).
10. Pelecanus Leucogaster Boddaert, Table Pl. enlum., 1783, 57, no. 973 (Cayenne).

11. Carbo floridanus Audubon, Bds. America (folio ed.),
3, 1835, pl. 252 (Florida Keys).
12. Carbo mexicanus Brandt, Bull. Sci. Acad. Imp. Sci.
St. Petersburg, 3, 1837, col. 56 (Mexico).
13. Plotus leucogaster Vieillot, Nouv. Dict. Hist. Nat.,
1, 1816: 545 (Florida).
14. Fregata minor rothschildi Mathews, Bds. Australia, 4,
1915: 280 (Aruba, Dutch West Indies).
15. [Ardea] Herodias Linnaeus, Syst. Nat., ed. 10, 1, 1758:
143 (in America [= Hudson Bay]).
16. Cancroma maculata Boddaert, Table Planch. Enlum., 1783:
5 (Martinique).
17. [Ardea] virescens Linnaeus, Syst., Nat., ed. 10, 1,
1758: 144 (in America [= coast of South Carolina]).
18. [Ardea] caerulea Linnaeus, Syst. Nat., ed. 10, 1, 1758:
143 (in America septentrionali [= South Carolina]).
19. Ardea caerulescens Latham, Index Orn., 2, 1790: 690
(Cayenne [= French Guiana]).
20. [Ardea] Egretta Gmelin, Syst. Nat., 1, pt. 2, 1789: 629
(in insula S. Dominici, insulis Falkland et America
australi ad Louisianam usque [= French Guiana]).
21. Ardea Thula Molina, Sagg. Stor. Nat. Chili, 1782: 235
(Chili).
22. [Ardea] Ibis Linnaeus, Syst. Nat., ed. 10, 1, 1758: 144
(Egypt).
23. Egretta ruficollis Gosse, Bds. Jamaica, 1847: 338
(Burnt Savanna River and Bluefields Creek, Jamaica).

24. [Ardea] Hoactli Gmelin, Syst. Nat., 1, pt. 2, 1789: 630 (in novae Hispaniae lacubus [= Valley of Mexico]).
25. [Ardea] violacea Linnaeus, Syst. Nat., ed. 10, 1, 1758: 143 (in America septentrionali [= South Carolina]).
26. Tigrisoma mexicana Swainson, in Murray's Encl. Geog., 1834: 1383 (Real del Monte, Hidalgo, Mexico).
27. [Ardea] exilis Gmelin, Syst. Nat., 1, pt. 2, 1789: 645 (Jamaica).
28. Cancroma zeledoni Ridgway, Proc. U.S. Nat. Mus., 8, 1885: 93 (Mazatlan, [Sinaloa,] Mexico).
29. Dendrocygna autumnalis fulgens Friedmann, Condor, 49, 1947: 190 (Lomita Ranch, Texas).
30. [Anas] discors Linnaeus, Syst. Nat., ed. 12, 1, 1766: 205 (in America septentrionali [= South Carolina]).
31. [Vultur] Aura Linnaeus, Syst. Nat., ed. 10, 1, 1758: 86 (in America calidior [= Veracruz, Mexico]).
32. Elanus leucurus majusculus Bangs and Penard, Proc. New England Zool. Club, 7, 1920: 46 (San Rafael, California).
33. Milvus yetapa Vieillot, Nouv. Dict. Hist. Nat., 20, 1818: 564 (Paraguay).
34. Falco uncinatus "Illiger" Temminck, Pl. Col., livr. 18, 1822, pls. 104, 105, 115 (Bahia, eastern Brazil).
35. Chondrohierax uncinatus aquilonis Friedmann, Jour. Washington Acad. Sci., 24, 1934: 314 (Tamaulipas, Mexico).
36. Rostrhamus sociabilis major Nelson and Goldman, Proc. Biol. Soc. Washington, 46, 1933: 193 (Catemaco, Veracruz, Mexico).

37. Sparvius bicolor Vieillot, Nouv. Dict. Hist. Nat., 10, 1816: 325 (Cayenne [= French Guiana]).
38. Buteo hypospodius Gurney, Ibis, 1876: 73 (Medellin, Colombia).
39. [Buteo borealis] var. costaricensis Ridgway, in Baird, Brewer, and Ridgway, Hist. N. Am. Birds, 3, 1874: 258 (no locality [= Costa Rica]).
40. Sparvius platypterus Vieillot, Tabl. Encyc. Méth., 3, 1823: 1273 (L'Amerique septentrionale [= Philadelphia, Pennsylvania]).
41. Rupornis magnirostris conspecta Peters, Auk, 30, 1913: 370 (San Ignacio, Yucatán, Mexico).
42. Rupornis magnirostris direptor Peters and Griscom, Proc. New England Zool. Club, 11, 1929: 46 (Finca El Cipres, near Mazatenango, Pacific Slope, Guatemala).
43. Buteo fuliginosus Sclater, Proc. Zool. Soc. London, 1858: 556 (State of Tamaulipas, Mexico).
44. Asturina plagiata, Schlegel, Mus. Pays-Bas, 2, 1862: 1 (Veracruz, Veracruz, Mexico).
45. Buteo ghiesbreghti DuBus, Esq. Orn., livr. 1, 1845: pl. 1 (Hacienda Mirador, several leagues from Veracruz [Mexico]).
46. Leucopternis ghiesbreghti costaricensis Sclater, Bull. Brit. Orn. Club, 39, 1919: 76 (Carrillo, Costa Rica).
47. Falco nigricollis Latham, Ind. Orn., 1, 1790: 35 (Cayenne [= French Guiana]).
48. Falco anthracinus Lichtenstein, Preis-Verz. Säug. Vögel, . . . Mexico, 1830: 3 (Veracruz, Mexico).

49. Urubitinga ridgwayi Gurney, List Diurn. Birds Prey, 1884: 148 (Guatemala).
50. Spizaetus ornatus vicarius Friedmann, Jour. Washington Acad. Sci., 25, 1935: 451 (near Manatol [= Manatee] Lagoon, British Honduras).
51. Spizaetus tyrannus serus Friedmann, Smith. Misc. Coll., 111, No. 16, 1950: 1 (Rio Indio, near Gatún, Canal Zone, Panamá).
52. Ischnosceles niger DuBus, Bull. Acad. Roy. Sci. Belg., 14, 1847: 102 (Mexico).
53. Pandion Ridgweir [sic] Anonymous [= C. J. Maynard], Am. Exch. and Mart., no. 3, 1887: 3 (Andros Island, Bahamas).
54. [Falco] carolinensis Gmelin, Syst. Nat., 1, 1788: 263 (Carolina).
55. Herpetotheres cachinnans chapmani Bangs and Penard, Bull. Mus. Comp. Zool., 62, 1918: 37 (Santa Lucia, Rio Hondo, Quintana Roo, Mexico).
56. [Falco] cachinnans Linnaeus, Syst. Nat., ed. 10, 1, 1758: 90 (in America meridionali [= Surinam]).
57. Carnifex naso Lesson, Echo du Monde Savant, 6, sec. 2, 1842, col. 1085 (Realejo, Nicaragua).
58. Micrastur guerilla Cassin, Proc. Acad. Nat. Sci. Philadelphia, 4, 1848: 87 (Jalapa, Veracruz, Mexico).
59. Falco anatum Bonaparte, Geogr. and Comp. List, 1838: 4 (Egg Harbor, [New Jersey]).
60. Falco albigularis Daudin, Traité d'Orn., 2, 1800: 131 (Cayenne [= French Guiana]).

61. Falco femoralis Temminck, Planches Col., i, 1823, pls. 121, 343 (Paraguay).
62. [Falco] sparverius Linnaeus, Syst. Nat., ed. 10, 1, 1758: 90 (in America [= South Carolina]).
63. [Crax] rubra Linnaeus, Syst. Nat., ed. 10, 1, 1758: 157 (in America [= western Ecuador]).
64. Penelope purpurascens Wagler, Isis von Oken, 1830, col. 1110 (Mexico [probably Veracruz]).
65. Ortalis vetula intermedia Peters, Auk, 30, 1913: 371 (Camp Mengel [= Alvaro Obregón], Rio Hondo, Quintana Roo, Mexico).
66. Ortallida plumbiceps Gray, List Gallinae Brit. Mus., 1867: 11 (Honduras [= Omoa], Guatemala).
67. Ortyx nigrogularis Gould, Proc. Zool. Soc. London, 1842 [1843]: 181 (Mexico [= Honduras]).
68. Aramus pictus dolosus Peters, Occ. Papers Boston Soc. Nat. Hist., 5, 1925: 144 (Bolson, Costa Rica).
69. Rallus longirostris belizenis Oberholser, Proc. U.S. Nat. Mus., 84, 1937: 335 (Yacacos Lagoon, British Honduras).
70. Limnopardalus maculatus insolitus Bangs and Peck, Proc. Biol. Soc. Washington, 21, 1908: 43 (Yacacos Lagoon, British Honduras).
71. Corethrura Guatemalensis Lawrence, Proc. Acad. Nat. Sci. Philadelphia, 15, 1863 [1864]: 106, 107 (Guatemala).
72. Aramides albiventris Lawrence, Proc. Acad. Nat., Sci. Philadelphia, 19, 1867: 234 (British Honduras).

73. [Fulica] americana Gmelin, Syst. Nat., 1, pt. 2,
1789: 704 (in America septentrionali [= North America]).
74. [Fulica] spinosa Linnaeus, Syst. Nat., ed. 10, 1,
1758: 152 (in America australi [= Panamá]).
75. [Charadrius] vociferus Linnaeus, Syst. Nat., ed. 10,
1, 1758: 150 (in America septentrionali [= South
Carolina]).
76. Charadrius Wilsonia Ord, in Wilson, Amer. Orn., 9,
1814: 77 (shore of Cape Island [= Cape May], New Jersey).
77. Numenius hudsonicus Latham, Index Orn., 2, 1790: 712
(in sinu Hudsonis [= Hudson Bay]).
78. Tringa solitaria Wilson, Amer. Orn., 7, 1813: 53
Pocano Mt., Pa., Kentucky, and New York [= Pocono
Mountains, Pennsylvania]).
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277. Cyanocitta yucatanica Dubois, Bull. Acad. Roy. Sci. Belg., ser. 2, 40, 1875: 797 (Yucatán).

278. Cissilopha yucatanica rivularis Brodkorb, Auk, 57, 1940: 547 (Balancán, Tabasco, Mexico).
279. Cistothorus elegans Sclater and Salvin, Ibis, 1859: 8 (Lake of Dueñas, Guatemala).
280. Heleodytes zonatus restrictus Nelson, Auk, 18, 1901: 49 (Frontera, Tabasco, Mexico).
281. Heleodytes zonatus vulcanius Brodkorb, Auk, 57, 1940: 547 (Aquacaliente, Volcán de Tacaná, Chiapas, Mexico).
282. Thryothorus modestus Cabanis, Jour. für Orn., 8, 1860: 409 (San José, Costa Rica).
283. Thryothorus maculipectus canobrunneus Ridgway, Man. N. Amer. Birds, 1887: 552 (Temax, Yucatán).
284. T[hryothorus]. maculipectus umbrinus Ridgway, Man. N. Amer. Birds, 1887: 552 (Guatemala).
285. Troglodytes intermedius Cabanis, Jour. für Orn., 8, 1860: 407 (San José, Costa Rica).
286. Scytalopus prosthaleucas Sclater, Proc. Zool. Soc. London, 24, 1856 [1857]: 290 (Cordova, Veracruz, Mexico).
287. Henicorhina prosthaleuca tropaea, Bangs and Peters, Bull. Mus. Comp. Zool., 67, 1927: 480 (Laviagua, Costa Rica).
288. Troglodytes brachyurus Lawrence, Ann. New York Acad. Sci., 4, 1887: 67 (Temax, Yucatán, Mexico).
289. Hemiura leucogastra musica Nelson, Proc. Biol. Soc. Washington, 16, 1903: 159 (Teapa, Tabasco, Mexico).

290. Nannorchilus leucogaster australis van Rossem,
Bull. Brit. Orn. Club, 54, 1938: 15 (Orange Walk,
Belize, British Honduras).
291. Melanoptila glabrirostris Selater, Proc. Zool.
Soc. London, 25, 1857 [1858]: 275 (Omoa, Honduras).
292. Mimus gilvus leucophaeus, Ridgway, Proc. U.S.
Nat'l. Mus., 10, 1887 [1888]: 506 (Isla Cozumel,
Quintana Roo, Mexico).
293. Turdus assimilis parcolor Austin, Bull. Mus. Comp.
Zool., 69, 1929: 386 (Camp 6, Cayo District, British
Honduras).
294. Turdus assimilis oblitus Miller and Griscom, Amer.
Mus. Novitates, 184, 1925: 13 (Tenorio, Costa Rica).
295. Merula tamaulipensis Nelson, Auk, 14, 1897: 75
(Ciudad Victoria, Tamaulipas, Mexico).
296. Turdus Grayi Bonaparte, Proc. Zool. Soc. London, 5,
1837 [1838]: 118 (Guatemala).
297. Myadestes unicolor pallens Miller and Griscom,
Amer. Mus. Novitates, 183, 1925: 5 (San Rafael del
Norte, Nicaragua).
298. Turdus Swainsoni Tschudi, Fauna Peruana, Aves,
1845: 28 (Carlton House, Saskatchewan, Canada).
299. Turdus minimus Lafresnaye, Lafresnaye, Rev. Zool.,
11, 1848: 5 (ad Bogotam in Nova-Grenada [= Bogotá,
Colombia]).
300. Turdus Fuscescens Stephens, in Shaw, Gen. Zool.,
10, 1817: 182 (Pennsylvania).

301. Hylocichla fuscescens salicicola Ridgway, Proc. U.S. Nat. Mus., 4, 1881 (1882): 374 (Rocky Mountain district [= Fort Garland, Colorado]).
302. Sialia sialis guatemalae Ridgway, Proc. U.S. Nat. Mus., 5, 1882: 13 (Guatemala).
303. Sialia sialis meridionalis Dickey and van Rossem, Condor, 32, 1930: 69 (Los Esesmites, Chalatenango, El Salvador).
304. Polioptila caerulea deppei van Rossem, Bull. Mus. Comp. Zool., 77, 1934: 402 (Rio Largartos, Yucatán, Mexico).
305. [Motacilla] caerulea Linnaeus, Syst. Nat., ed. 12, 1, 1766: 337 (Pennsylvania [= Philadelphia, Pennsylvania]).
306. Popioptila superciliaris Lawrence, Ann. Lyc. Nat. Hist. New York, 7, 1861 [1862]: 304 (New Grenada, Isthmus of Panama [= Lion Hill, Panamá]).
307. Scolopacinus rufiventris Bonaparte, Proc. Zool. Soc. London, 5, 1837 [1838]: 119 (Guatemala [= San José, Guatemala]).
308. Ramphocaenus rufiventris ardeleo Van Tyne and Trautman, Occas. Papers, Univ. Michigan Mus. Zool., no. 439, 1941: 9 (Chichén Itzá, Yucatán, Mexico).
309. Cyclorhis flaviventris yucatanensis Ridgway, Proc. U.S. Nat. Mus., 9, 1886 [1887]: 519 (Mérida, Yucatán, Mexico).
310. Cyclaris flaviventris Lafresnaye, Rev. Zool., 5, 1842: 133 (Santa-Cruce in Mexico [= probably, Veracruz, Mexico]).

311. Vireolanius pulchellus Sclater and Salvin, Ibis, 1859: 12 (Guatemala).
312. Tanagra grisea Boddaert, Table Planch. Enlum., 1783: 45 (Louisiana [= New Orleans, Louisiana]).
313. [Muscicapa] noveboracensis Gmelin, Syst. Nat., 1, pt. 2, 1789: 947 (Noveboraco [= New York]).
314. Vireo semiflavus Salvin, Proc. Zool. Soc. London, 1863 [1864]: 188 (Petén, Guatemala).
315. Vireo solitarius notius Van Tyne, Occas. Papers, Univ. Michigan Mus. Zool., no. 256, 1933: 2 (12 mi. south of El Cayo, British Honduras).
316. Vireosylvia flavoviridis Cassin, Proc. Acad. Nat. Sci. Philadelphia, 5, 1851: 152 (Panamá, . . ., and San Juan de Nicaragua [= San Juan de Nicaragua, Nicaragua]).
317. Vireosylvia magister (Baird Ms.) Lawrence, Ann. Lyc. Nat. Hist. New York, 10, 1871: 20 (Belize, British Honduras).
318. Phyllomanes barbatulus Cabanis, Jour. für Orn., 3, 1855: 467 (Cuba).
319. Hylophilus ochraceiceps Sclater, Proc. Zool. Soc. London, 27, 1859 [1860]: 375 (Playa Vicente, Oaxaca, Mexico).
320. Sylvicola decurtata Bonaparte, Proc. Zool. Soc. London, 5, 1837 [1838]: 118 (Guatemala).
321. Chlorophanes guatemalensis Sclater, Proc. Zool. Soc. London, 1861 [1862]: 129 (Guatemala [= Choctum, Vera Paz, Guatemala]).

322. Caereba carneipes Sclater, Proc. Zool. Soc. London, 27, 1859 [1860]: 376 (Playa Vicente, Oaxaca, Mexico).
323. Caereba lucida Sclater and Salvin, Ibis, 1859: 14 (Guatemala).
324. Certhiola mexicana Sclater, Proc. Zool. Soc. London, 24, 1856 [1857]: 286 (Cordova, Veracruz, Mexico).
325. [Motacilla] aestiva Gmelin, Syst. Nat., 1, pt. 2, 1789: 996 (in Gujana, aestate in Canada [= City of Quebec, Canada]).
326. Dendroica aestiva amnicola Batchelder, Proc. New England Zool. Club, 6, 1918: 82 (Curslet, Newfoundland).
327. Motacilla rubiginosa Pallas, Zoogr. Rosso-Asiatica, 1, 1811: 496 (in insula Kadiak [= Kodiak Island, Alaska]).
328. Dendroica aestiva morcomi Coale, Bull. Ridgway Orn. Club, No. 2, 1887: 82 (Fort Bridger, Utah [= Wyoming]).
329. Dendroica Vieillotii, var. Bryanti Ridgway, Amer. Nat., 7, 1873: 606 (no locality [= Belize, British Honduras]).
330. [Motacilla] caerulescens Gmelin, Syst. Nat., 1, pt. 2, 1789: 960 (in insula S. Dominici [= Hispaniola]).
331. Dendroica coronata hooveri McGregor, Bull. Cooper Orn. Club, 1, 1899: 32 (Palo Alta, California).
332. [Motacilla] coronata Linnaeus, Syst. Nat., ed. 12, 1, 1766: 333 (in Pennsylvania [= Philadelphia, Pennsylvania]).

333. [Motacilla] virens Gmelin, Syst. Nat., 1, pt. 2, 1789: 985 (in Pensilvania [= Philadelphia, Pennsylvania]).
334. Dendroica Dominica var. albilora Baird Ms. in Ridgway, Amer. Nat., 7, 1873: 606 (Belize, [British] Honduras).
335. Dendroica Graciae, var. decora Ridgway, Amer. Nat., 7, 1873: 608 (Belize, [British] Honduras).
336. Sylvia discolor Vieillot, Hist. Nat. Ois. Amér., 2, 1807: 37 (Etats-Unis et les grandes Iles Antilles [= New York]).
337. [Motacilla] palmarum Gmelin, Syst. Nat., 1, pt. 2, 1789: 951 (in insula s. Dominici [= Hispaniola]).
338. [Motacilla] aurocapillus Linnaeus, Syst. Nat., ed. 12, 1, 1766: 334 (in Pensylvania [= at sea, apparently off Haiti]).
339. Motacilla noveboracensis Gmelin, Syst. Nat., 1, pt. 2, 1789: 958 (in Louisiana, et Noveboraci sepibus [= New York]).
340. Siurus naevius notabilis Ridgway, Proc. U.S. Nat. Mus., 3, 1880: 12 (Black Hills [= shores of Como Lake, Carbon County], Wyoming).
341. Trichas brachidactylus Swainson, Anim. Menag., 1838: 295 (northern provinces of the United States).
342. [Turdus] trichas Linnaeus, Syst. Nat., ed. 12, 1, 1766: 293 (in America septentrionali [= Maryland]).
343. Chamaethlypis palpebralis Ridgway, Man. No. Amer. Birds, 1887: 526 (Mirador, Veracruz).

344. [Turdus] virens Linnaeus, Syst. Nat., ed. 10, 1758: 171 (in America [= South Carolina, 200 or 300 miles from the sea]).
345. Granatellus sallaei boucardi Ridgway, Proc. U.S. Nat. Mus., 8, 1885: 23 (Yucatán, Mexico).
346. Granatellus sallaei griscomi van Rossem, Bull. Mus. Comp. Zool., 77, 1934: 403 (Cobán, Guatemala).
347. Muscicapa pusilla Wilson, Amer. Orn., 3, 1811: 103 (Southern States, . . . lower parts . . . of New Jersey and Delaware [= Southern New Jersey]).
348. [Motacilla] Ruticilla Linnaeus, Syst. Nat., ed. 10, 1758: 186 (in America [= Virginia]).
349. Motacilla tricolora P.L.S. Müller, Natursyst. Suppl., 1776: 175 (Cayenne [= French Guiana]).
350. Sylvia culicivora Lichtenstein, Preis-Verz. Säug., Vögel, . . . Mexico, 1830: 2 (Mexico [= Jalapa, Veracruz]).
351. Basileuterus salvini Cherrie, Proc. U.S. Nat. Mus., 14, 1891: 342 (Cobán, Vera Paz, Guatemala).
352. Cacicus wagleri Gray and Mitchell, Genera Birds, 2, 1844: 342 (no locality [= Cobán, Guatemala]).
353. Sturnus holosericeus Lichtenstein, Preis.-Verz. Säug., Vögel, . . . Mexico, 1830: 1 (Alvarado, Veracruz, Mexico).
354. Psomocolax oryzivorus impacifus Peters, Proc. Biol. Soc. Washington, 42, 1929: 123 (Pasa Nueva, Veracruz, Mexico).

355. Ps[arocolius]. aeneus Wagler, Isis von Oken, 22, Heft 7, 1829, col. 758 (Mexico [= Laguna, Veracruz]).
356. [Corvus] mexicanus Gmelin, Syst. Nat., 1, pt. 1, 1788: 375 (Mexico [= Veracruz]).
357. Icterus dives Lichtenstein, Preis-Verz. Säug., Vögel, . . . Mexico, 1830: 1 (Mexico).
358. Xanthornus prothemelas Strickland, Contr. Orn., 1850: 120, pl. 62 (Guatemala).
359. Icterus cucullatus igneus Ridgway, Proc. U.S. Nat. Mus., 8, 1885: 19 (Yucatán).
360. Icterus cucullatus masoni Griscom, Amer. Mus. Novitates, no. 235, 1926: 18 (Manatee, British Honduras).
361. Ps[arocolius]. mesomelas Wagler, Isis von Oken, 22, Heft 7, 1829: col. 755 (Mexico).
362. Xanthornus chrysater Lesson, Echo du Monde Savant, 11, 1844: 204 (Mexico).
363. Icterus chrysater mayensis van Rossem, Bull. Brit. Orn. Club., 58, 1938: 136 (Peto, Yucatán, Mexico).
364. Icterus gularis yucatanensis Berlepsch, Auk, 5, 1888: 454 (Yucatán, Mexico).
365. Agelaius phoeniceus richmondi Nelson, Auk, 14, 1897: 58 (Tlacotalpam, Veracruz, Mexico).
366. Agelaius phoeniceus pallidulus van Tyne and Trautman, Occas. Papers Univ. Michigan Mus. Zool., no. 496, 1946: 1 (3 km. south of Progreso, Yucatán, Mexico).

367. Agelaius phoeniceus matudae Brodkorb, Auk, 57, 1940: 548 (Palizada, Campeche, Mexico).
368. Sturnella magna inexpectata Ridgway, Proc. U.S. Nat. Mus., 10, 1887 [1888]: 587 (Segovia River, Honduras).
369. Pipra elegantissima Bonaparte, Proc. Zool. Soc. London, 5, 1837 [1838]: 112 (Mexico).
370. Phonasca humilis Cabanis, Jour. für Orn., 8, 1860: 334 (Costa Rica).
371. Tanagra [Euphonia affinis] Lesson, Rev. Zool., 5, 1842: 175 (Realejo, Nicaragua).
372. Tanagra lauta lauta Bangs and Penard, Bull. Mus. Comp. Zool., 63, 1919: 35 (Guatemala).
373. Euphonia Gouldi Sclater, Proc. Zool. Soc. London, 25, 1857 [1858]: 66, pl. 124 (Guatemala).
374. Calliste larvata DuBus, Esq. Orn., Livr. 2, 1846, pl. 9 (Tabasco, Mexico).
375. Tanagra diaconus Lesson, Rev. Zool., 5, 1842: 175 (Realejo, Nicaragua).
376. Ramphocelus passerinii Bonaparte, "Antologia, 1831, no. 130, 3"; Isis, 1883: 755 (in insula Cuba [= Mexico]).
377. Tanagra (Tachyphonus) sanguinolenta Lesson, Cent. Zool., 1831: 107, pl. 39 (Mexico).
378. [Fringilla] rubra Linnaeus, Syst. Nat., ed. 10, 1, 1758: 181 (in America [= South Carolina]).

379. Pyranga figlina Salvin and Godman, Biol. Centr.-Amer., Aves, 1, 1883: 293 (Manati [= Manatee] River, British Honduras).
380. Pyranga leucoptera Trudeau, Jour. Acad. Nat. Sci. Philadelphia, 8, 1839: 160 (Mexico).
381. Saltator rubicoides Lafresnaye, Rev. Zool., 7, 1844: 41 (Mexico).
382. Phoenicotheraupis rubica nelsoni Ridgway, Bull. U.S. Nat. Mus., 50, pt. 2, 1902: 142, 145 (Peninsula of Yucatán [Puerto Morelos] including Campeche [Apazote]).
383. Phoenicotheraupis rubica confinis Bangs, Proc. Biol. Soc. Washington, 18, 1905: 156 (Yaruca, Honduras).
384. Phoenicotheraupis salvini rooensis Griscom, Amer. Mus. Novitates, no. 235, 1926: 17 (Chunyaxche, Quintana Roo, Mexico).
385. Phoenicotheraupis salvini peninsularis Ridgway, Proc. Washington Acad. Sci., 3, 1901: 150 (Izalam, Yucatán, Mexico).
386. Phoenicotheraupis littoralis Nelson, Auk, 18, 1901: 48 (Frontera, Tabasco, Mexico).
387. Phoenicotheraupis salvini Berlepsch, Ibis, 1883: 488 (Vera Paz, Guatemala).
388. Lanio aurantius Lafresnaye, Rev. Zool., 9, 1846: 204 (Guatemala).
389. Eucometis spodocephala pallida Berlepsch, Auk, 5, 1888: 451 (Yucatán).

390. Chlorospingus honduratus Berlepsch, Verh. 5th Int. Orn. Kong., 1912: 1088 (Volcán de Puca, Honduras).
391. Chlorospingus ophthalmicus richardsoni Griscom, Ibis, 1935: 816 (Sierra de las Minas, Guatemala).
392. Tanagra (Saltator) atriceps Lesson, Cent. Zool., 1832: 208 (Mexico [= Veracruz]).
393. Pyrrhula raptor Cabot, Jour. Boston Soc. Nat. Hist., 5, 1845: 90 (Yucatán, Mexico).
394. Saltator magnoides Lafresnaye, Rev. Zool., 7, 1884: 41 (Mexico [= Guatemala]).
395. Saltator gigantodes Cabanis, Mus. Hein., 1, 1851: 142 (Mexico).
396. Tanagra grandis Lichtenstein, Preis.-Verz. Säuget., Vögel, . . . Mexico, 1830: 2 (Jalapa, Veracruz, Mexico).
397. Saltator grandis yucatanensis Berlepsch, Verh. 5th Int. Orn. Kong., 1912: 1114 (Mérida, Yucatán, Mexico).
398. Pitylus poliogaster DuBus, Bull. Acad. Roy. Sci. Belg., 14, 1847: 105 (Guatemala).
399. Cardinalis cardinalis flammiger Peters, Auk, 30, 1913: 380 (Xcopen, Quintana Roo, Mexico).
400. C[ardinalis]. cardinalis yucatanicus Ridgway, Man. N. Am. Birds, 1887: 443 ([Mérida,] Yucatán, [Mexico]).
401. [Loxia] caerulea Linnaeus, Syst. Nat., ed. 10, 1, 1758: 175 (America [= South Carolina]).

402. Cyanoloxia concreta DuBus, Bull. Acad. Roy. Sci. Belg., 22, 1855: 150 (Playa Vicente, Veracruz, Mexico).
403. Cyanocompsa cyanoides caerulescens Todd, Auk, 40, 1923: 61 (Esparta, Costa Rica).
404. Cyanoloxia parellina Bonaparte, Consp. Gen. Avium, 1, 1850: 502 (Alvarado, Veracruz, Mexico).
405. Cyanocompsa parellina dearborni Miller and Griscom, Amer. Mus. Novitates, No. 184, 1925: 1 (San Rafael del Norte, Nicaragua).
406. [Emberiza] Ciris Linnaeus, Syst. Nat., ed. 10, 1, 1758: 179 (in America [= South Carolina]).
407. Spermophila morelleti Bonaparte, Consp. Gen. Avium, 1, pt. 2, 1850: 497 (Guatemala [= Petén, Guatemala]).
408. Spermophila corvina Sclater, Proc. Zool. Soc. London, 27, 1859 [1860]: 379 (Playa Vicente, Oaxaca, Mexico).
409. Fringilla splendens Vieillot, Nouv. Dict. Hist. Nat., nouv. ed., 12, 1817: 173 (Cayenne [= French Guiana]).
410. Spinus notatus oleaceus Griscom, Proc. New England Zool. Club, 1, 1932: 61 (Cerro Cantoral, District of Achaga, Honduras).
411. Carduelis notata DuBus, Bull. Acad. Roy. Sci. Belg., 14, 1847: 106 (le Mexique [= Jalapa, Veracruz, Mexico]).
412. Loxia curvirostra stricklandi Ridgway, Proc. U.S. Nat. Mus., 8, 1885: 354 (Mexico [= City of Mexico]).

413. Loxia curvirostra mesamericana Griscom, Proc. Boston Soc. Nat. Hist., 41, 1937: 136 (Rancho Quemado, South central Honduras).
414. Arremon aurantirostris saturatus Cherrie, Proc. U.S. Nat. Mus., 14, 1891: 345 (Choctum, Dept. of Vera Paz, Guatemala).
415. Arremon rufidorsalis Cassin, Proc. Acad. Nat. Sci. Philadelphia, 1865: 170 (Turrialba, Costa Rica).
416. [Embernagra rufivirgata] verticalis Ridgway, Proc. U.S. Nat. Mus., 1, 1878: 248-49 (Merida, Yucatán, Mexico).
417. Embernagra chloronota Salvin, Proc. Zool. Soc. London, 1861 [1862]: 202 (Choctum, Vera Paz, Guatemala).
418. Fringilla Savanna Wilson, Amer. Orn., 3, 1811: 55 (Atlantic coast, from Savannah Georgia, to Great Egg Harbor, New Jersey [= Savannah, Georgia]).
419. Passerculus sandwichensis nevadensis Grinnel, Univ. Calif. Publ. Zool., 5, 1910: 312 (Soldier Meadows, Humboldt County, Nevada).
420. Passerculus anthinus Bonaparte, Compt. Rend. Acad. Sci. Paris, 37, 1853: 920 (Kadiak [= Kodiak Island, Alaska]).
421. Passerina pratensis Vieillot, Nour. Dict. Hist. Nat., nouv. ed. 25, 1817: 24 (New York).
422. Coturniculus savannarum cracens Bangs and Peck, Proc. Biol. Soc. Washington, 21, 1908: 45 (Ycacos Lagoon, British Honduras).

423. Embernagra pyrgitoides Lafresnaye, Rev. Zool., 2, 1839: 97 (Mexico [= Jalapa, Veracruz]).
424. Aimophila rufescens discolor Ridgway, Proc. U.S. Nat. Mus., 10, 1887 [1888]: 587 (Segovia River, Honduras).
425. Ammodromus petenicus Salvin, Proc. Zool. Soc. London, 1863 [1864]: 189 (Petén, Guatemala).
426. Zonotrichia botteri Sclater, Proc. Zool. Soc. London, 25, 1857 [1858]: 214 (vicinity of Orizaba, Veracruz, Mexico).
427. Spizella pinetorum Salvin, Proc. Zool. Soc. London, 1863 [1864]: 189 ([Poctum,] Petén, Guatemala).

Figure 1. Map of British Honduras showing the localities that are numbered in the Gazetteer. The numerical sequence of localities is an arrangement whereby north takes precedence over south and west over east. 1. Corozal. 2. Orange Walk, 3. Rio Hondo. 4. Ambergris Cay. 5. New River. 6. Maskalls. 7. Crooked Tree Lagoon. 8. Cay Corker. 9. Hill Bank Lagoon. 10. Spanish Creek. 11. Hick's Cays. 12. Mauger Cay. 13. Isabella. 14. Hill Bank. 15. Boom. 16. Rendezvous Point. 17. Gallon Jug. 18. Belize River. 19. Belize. 20. Northern Two Cays. 21. Sibun River. 22. Sergeant's Cay. 23. McNabb's Water Cay. 24. Turneffe Islands. 25. Lighthouse Reef. 26. English Cay. 27. Soldier Cay. 28. Churchyard. 29. Orange Walk. 30. Saddle Cay. 31. Middle Long Cay. 32. Calabash Cay. 33. Man-of-war Cay. 34. Chorro. 35. Duck Run. 36. Manatee Bar. 37. Half Moon Cay. 38. Manatee Lagoon area. 39. Manatee River. 40. Caves Branch at Hummingbird Highway. 41. Western Branch of the Belize River. 42. Cayo. 43. Sibun River at Hummingbird Highway. 44. San Felipe. 45. Mullins River. 46. Penque Viejo. 47. San Antonio. 48. Dry Creek at Hummingbird Highway. 49. Baldy Deacon. 50. Hummingbird Gap. 51. Middlesex. 52. Arenal. 53. Pomona. 54. Cay Dolores Channel. 55. North Stann Creek. 56. Stann Creek. 57. Augustine. 58. Camp VI. 59. Guacamallo. 60. Tobacco Cay. 61. Eastern Branch of the Belize River. 62. Ballerina Camp. 63. Sittee River. 64. Freetown. 65. Regalia. 66. Southern Water Cay. 67. Kendal. 68. All Pines. 69. Sittee Branch of South Stann Creek. 70. Victoria Peak. 71. Mountain Cow. 72. Curlew Cay. 73. Millionario. 74. North East Cay. 75. Long Cay. 76. Middle Cay. 77. South West Cay. 78. Glover's Reef. 79. South Stann Creek. 80. Point Placentia. 81. Hatchet Cay. 82. Round Cay. 83. Deep River. 84. Pompion Cay. 85. Monkey River. 86. San Pedro Columbia. 87. Rio Grande. 88. Tom Owens Cay. 89. Toledo Settlement. 90. Punta Gorda. 91. Hunting Cay. 92. Moho River. 93. Temash River.

APPENDIX B

GAZETTEER OF LOCALITIES

Place names and geographic features to which reference is made in the text are listed here. Names are followed by co-ordinates to the nearest minutes of, first, north latitude, and, second, west longitude. Most of the localities are to be found on the American Geographical Society's "Map of Hispanic America on the Scale of 1:1,000,000 (Millionth Map)," Provisional edition, N.E-16. Spellings conform to usage in British Honduras. Numbers in brackets identify the position of a locality on the map in Figure 1.

All Pines. — $16^{\circ} 48'$, $88^{\circ} 18'$. A village on the coast south of the mouth of the Sittee River. Important Blake and Agostini locality [68].

Ambergris Cay. — Between $17^{\circ} 54'$, $88^{\circ} 03'$ and $18^{\circ} 09'$, $87^{\circ} 54'$. Large key south of the boundary between British Honduras and Quintana Roo, Mexico. Visited by Griscom [4].

Arenal. — $17^{\circ} 02'$, $89^{\circ} 09'$. Village about 10 miles southwest of Cayo on the boundary between British Honduras and Guatemala [52].

- Augustine. — $16^{\circ} 58'$, $88^{\circ} 00'$. Village at the western edge of the pinelands of the Mountain Pine Ridge. Important collecting locality. Elevation 1550' [57].
- Back Landing. — I did not find this locality on any maps. Probably near coast on Belize River. A specimen in British Museum from this locality.
- Baldy Beacon. — $17^{\circ} 03'$, $88^{\circ} 47'$. The highest point in the Mountain Pine Ridge. Elevation 3000' [49].
- Ballerina Camp. — $16^{\circ} 53'$, $88^{\circ} 59'$. A Lancaster and Russell collecting locality on the Eastern Branch of the Belize River. Pine ridge to north, tall forest to south. Elevation about 1500' [62].
- Belize. — $17^{\circ} 30'$, $88^{\circ} 12'$. City on coast. Many old specimens labeled "Belize" were collected inland. The city is surrounded by mangroves, but pinelands and tall forest are within 15 miles [19].
- Belize River. — From $17^{\circ} 10'$, $89^{\circ} 04'$ to the sea at $17^{\circ} 33'$, $88^{\circ} 17'$. Formerly the usual route from Belize to Cayo. Also called Old River [18].
- Benque Viejo. — $17^{\circ} 04'$, $89^{\circ} 08'$. Village 6 miles southwest of Cayo on boundary between British Honduras and Guatemala [46].
- Boom. — $17^{\circ} 34'$, $88^{\circ} 24'$. Village on Belize River 14 miles north-northwest of Belize [15].
- Calabash Cay. — $17^{\circ} 14'$, $87^{\circ} 51'$. Key on east edge of Turneffe Islands. Mangroves and coconut palms. Important Dennett and Russell locality [32].
- Camp VI. — $16^{\circ} 56'$, $89^{\circ} 04'$. Formerly a mahogany camp. An Austin locality. Also written Camp 6 [58].

Caves Branch at Hummingbird Highway. — $17^{\circ} 09'$, $88^{\circ} 42'$. Area formerly forested, now agricultural [40].

Cay Corker. — $17^{\circ} 45'$, $88^{\circ} 03'$. Key 20 miles northeast of Belize [8].

Cay Dolores Channel. — $16^{\circ} 59'$, $88^{\circ} 03'$. East of Stann Creek. A Salvin locality [54].

Cayo. — $17^{\circ} 08'$, $89^{\circ} 06'$. Town at the union of the Eastern and Western Branches of the Belize River. Formerly called El Cayo [42].

Cayo District. — An administrative division in British Honduras. It now includes all of the area west of the crest of the Maya Mountains (including the Mountain Pine Ridge) and much of the valley of the Belize River. Once called "Western District," and some specimens in the British Museum are so labeled.

Chetumal Bay. — Situated at northeastern border of mainland British Honduras. Also called Bahia de Chetumal.

Chorro. — $17^{\circ} 13'$, $89^{\circ} 07'$. Village 5 miles northwest of Cayo [34].

Churchyard. — $17^{\circ} 17'$, $88^{\circ} 34'$. village on Sibun River [28].

Cockroach Cay. — In the northeastern part of the Turneffe Islands. I did not find it on maps.

Cockscomb Mountains. — Highest mountains in British Honduras. Part of Maya Mountains. Victoria Peak, which is the highest point (elevation 3700'), is identified on the map as locality no. 70.

Columbia River. — A tributary of the Rio Grande in southern British Honduras. Identified on map as river nearest locality no. 86.

Corozal. — $18^{\circ} 24'$, $88^{\circ} 24'$. Town in extreme northern British Honduras [1].

Crooked Tree Lagoon. — In northern British Honduras [7].

Curlew Cay. — $16^{\circ} 46'$, $88^{\circ} 05'$. Key east of All Pines. A Salvin locality [72].

Deep River. — From $16^{\circ} 28'$, $88^{\circ} 47'$. Southeast into the sea [83].

Dry Creek at Hummingbird Highway. — $17^{\circ} 04'$, $88^{\circ} 36'$. A Dennett and Russell locality in tall forest [48].

Duck Run. — Formerly a chicle station on the Belize River below Cayo. I was unable to determine its precise location. Also called Benque Ceiba [35].

Eastern Branch of the Belize River. — One of the two main tributaries of the Belize River. Also called Makal River [61].

English Cay. — $17^{\circ} 19'$, $88^{\circ} 02'$. Tiny key 1½ miles southeast of Belize [26].

Freetown. — $16^{\circ} 49'$, $88^{\circ} 18'$. A village on the Sittee River near the coast. An important Blake and Agostini locality [64].

Gallon Jug. — $17^{\circ} 33'$, $89^{\circ} 02'$. A village in northwestern British Honduras. Not established until about 1945. Ornithologically, it is the most thoroughly studied area in the Colony. Elevation 400' [17].

Glover's Reef. — A group of small keys situated between $16^{\circ} 42'$, $87^{\circ} 51'$ and $16^{\circ} 42'$ and $87^{\circ} 47'$. Also spelled Glover Reef [78].

Grassy Cay. — I was unable to find this locality on maps. A Salvin locality situated somewhere in the Turneffe Islands.

Guacamallo. — $16^{\circ} 55'$, $89^{\circ} 02'$. Abandoned camp situated 570 feet above the Eastern Branch of the Belize River at an elevation of 1700' [59]. The river crossing near this point is the Guacamallo Crossing.

Half Moon Cay. — $17^{\circ} 13'$, $87^{\circ} 34'$. Key 48 miles east-southeast of Belize. Best known for its booby colony [37].

Hatchet Cay. — $16^{\circ} 27'$, $88^{\circ} 07'$. Key 17 miles east of Point Placentia [81].

Hick's Cays. — A number of keys a few miles northeast of Belize [11].

Hill Bank. — $17^{\circ} 35'$, $88^{\circ} 44'$. A village at the south end of the Hill Bank Lagoon. Both tall forest and pinelands in the vicinity. An important collecting locality [14].

Hill Bank Lagoon. — Between $17^{\circ} 35'$, $88^{\circ} 44'$ and $17^{\circ} 46'$, $88^{\circ} 39'$. Near the source of the New River. Also called New River Lagoon [9].

Hummingbird Gap. — $17^{\circ} 03'$, $88^{\circ} 34'$. Highest point on the Hummingbird Highway. Tall forest. Elevation about 900' [50].

Hunting Cay. — $16^{\circ} 07'$, $88^{\circ} 16'$. Key 32 miles east of Punta Gorda [91].

Isabella. — $17^{\circ} 37'$, $88^{\circ} 32'$. Village on Belize River [13].

Kendal. — $16^{\circ} 48'$, $88^{\circ} 24'$. Plantation on Sittee River [67].

Lighthouse Reef. — A group of keys between $17^{\circ} 13'$, $87^{\circ} 34'$, and $17^{\circ} 28'$, $87^{\circ} 28'$ [25].

Long Cay. — $16^{\circ} 44'$, $87^{\circ} 48'$. A key in Glover's Reef [75].

Makal River. — See Eastern Branch of the Belize River.

Man-of-war Cay. — About $17^{\circ} 13'$, $87^{\circ} 55'$. A tiny key in the Turneffe Islands [33].

Manatee Bar. — $17^{\circ} 13'$, $88^{\circ} 18'$. At the mouth of the Manatee River. A Peck locality [36].

Manatee Lagoon area. — About $17^{\circ} 12'$, $88^{\circ} 23'$. Peck collected many specimens within a radius of five miles of the point on the map [38].

Manatee River. — From $17^{\circ} 08'$, $88^{\circ} 33'$ to Manatee Lagoon and the sea [39].

Maskalls. — $17^{\circ} 53'$, $88^{\circ} 20'$. Village in northeastern British Honduras [6].

Mauger Cay. — $17^{\circ} 36'$, $87^{\circ} 47'$. Small key at northern end of the Turneffe Islands [12].

Maya Mountains. — The high mountains in the interior of the Colony. They include the Cockscomb Mountains and the Mountain Pine Ridge. The area southwest of localities no. 49 and 70.

McNabb's Water Cay. — $17^{\circ} 23'$, $88^{\circ} 05'$. Small key 10 miles southeast of Belize [23].

Melinda. — $16^{\circ} 59'$, $88^{\circ} 20'$. A village in the valley of the North Stann Creek about 3 miles from the coast.

Middle Cay. — $16^{\circ} 43'$, $87^{\circ} 49'$. A key in Glover's Reef [76].

Middle Long Cay. — $17^{\circ} 17'$, $88^{\circ} 06'$. A key 16 miles south-southeast of Belize [31].

Middlesex. — $17^{\circ} 02'$, $88^{\circ} 32'$. A village near the head of the North Stann Creek valley [21].

Millionario. — $16^{\circ} 46'$, $89^{\circ} 01'$. A camp in tall forest south of the Eastern Branch of the Belize River. Elevation about 2000' [73].

Moho River. — From about $16^{\circ} 13'$, $89^{\circ} 05'$ southeast to the sea. [92].

Monkey River. — $16^{\circ} 21'$, $88^{\circ} 30'$. A village in southern British Honduras situated at the mouth of a river of the same name [85].

Morgan Cay. — I did not find this locality on maps. Berry collected Anous tenuirostris on this key in April 1907. I suspect that it is east or southeast of the mouth of the Manatee River.

Mountain Cow. — $16^{\circ} 47'$, $89^{\circ} 03'$. An Austin site southwest of the Mountain Pine Ridge [71].

Mountain Pine Ridge. — A part of the Maya Mountains. It includes the area on the map from localities no. 57, 59, and 62 east to no. 49. Much of the area consists of hilly pinelands between elevations of 1,000' and 3000'.

Mullins River. — $17^{\circ} 06'$, $88^{\circ} 18'$. A village on the coast of central British Honduras at the mouth of a river of the same name [45].

New River. — From about $17^{\circ} 29'$, $88^{\circ} 45'$ north-northeast to Chetumal Bay [5].

North East Cay. — $16^{\circ} 45'$, $87^{\circ} 48'$. A key in Glover's Reef [74].

North Stann Creek. — From about $17^{\circ} 00'$, $88^{\circ} 32'$ eastward to the sea. Citrus trees are extensively cultivated in the valley [55].

Northern Two Cays. — $17^{\circ} 28'$, $87^{\circ} 28'$. Keys in the northern part of Lighthouse Reef [20].

Old River. — See Belize River.

Orange Walk. — $18^{\circ} 05'$, $88^{\circ} 55'$ [2]. $17^{\circ} 17'$, $88^{\circ} 48'$ [29]. Several specimens in the British Museum, which were collected late in 1887, bear the name "Orange Walk." I suspect these specimens were taken at the more northern of the two towns, which was the more important place. However, Goss recorded observations of ducks on the Belize River near Orange Walk, which is the more southern locality.

Point Placentia. — $16^{\circ} 30'$, $88^{\circ} 23'$. On the southern coast [80].

Pomona. — $17^{\circ} 00'$, $88^{\circ} 22'$. A village in the valley of the North Stann Creek [53].

Pompion Cay. — $16^{\circ} 24'$, $88^{\circ} 09'$. A small key about 23 miles east of Monkey River [84].

Punta Gorda. — $16^{\circ} 06'$, $88^{\circ} 49'$. The largest town in southern British Honduras. Coastal [90].

Regalia. — $16^{\circ} 49'$, $88^{\circ} 22'$. A village on the Sittou River [65].

Rendezvous Point. — $17^{\circ} 32'$, $87^{\circ} 50'$. A part of the Turneffe Islands [16].

Rio Grande. — From $16^{\circ} 15'$, $88^{\circ} 56'$ southeast to the sea [87].

Rio Hondo. — Forms the northern boundary between British Honduras and Quintana Roo, Mexico. Flowing northeast into Chetumal Bay [3].

Rio Mopan. — See Western Branch of the Belize River.

Round Cay. — $16^{\circ} 24'$, $88^{\circ} 06'$. Key about 26 miles east of Monkey River [82].

Saddle Cay. — $17^{\circ} 15'$, $87^{\circ} 32'$. A key in Lighthouse Reef [30].

San Antonio. — $17^{\circ} 04'$, $89^{\circ} 03'$. A village 6 miles south-southeast of Cayo. A number of specimens in the British Museum were collected at this locality. There are other villages called San Antonio in the Colony [47].

San Felipe. — $17^{\circ} 07'$, $89^{\circ} 04'$. A village 3 miles south-east of Cayo. A number of specimens in the British Museum were taken at this locality. [44].

San Pedro Columbia. — $16^{\circ} 16'$, $88^{\circ} 58'$. A village on the Columbia River in southern British Honduras. An important Dennett and Russell site was situated two miles west of San Pedro Columbia at the point where a large spring formed the Columbia River [86].

Sergeant's Cay. — $17^{\circ} 23'$, $88^{\circ} 03'$. A small key 13 miles southeast of Belize [22].

Sibun River. — Flowing northeast from the Mountain Pine Ridge to the sea [21].

Sibun River at the Hummingbird Highway. — $17^{\circ} 08'$, $88^{\circ} 38'$. Forested area [43].

Silver Creek at the Hummingbird Highway. — Silver Creek is a tributary of the Sibun River. This crossing is between localities 43 and 48 on the map.

Sittee Branch of South Stann Creek. — From $16^{\circ} 48'$, $88^{\circ} 39'$ east and southeast to South Stann Creek. Draining the northern slope of the Cockscomb Mountains [69].

Sittee River. — From $16^{\circ} 50'$, $88^{\circ} 34'$ east to the sea [63].

Soldier Cay. — $17^{\circ} 17'$, $87^{\circ} 49'$. A key on the eastern edge of the Turneffe Islands [27].

South Stann Creek. — From the Cockscomb Mountains east-southeast to the sea [79].

South West Cay. — $16^{\circ} 42'$, $87^{\circ} 51'$. A key in Glover's Reef. Also called Southwest Cay, Southwest-of-all Cay [77].

Southern Mountain Pine Ridge. — See Mountain Pine Ridge.

Southern Pine Ridge. — See Mountain Pine Ridge.

Southern Water Cay. — $16^{\circ} 48'$, $88^{\circ} 05'$. A key 13 miles east of the mouth of the Sittee River [66].

Spanish Creek. — From $17^{\circ} 52'$, $88^{\circ} 16'$ north into Crooked Tree Lagoon [110].

Stann Creek. — $16^{\circ} 58'$, $88^{\circ} 15'$. Town at the mouth of North Stann Creek [56].

Temash River. — From the Guatemalan border in extreme southern British Honduras to the sea [93].

Tobacco Cay. — $16^{\circ} 54'$, $88^{\circ} 06'$. A key 11 miles southeast of Stann Creek [60].

Toledo District. — An administrative division of British Honduras. It includes most parts of the Colony south of Point Placentia. Districts in the Colony undergo frequent boundary changes.

Toledo Settlement. — $16^{\circ} 07'$, $88^{\circ} 23'$. Formerly a village 4 miles west of Punta Gorda [89].

Tom Owens Cay. — $16^{\circ} 11'$, $88^{\circ} 14'$. A key 39 miles east northeast of Punta Gorda [38].

Turneffe Islands. — A group of small islands about 20-25 miles east of Belize. Appear on many maps as a single island [24].

Twelve Mile Station. — Twelve miles up North Stann Creek, A railroad once ran through the valley. A Schmidt locality.

Twenty-two Mile Station. — Twenty-two miles up North Stann Creek. A Schmidt locality.

Victoria Peak. — $16^{\circ} 47'$, $88^{\circ} 38'$. In the Cockscomb Mountains. The highest point in the Colony. Elevation 3700' [70].

Western Branch of the Belize River. — One of the two main tributaries of the Belize River. Also called Rio Mopan [41].

Western District. — See Cayo District.

Wild Cane Cay. — A small key situated about 10 miles south of the town of Monkey River. A Peck locality.

Yacacos Lagoon. — $16^{\circ} 17'$, $88^{\circ} 37'$. A coastal lagoon in southern British Honduras. A Peck locality eight miles southwest of locality no. 85.

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AUTOBIOGRAPHY

Stephen M. Russell was born on September 16, 1931, in Hot Springs, Arkansas. He graduated in 1953 from Virginia Polytechnic Institute in Blacksburg, Virginia, with the degree of Bachelor of Science in Biology. Since September 1958, he has been a member of the faculty at Louisiana State University in New Orleans. He became a candidate for the degree of Doctor of Philosophy in 1959.

EXAMINATION AND THESIS REPORT

Candidate: Stephen Mims Russell

Major Field: Zoology

Title of Thesis: A Distributional Study of the Birds
of British Honduras

Approved:

Sergeant Henry J.
Major Professor and Chairman

Max Goodrich
Dean of the Graduate School

EXAMINING COMMITTEE:

Harvey Roberts
H. Bruce Bondrean
George Kent
Clair A. Brown
Harry Bennett

Date of Examination:

15 January 1962