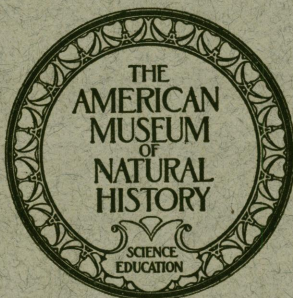


THE BIRDS OF MT. AUYAN-TEPUI, VENEZUELA

BY E. THOMAS GILLIARD



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Article IX.—THE BIRDS OF MT. AUYAN-TEPUI, VENEZUELA

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INTRODUCTION

The following annotated list of the birds of Mt. Auyan-tepui treats 305 species and subspecies, representing 232 genera, 54 families and 18 orders. It is based on the collection obtained by the Phelps Venezuelan Expedition of The American Museum of Natural History at Mt. Auyan-tepui, Venezuela, during the winter of 1937-1938 and is intended as a sequel to the Upper Zonal Birds of Mt. Auyan-tepui by Frank M. Chapman.¹

It is difficult to express appropriately my appreciation and gratitude to Dr. Frank M. Chapman for the unfailing support and encouragement which he has always extended to me. I am also greatly obligated to Mr. John Todd Zimmer for his generous coöperation, guidance and advice in ornithological problems.

Mr. W. H. Phelps, in addition to bearing the expenses of the expedition, the laboratory work and the printing, has tirelessly given of his time and knowledge of Venezuelan ornithology. I am deeply grateful for the opportunities he has given me.

The Works Progress Administration has

provided efficient assistance in the person of Mr. Joseph Lettl. I am most grateful to him for his translations and secretarial work.

Mt. Auyan-tepui, an immense sandstone plateau, rises near the northern limit of the Guiana Highlands, a region situated in southern Venezuela, western British Guiana and extreme northern Brazil. With the exception of Matto Grosso, the Guiana Highlands probably comprise the largest little known area in the New World; they embrace more than 40,000 square miles.

Inasmuch as our survey is based on a collection obtained in an area of about 50 square miles it is immediately apparent that we are dealing with a region in which the avifauna is both diversified and abundant.

Dr. Frank M. Chapman in 1912 inaugurated a series of research expeditions into the Guiana Highlands. His interest regarding these highlands had been aroused by the reports of early explorations contained in the following collection:

1842, The Richard Schomburgk collection from Mt. Roraima obtained four years after dis-

¹ 1939, Amer. Mus. Novit., No. 1051.

covery of the mountain in 1838 by his brother, Robert Schomburgk. In his report on this collection Cabanis¹ described eight species as new.

1883, The Henry Whitely collection which revealed the richness of the indigenous avifauna of Roraima.

1894, The first Frederick V. McConnell and John J. Quelch collection from Roraima.

1898, The second Frederick V. McConnell and John J. Quelch collection from Roraima.

In 1912 the American Museum dispatched Leo E. Miller and F. X. Iglseider to collect on Mt. Duida toward the headwaters of the Orinoco River. Shortly after reaching the foot of Mt. Duida Iglseider fell desperately ill with a complication of beriberi and malaria, and in order to save his life Mr. Miller was compelled to return with him to San Fernando.

In 1927 the American Museum sent its first expedition to Mt. Roraima. Specimens of plants and birds new to science were procured and they indicated the need of further study and exploration in that region. The fact that some of the birds obtained on Mt. Roraima bore Andean affinities indicated that perhaps they were part of a dying fauna which formerly had existed over a great part of the unexplored territory which extends in a broad belt to westward. If such were the case, it certainly was within the bounds of possibility that there, high on the remnant plateaus, some of which were visible from the top of Mt. Roraima, were the last remains of an ancient life—remnants of the life which had thrived eons ago, before the slow process of erosion had cut sandstone cracks into giant canyons and into great valleys hundreds of miles in width.

In 1928, hardly a year after the Museum Expedition to Mt. Roraima, one was sent to Mt. Duida. Unlike Mt. Roraima, this mountain, situated about four hundred miles to the southwest, on the western edge of the Guiana Highlands, had never been studied or climbed. The theories inspired by the collections from Roraima were mirrored in the abundant material obtained on the slopes and summit of Duida. Nearly one-half of the birds peculiar to the Rorai-

man-Duidan fauna were found by Dr. Chapman to have their nearest relatives in the Subtropical and Temperate Zones of the Andes; 34 were found to be common to both mountains; 28 were common to both mountains as representative forms; 17 were found on Roraima only; and 7 were found on Duida only.

In his treatise on the Upper Zonal Birds of Mts. Roraima and Duida,² Dr. Chapman wrote: "Remembering that Roraima and Duida are nearly 400 miles apart, and that, although the intervening area may have subtropical altitudes, both mountains are isolated, at least from their immediate surroundings; this surprising close relation has a definite significance of the first importance. It means that the mountains should be considered as parts of a faunal unit, and that in its major details, at least, the faunal history of one is essentially that of the other." That this second expedition had by no means completed the need of field studies is clearly seen in the following: (*op. cit.*) "Here, then, is proof that we are not dealing with the fauna of a single mountain island and its nearby dependencies but with that of an area which, as previously stated, extends, or extended at favorable altitudes, over 40,000 square miles."

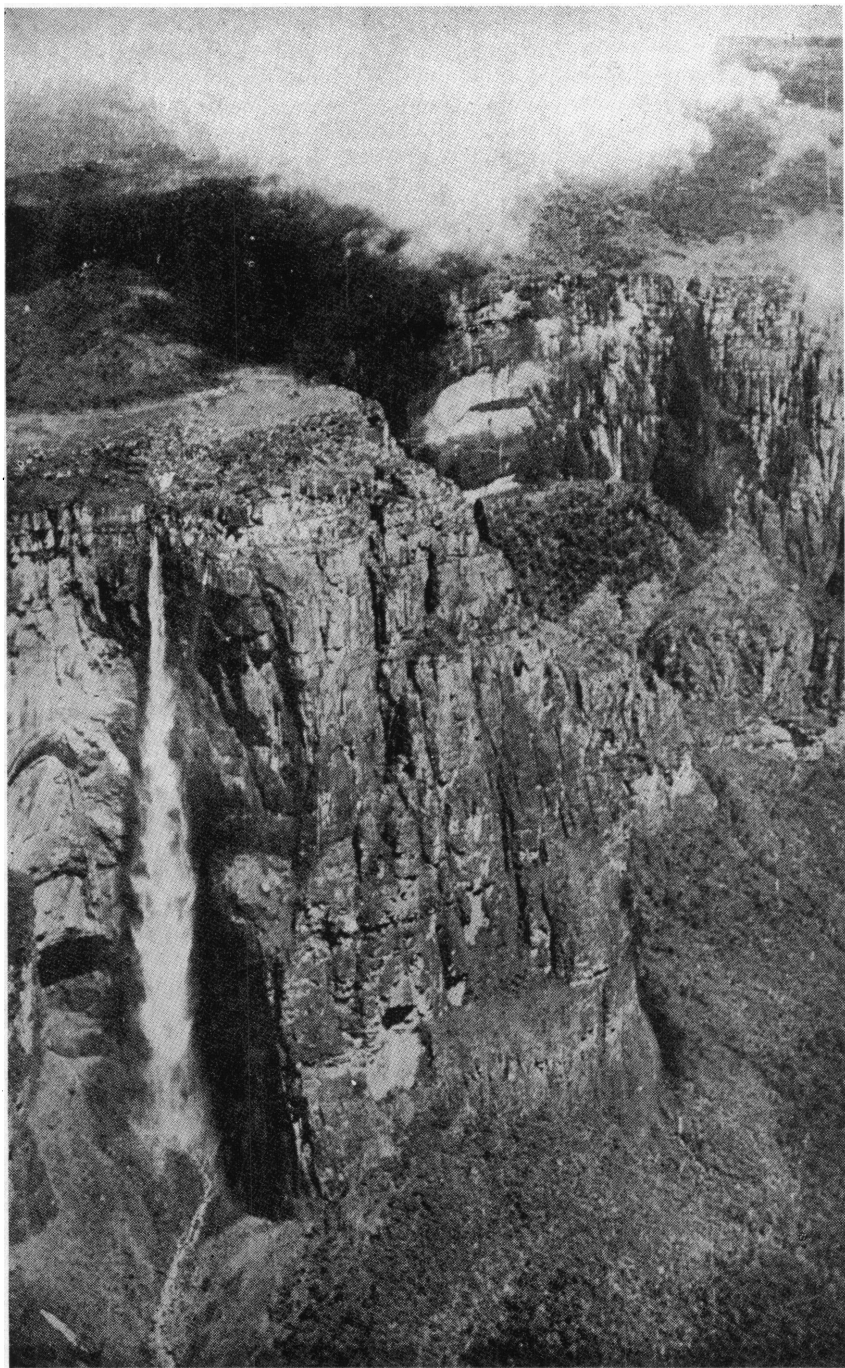
Coincident with the depression, no financial support could be found to carry on the work which had been planned. Museum authorities wanted to send an expedition into the midst of the unknown area, hoping to find highlands of sufficient altitude to sustain a flora and fauna generally similar to that which had been discovered on Mts. Roraima and Duida.

In 1937, ten years after the Roraima venture, W. H. Phelps of Caracas, a keen ornithologist, wrote to Dr. Chapman announcing the discovery of a giant tableland, 8400 feet high, called Mt. Auyan-tepui, at almost precisely the location chosen by the American Museum for a future expedition. Phelps urged that a party be dispatched to study the region and offered to defray its expenses.

The United States Department of State approved the plan and the Government of

¹ 1848, Cabanis, J., in Schomburgk, Richard, "Reisen in British Guiana in den Jahren 1840-1844," III, Vogel, pp. 662-765.

² 1931, Bull. Amer. Mus. Nat. Hist., LXIII, p. 34.



Courtesy "Revista de Fomento"

Fig. 1. Airplane view of Angel Falls on the northeastern rim of Mt. Auyan-tepui. A Venezuelan Government report (1939, "Revista de Fomento," No. 19, p. 635) estimates the height as more than 1000 meters (3300 ft.). They have never been approached except by plane. This would make these falls by far the highest in the world.

Venezuela, whose president, Dr. Eleazar Lopez Contreras, took special interest in the undertaking, countenanced it by granting many invaluable facilities.

Grateful acknowledgments are extended to Dr. Victor M. Lopez of the Ministerio de Fomento, the American Minister at Caracas, Mr. Meredith Nicholson, and the Consul, Mr. Stewart E. McMillin; Mr. W. L. Mellon, who offered the facilities of the

Gulf Oil Company establishments at El Tigre and at Ciudad Bolivar, where the manager, Mr. Brossard, provided every convenience.

We are all deeply obligated to Mr. N. Valery Agostini of Ciudad Bolivar, who for almost four months painstakingly maintained daily contact with our short wave radio and attended to our correspondence.

HISTORY

Attention was called to Mt. Auyan-tepui early in 1937 by "Jimmy" Angel, an American aviator. Angel's story of the discovery of this mountain is as romantic as its appearance. I quote G. H. H. Tate¹:

who was engaged in mapping the course of the Río Carrao (a tributary of the Río Caroni, which flows close to the northern cliffs of Mt. Auyan-tepui), arrived on foot at the southern base of Mt. Auyan-tepui he found

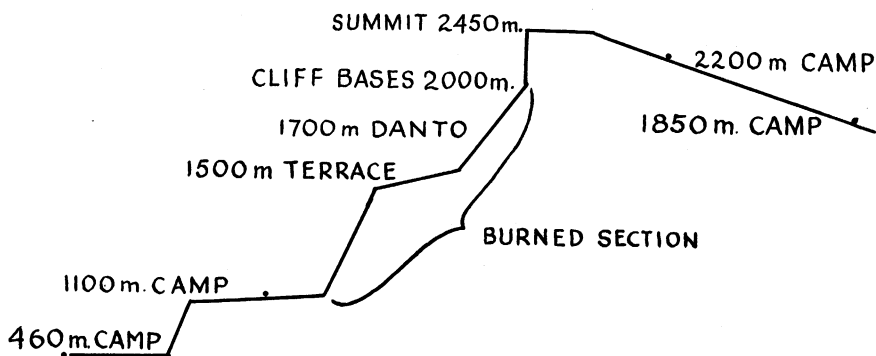


Fig. 2. Diagram showing relative position of collecting stations.

"About 1921, James Angel, an aviator, met a prospector in Panama who claimed to have entered Venezuela from Brazil and to have discovered and ascended Auyan-tepui, on the summit of which he had found a river rich in gold." Jimmy Angel claims that the prospector showed him the mountain on a reconnaissance flight. The facts are that when Captain Felix Cardona,

Jimmy Angel there. Cardona had walked around the mountain when he heard from the Indians that another white man was in the region. The real discoverer of the mountain is not known.

Captain Felix Cardona collected the first ornithological specimen on October 7, 1937, a swift which he found dying. It is the first record of *Cypseloides fumigatus* for Venezuela.

¹ 1938, Geo. Rev., XXVIII, No. 3, p. 452.

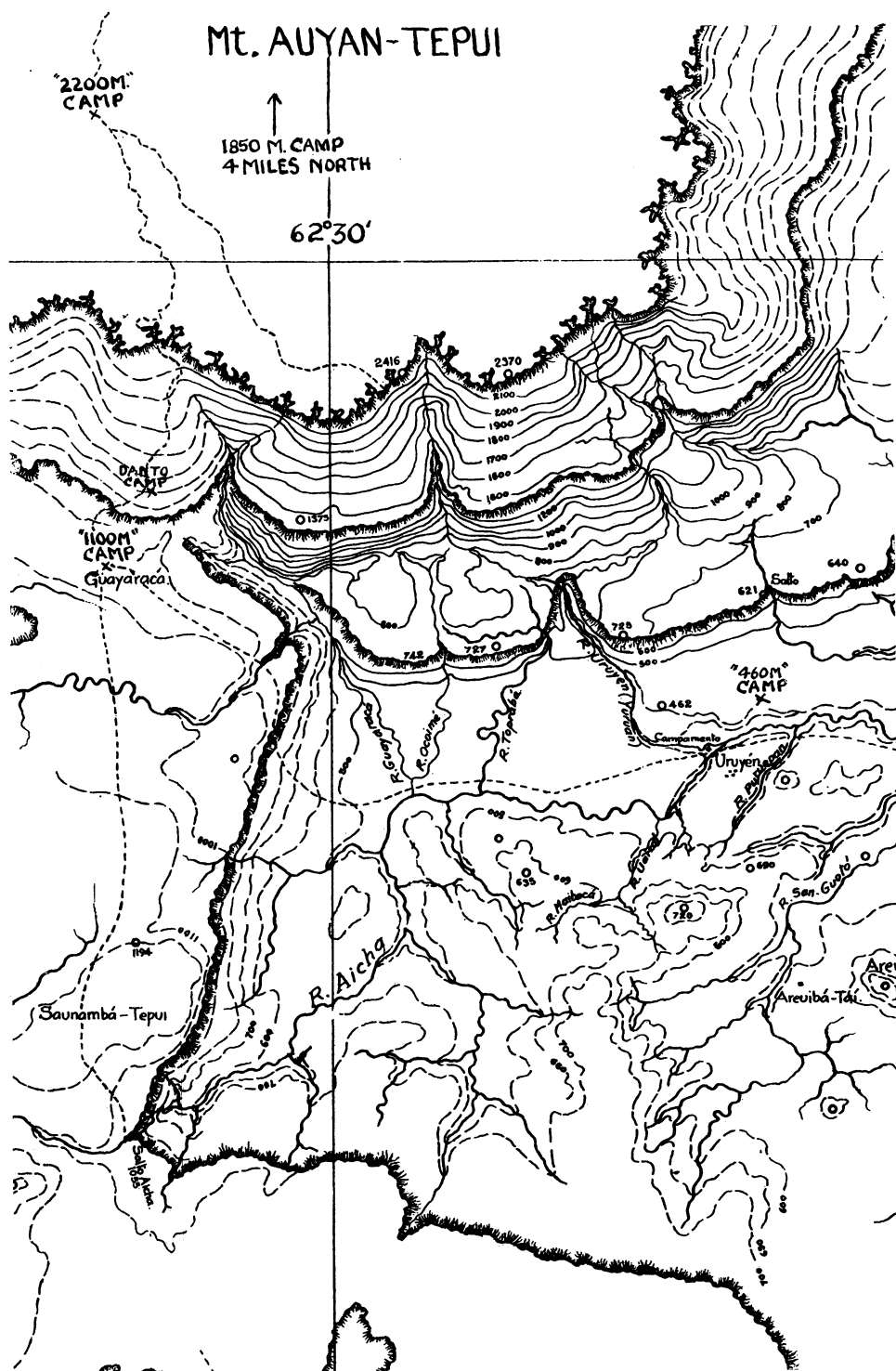


Fig. 3. Venezuelan Government map (1939, "Revista de Fomento," No. 19) of part of Camarata Valley and of Mt. Auyan-tepui, on which we have indicated the position of our four camps.

THE WILLIAM H. PHELPS EXPEDITION TO MT. AUYAN-TEPUI

In addition to Mr. Phelps and his son, William H., Junior, and Capt. Felix Cardona (in charge of transport), the expedition included Dr. G. H. H. Tate, leader of the Roraima and Duida explorations, with his assistant in mammals, Mr. James A. Dillon, Mr. William F. Coultas and the author. It sailed from New York on October 14, 1937, and approached Mt. Auyan-tepui from the north by way of Ciudad Bolivar.

On the morning of November 30, 1937, our personnel, equipment and supplies were

flown from the airfield on the outskirts of Ciudad Bolivar, to the 460-meter camp on a large savanna near the base of Mt. Auyan-tepui. Practically inaccessible by land, we reached this landing place in 90 minutes. Four round trip flights of the Lockheed Electra, piloted by Colonel Eleazar Lopez Henriquez of the Venezuelan Aero-Postal Service, were required to move us and our belongings. Collecting was begun immediately and continued until March 15, 1938. During that period 2028 specimens of birds were obtained.

MT. AUYAN-TEPUI COLLECTING STATIONS

460 METER CAMP.—Situated in fertile surroundings, it offered a variety of Tropical Zone environments. The camp itself was situated near the edge of the sandstone wash that bordered the mountain and the igneous area that stretched out for an undetermined distance to the south. It is noteworthy that the flora of the igneous section was a great deal richer than that of the sandstone area. The Indian gardens, for example, were without exception in the forests on the south side of the Aicha River well within the borders of the igneous area. The large llano-like savannas, one of which served admirably as our airfield, were found only on the sandstone deposits.

The Río Aicha, a small tributary of the Río Akarón (which joins the Carrao, to reach the Caroni River) that flows through the savannas, was frequented by a few small crocodiles and by such birds as Cormorants, kingfishers, herons, sandpipers and Bank Swallows. Its banks were a no-man's land of bamboo thickets and tall palm fencing in which were found a variety of birds: parrots, hummingbirds, flycatchers, Chalchalacas, hawks, Palm Swifts, etc. Frequently the river bed fanned out and lost itself in rich swampy areas of roughly a dozen acres in extent. These were intermittently spotted with small lily ponds in which were found wading birds and, rarely, the majestic Giant Jabiru. The abundance of fruit and flowering plants, in this vicinity, enticed many kinds of pigeons,

toucans, parrots and macaws, along with many of the nectar-feeding species. The unusual abundance of insects served to make these regions little utopias for insectivorous birds. It is worthy of mention that Gallinules and Jacanas were never observed.

From the air the Río Aicha, with its border of thick growth, looked like a green snake stretching out over the yellowish-gray savannas. Semi-arid stretches of terrain, almost half a mile wide on either side of the river at the location of the airfield, supported little more than coarse grass and small sage-like bushes. Annually, at the height of the dry season, the Indians set fire to them. They do so as a means of insect and snake control. Occasionally their fires burn through the driest parts of the upland forest and gain access to the talus slope. The fire which destroyed much of the 1500- to 2000-meter forest, approximately ten years ago, is probably an extreme example of damage done by the Indians to their own lands during periods when the forests are abnormally dry. A fire which was set on the airfield savanna during our stay, in March, 1938, burned the southern talus. For four days and nights we followed its progress up the slopes. In the savanna environment, inhabited by grasshoppers and termites, we collected the long-tailed finch, *Emberizoides herbicola*, Savanna Sparrows, the rare little Schomburgk Rail, Pipits, goatsuckers, swallows, Giant Swifts, etc.

The hard sandy savannas, treeless and only rarely moist, are bordered on the south by a Tropical rain forest as dense and varied as any Central American jungle. Throughout this jungle were Indian trails which proved invaluable to us. They were made by the inhabitants of the Arecuna Indian village of Uruyén which is located about half a mile south of the airfield camp and which has a population of about thirty-five. It is named for one of the two streams, the Aicha and Uruyén, which join nearby. The Uruyén begins as a thin waterfall on the southern cliffs of Mt. Auyan-tepui.

1100 METER BASE CAMP (Guayaracá Camp of Capt. Felix Cardona).—Altitude 1038 meters. This camp, roughly 9 miles west of the airfield, proved to be ideally situated both in relation to collecting and as a base camp for our ascent of the mountain. It was occupied continuously from December 2, 1937, to February 28, 1938. A variety of collecting localities were easily accessible. The little airfield used by Angel consisted of a gently rolling savanna bordered on the north by the band of tall dense forest which represented the junction of Upper Tropics and Lower Subtropics. On the south it was bordered by a swampy area approximately five acres in extent, and, behind this, on higher ground, a semi-arid sand and rock slope several miles long and half a mile wide which was sparsely covered with bushes and spaced-out trees. We collected over a wide area, aggregating about ten square miles, between the cliffs overlooking the 460-meter level and the steep inclines of the talus slope. Old Tapir trails leading through rocky savanna and patches of small timber, scar the 1100-meter talus step between the big forest and the cliffs. Several small streams skirted by thick growths of small trees and bushes, drain the area and convey seepage from above. The savannas, and even parts of the area where Angel landed his ship so masterfully, are roughened by outcroppings of nearly flat beds of sandstone.

At the cliffs, where currents of air are fumed upward, swifts and swallows were to be found almost any day effortlessly rid-

ing the updrafts. Elsewhere on the savannas and in the thinned-out stubby trees, parrots, hawks, tanagers, puffbirds, hummingbirds, Pipits, Larks, pigeons, goat-suckers, swifts and snipes, etc., were collected.

The forest, which had a crown average of about one hundred feet, contained a fascinating assortment of animals and birds, perhaps largely because it was so far removed from the Indian village. In it were found White-lipped peccaries, deer, Howling monkeys, anteaters, Partridges, wild turkeys, the Cock of the Rock, Capuchin Birds, etc., and during the courtship season of the Bell Bird, it rang incessantly with their penetrating, almost unbelievably bell-like tolls.

Above the 1100-meter shelf the flora and fauna rapidly thinned out. Little collecting was undertaken on the talus between 1500 meters and the plateau because of an unnatural desolate condition brought about by a fire which about ten years ago destroyed the talus. I quote my description¹ which appeared in Dr. Chapman's paper on the Upper Zonal Birds of Auyan-tepui. "Between ten and fifteen years ago a forest fire annihilated the growth on the talus and much of the plateau of Mt. Auyan-tepui. Gaunt denuded forests of seared trunks attest to the severity of this fire in the region of the first steep talus extending upward from the 1100-meter level to the crest of the 1500-meter terrace. Only scrub growths and plants cling to the steep inclines and, as one proceeds higher across the gentle slope (1500 meters), to the top of the last steep buttress of Mt. Auyan-tepui (2000 meters), remnants of a different sort of forest, at times resembling an entanglement of Rhododendron-like proportions, are to be seen in the maze of charred limbs through which one must crawl. Elsewhere the area is matted with peaty soil which covers all but the largest and most recently fallen boulders. Numerous bushes, ground orchids and very few small trees are to be seen. The barren starved appearance of this slope, which lies in the 'cloud-trap' area, is perhaps due to the

¹ 1939, Amer. Mus. Novit., No. 1051, p. 3

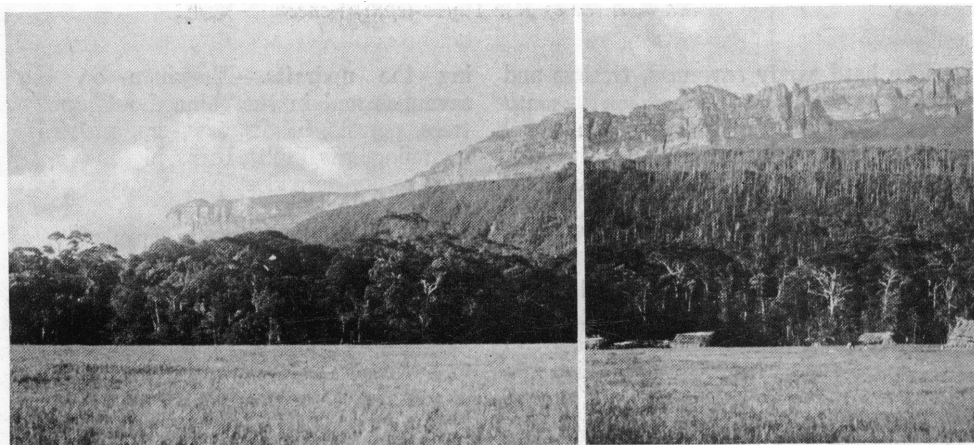


Fig. 4. The "1100-meter" camp. The southwest wall, "Sanjón" (second section from left). "South



Courtesy Amer. Geo. Soc.

Fig. 5. One aspect of southwest plateau. "First Wall," one of the cliffed ridges that prevent free exploration of the plateau.

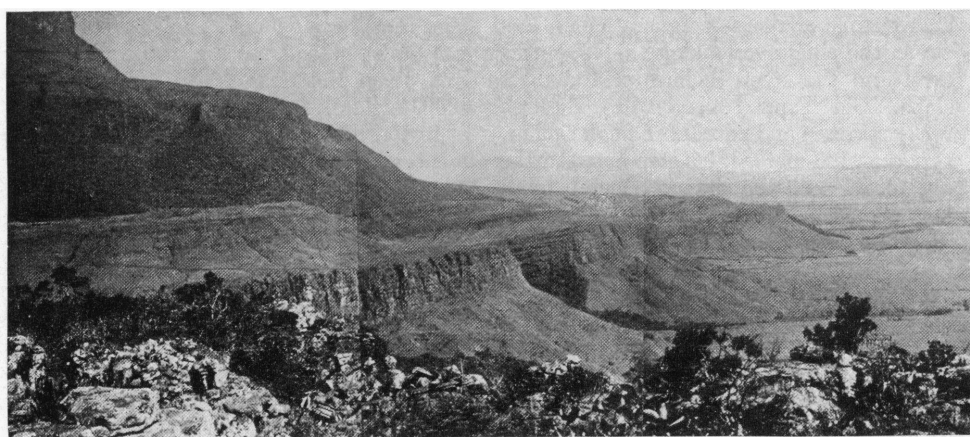
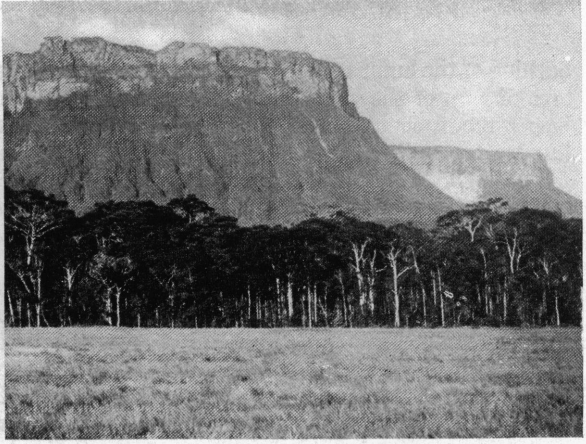
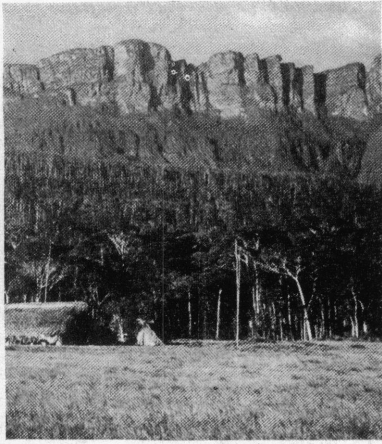


Fig. 7. Camarata Valley (460-500 m.) looking east from crest of "anticline" (1100 m.). "X" "the dome" beyond it. Tip of Awarapaima extreme right. The forest grows upon country rock



Courtesy Amer. Geo. Soc.

Point" bastion and "South-southeast Point." Note the burnt forest on the "1500-meter" terrace.

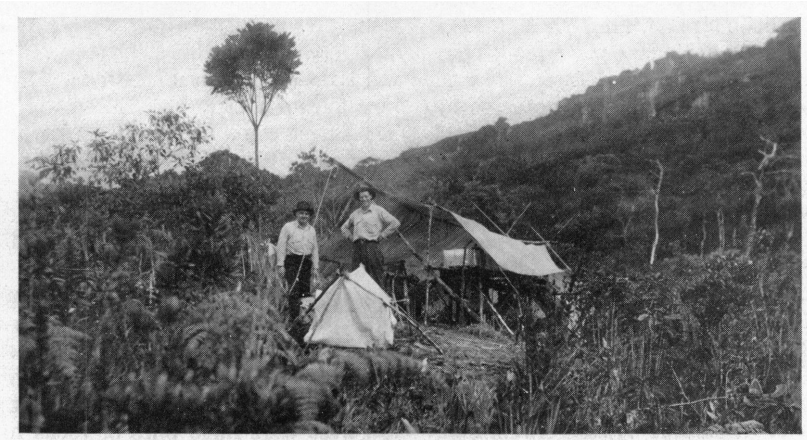
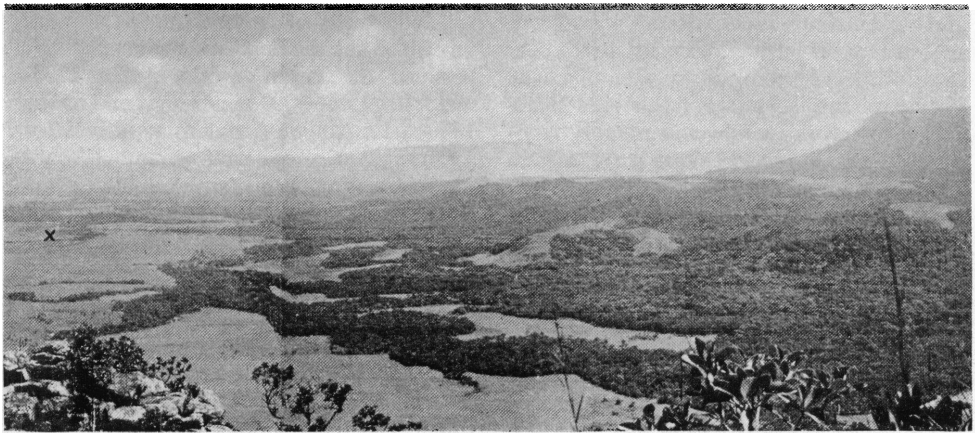


Fig. 6. Mr. William F. Coultas and Dr. G. H. H. Tate at the "1850-meter" camp.



Courtesy of Amer. Geo. Soc.

indicates 460-meter camp. At left, 1000 and 1500-meter terraces of Auyan-tepui. Caraieucu with of intrusive type.

burning of the humus and consequently the breaking up of the water mat. It can no longer retain enough moisture to last out the dry season."

THE 2200 METER CAMP (actually 2226 meters).—This was the first of two main focal points of collecting on the plateau and the highest camp established. It was located on the edge of a creek about a mile north of the southern cliffs which overlook the base camp. Like practically all of the plateau which we were able to inspect, the place was mostly made up of eroded rock floors, split frequently by pressure cracks and strewn profusely with boulders. Our tents were pitched on the edge of an enlarged pressure crack through which coursed a little stream, draining an area of perhaps three-quarters of one square mile. To the north and east the decomposed rock and meager vegetable matter, gathered by the stream, had accumulated to form a field of about fifty acres in extent, by far the largest and richest found at this altitude. Most of this boggy humus field was overgrown with a *Bonnetia roraimae* forest averaging about fifteen feet in height. Here and there throughout the forest were little swamps in which pitcher plants, xyrids, pipeworts, etc., were found, and higher on the rock basin where more arid joint cracks literally spider-webbed the region, *Bonnetia crassa*, *Crepinella*, *Brocchinia reducta*, grasses, sedges and spiny bromeliads thrived. Part of this remote and inaccessible patch of forest, all but surrounded by rock without a vestige of soil, had been burned. To the north, fire had killed everything in an area of about six acres but, aside from this, the 2200-meter forest was virgin and roughly comparable to the rocky slope 1100 meters below it and, as the crow flies, hardly two miles distant. The sharp contrast between

the forest area of this camp and that of the 1100-meter level might be compared to that which exists between a patch of abandoned hedges and a "stand" of big oak trees.

THE 1850 METER CAMP.—This camp was located only 448 meters below the first plateau collecting station. It was situated about four miles from the southern cliffs which overlook the base camp and was placed at a point as near the center of the tableland as we were able to reach. A stream of about sixteen feet in average width flowed near our tents. This, the largest watercourse found on the plateau, drained about twenty-five square miles of the southern plateau and in the course of time had cut a giant canyon. Fringed along this stream, in the vicinity of camp and blocked by the steep canyon walls, was a rich Subtropical forest startlingly different from that at the 2200-meter camp. The forest contained no trees of *Bonnetia roraimae*, which comprised ninety-five per cent of the growth in the fifty-acre forest only 448 meters above. Here trees approached two feet in diameter, and their crowns often reached 70 feet up while throughout the forest epiphytic arums and vines were abundant. Although we never succeeded in reaching the northern end of this fringe of forest it probably covers an area of at least 35 acres. Immediately to the west were huge piles of rocks heaped hundreds of feet high, which were all but impassable. Here, and to the south, a labyrinth of cliffs, fissures and tangled brush discouraged exploration. It appears probable that the floral contrasts exhibited between the virgin forests at the 1100-meter level, the 2200-meter level and at the 1850-meter canyon (made more impressive by the vast areas of barren ground and bare rock separating them) may well have some influence on faunal relationships.

OUTLINE OF GEOLOGY OF THE GUIANA REGION

I quote Dr. G. H. H. Tate¹: "In the broadest sense the Guiana region can be considered as the whole of that part of South America embraced by the connected

waters of the Orinoco, Cassiquiare and Amazon Rivers. Five countries, Venezuela, Brazil, and British, French and Dutch Guiana, contribute to its composition. The term Guiana Highlands represents a more restricted usage: Characteris-

¹ 1939, Bull. Amer. Mus. Nat. Hist., LXXVI, Art. V, p. 151.

tically it refers to those mountains (and included valleys) of the area composed of sandstones and quartzites. Chapman (1931) in his treatment of the birds of Duida further limits the term by confining it to those parts of the area reaching 4000 feet or more above sea-level. In practice it has been found that many species of plants and animals are more closely associated with the actual distribution of the sandstones (particularly the unforested portions) than with the usual major factors of distribution, temperature and humidity. A surprisingly large number of plants and animals found at altitudes of 6000 to 8500 feet above sea-level occur also as low as 2000 to 3000 feet in environments with es-

entially the same geological formation but differing in temperature and rainfall. The sandstone formation, now so greatly eroded and dissected that only fragments are left, once covered an enormous area. Originally it reached at least from the most westerly part of the Orinoco River to the Potaro and probably continued to an outlier in Dutch Guiana; and from about level with the mouth of the Paragua River south to the Humirida ('Pacaraima') Mountains forming the boundary between Brazil and Venezuela. Sandstones have also been reported from the eastern side of the Colombian Andes. Though they may be homologous with the Guiana series, little seems to be known about them."

REMARKS ON THE DISTRIBUTION OF FORESTS AND SAVANNAS

Dr. G. H. H. Tate¹ describes the floral distribution as follows:

"Tropical forest occupies almost all of the area not taken up by savanna and sandstone plateau. It covers the coastal Guianas and extreme east of Brazil north of the Amazon as far as the principal divide, with the exception of the Rupununi area, in which the height of land falls almost to sea-level and the Brazilian grasslands invade British Guiana extensively. It is said to be continuous along the coast strip, across the islands of the Orinoco delta to the forest of eastern Sucre, but inland it terminates a little north of the Cuyuni.

"West from the Cuyuni, a belt some fifty miles wide crosses the Caroni and connects with the Caura forests, which in turn follow the foothills of the mountains adjoining the right bank of the Orinoco until they connect with the interminable Río Negro-Amazonian forests. These last are apparently continuous eastward (except a few tiny areas of savanna at the base of Duida) over the Parima Mountains to near the Río Branco, where the north Brazilian savannas commence.

"On the south side of the Guiana uplands

a thin and very broken band of forest extends from the Parima range, along the north side of the Uraricoera and Surumu Rivers to join the Guiana forest mass.

"The interior of the mountain area may be thought of as chiefly forested west of the Caura, and to the east of it as chiefly savanna land.

"Savannas occupy only about one-sixth of the Guiana region. On the northern edge of the Guiana region the llanos of Venezuela cross the Orinoco and extend, particularly at their eastern end, south almost to the Cuyuni and Yuruán.² The great area east of the Branco lying between the Amazon and the Guiana mountains is also chiefly savanna-covered. Both the north Brazilian savannas and the llanos give off branches which reach considerable altitudes under suitable conditions; possibly at a few places they almost unite. These higher savanna areas occur all about Roraima and Auyan-tepui. The 'Grand Sabana' of the upper Caroni belongs to the high savanna system. The savannas (3000-4500 feet) have their principal biotic affinities with the Brazilian grasslands."

¹ 1939, Bull. Amer. Mus. Nat. Hist., LXXVI, Art. 5, p. 152.

² Mr. M. A. Carriker, who visited the Yuruán in 1910, has described the locale to me recently.

NOTES ON CLIMATOLOGY

Dr. G. H. H. Tate¹ describes these conditions as follows:

"Meteorological observations were carried out as opportunity permitted at the collecting stations. General weather conditions at the stations may be described thus:

"CAMARATA VALLEY (460 METERS)

"End of November: Heavy ground mists in the early morning, rising up the mountain slopes by 9.00 A.M.; clear and sunny until 3.00 or 4.00 P.M. when rain storms accompanied by lightning and strong east winds developed; evenings generally clear.

"Mid-January: A stormy period, with northeast winds and some rain, lasting three days preceded and followed by a long period of fair, dry weather, with southeast winds.

"Feb. 15-Mar. 15: Very dry and hot; southeast breeze, except Mar. 12-14, when unsettled, showery, with northeast winds.

"THE '1100 METER CAMP'

"Early December: Mornings usually clear, followed by fair weather until afternoons, when between 3.00 and 5.00 P.M. violent storms of winds and lightning often developed.

"Mid-January: Fair weather, preceded by heavy mists, which cleared away about 9.00 A.M.; no electric storms but occasional showers from clouds gathered in the lee of the southwest face.

"February: Morning mists until 11.00 A.M. and often all day, but many bright, fair days; late February afternoon showers from northwest; one to two rainy days.

"DANTO OVERNIGHT CAMP '1900 METERS'

"This cloud-belt station remained very wet during December. In the two dry months, January and February, the weather followed closely that of the '1100-meter camp': several dry, sunny days below were likely to be reflected in the weather at Danto.

"THE '2200 METER CAMP'

"Dec. 10 to early January: Generally wet, with several consecutive days of rain and fog; one or two fair days and one short dry spell.

"January: First part clear and dry, but weather unsettled with mist and rain from the 21st to end of month.

"THE '1850 METER CAMP'

"January: Reflected weather of '2200-meter camp.' But more sheltered and rather drier, with many more hours of sunshine; weather bad from the 21st to the end of the month.

"This synopsis, although it covers only the period December to mid-March, represents dry-season conditions for 1937-1938. It can be compared with the weather observations taken at Mt. Duida between October, 1928, and March, 1929. There is undoubtedly a prolonged and severe wet season that includes most of the rest of the year. Evidence of this in the form of dried-up swamps and nearly dry water-courses and waterfalls was ample. In exceptional years the dry period becomes a drought. In such seasons savanna fires, started daily by Indians, may sweep the forests and reach the mountain tops, where they do untold harm to the vegetation and humic soil."

THE GEOGRAPHICAL STATUS OF MT. RORAIMA BIRDS

It was Dr. Chapman who in 1929, in his "Description of New Birds from Mt. Roraima"² first righted the concept that Roraima birds were not Venezuelan but exclusively British Guianan. He gave the Roraima collecting localities of the Lee Garnett Day Expedition of The American Museum of Natural History (Arabupu,

Paulo, Philipp Camp, Rondon Camp, Summit Camp) as in Venezuelan territory. I follow W. H. Phelps³ in ascribing a Venezuelan range to all birds ever recorded from the vicinity of Mt. Roraima and Mt. Kukenam, and consequently deny a British Guianan range to the following Mt. Auyan-

¹ 1938, *Geo. Rev.*, XXVIII, No. 3, p. 466.

² 1929, *Amer. Mus. Novit.*, No. 341, pp. 1-7.

³ 1938, Aug.-Sept., *Bol. Soc. Ven. Ciencias Nat.*, Caracas, No. 36, pp. 83-95. "The Geographical Status of the Birds Collected at Mt. Roraima."

tepui species which have been recorded from the neighborhood of these two mountains but, as far as I know, from no other British Guiana locality.

Colibri germanus
Trogonurus personatus roraimae
Automolus roraimae roraimae
Lochmias nematura castanonota

Thamnophilus insignis
Schistocichla leucostigma saturata
Myrmothera simplex simplex
Euscarthmornis russatus
Mecocerculus leucophrys roraimae
Tyranniscus gracilipes gracilipes
Troglodytes rufulus rufulus
Sturnella magna monticola
Tangara xanthogastra xanthogastra
Catamenia homochroa duncani

NEW BIRDS FROM MT. AUAYAN-TEPUI

*Glaucidium brasilianum olivaceum*¹
*Agyrtrina lactea zimneri*²
*Piculus rubiginosus viridissimus*¹
*Euscarthmornis margaritaceiventer auyantepui*²

*Oxyruncus cristatus phelpsi*³
*Diglossa major gilliardi*¹
*Atlapietes personatus collaris*¹

MIGRANTS FROM NORTH AMERICA

Actitis macularia
Hirundo rustica erythrogaster
Hylocichla minima aliciae
Vireo virescens virescens
Dendroica aestiva aestiva

Dendroica breviunguis
Seiurus noveboracensis noveboracensis
Setophaga ruticilla
Piranga rubra rubra

EXTENSIONS OF RANGE TO VENEZUELA

*Tinamus major major*⁴
Botaurus pinnatus
Euxenura galeata
Accipiter pectoralis
Leucopternis melanops
Micrastur ruficollis gilvicollis
*Laterallus viridis viridis*⁴
*Capella undulata undulata*⁴
*Pyrrhura egregia*⁴
*Touit purpurata purpurata*⁴
*Tyto alba hellmayri*⁴
*Ciccaba virgata macconnelli*⁴
*Nyctibius griseus griseus*⁴
Chaetura rutila rutila
Cypseloides fumigatus
Reinarda squamata squamata
Threnetes leucurus leucurus
*Phaethornis augusti incanescens*⁴
Polyplanta aurescens
Trogonurus curucui curucui
Notharchus hyperrhynchus hyperrhynchus
Automolus rubiginosus obscurus

Sclerurus caudacutus insignis
*Corythopsis torquata anthoides*⁴
Cotinga cotinga
*Xipholena punicea*⁴
*Perissocephalus tricolor*⁴
*Procnias alba*⁴
*Chloropipo uniformis uniformis*⁴
Tyranneteus virescens
*Corapipo gutturalis*⁴
Coryphotriccus parvus parvus
Terentotriccus erythrurus erythrurus
*Platyrinchus coronatus gumia*⁴
*Elaenia ruficeps*⁴
Neochelidon tibialis griseiventris
Microcerculus bambla bambla
Ramphocaenus melanurus albiventris
Dacnis lineata
Tanagra cayennensis
*Tanagra plumbea*⁴
*Tangara gyrola gyrola*⁴
*Thraupis episcopus episcopus*⁴
Lanio fulvus

SUBTROPICAL FORMS FOUND ON MT. AUAYAN-TEPUI

Caprimulgus longirostris roraimae
*Phaethornis augusti incanescens*⁵
Campylopterus hyperythrus
Colibri germanus
Waldronia milleri

Trogonurus personatus roraimae
Aulacorhynchus derbianus whitelyanus
*Piculus rubiginosus guianae*⁵
Piculus rubiginosus viridissimus
Cranioleuca demissa
Roraimia adusta adusta
Automolus roraimae roraimae
Lochmias nematura castanonota
Thamnophilus insignis
*Chamaeza brevicauda fulvescens*⁵

¹ 1939, Amer. Mus. Novit., No. 1051.

² Described as new in this paper.

³ 1939, Amer. Mus. Novit., No. 1047, p. 1.

⁴ Venezuela had not been included in range. Previous Venezuelan records from Mt. Roraima were credited to British Guiana.

⁵ Ranges down into Tropical Zone.

Myrmothera simplex simplex
Chloropipo uniformis uniformis
Myiophobus roraimae
Euscarthmornis russatus
Mecocerculus leucophrys roraimae
Elaenia olivina
Elaenia dayi dayi
*Oxyruncus cristatus phelpsi*¹
Troglodytes rufulus rufulus
*Turdus ignobilis murinus*¹
Platycichla flavipes polionota
Cichlopsis leucogenys gularis
*Hylophilus sclateri*¹

Diglossa major gilliardi
Coereba flaveola roraimae
Myioborus bruniceps castaneocapillus
Basileuterus bivittatus roraimae
*Macroagelaius subalaris imthurni*¹
Chlorophonia cyanea roraimae
*Tanagra xanthogaster brevirostris*¹
Tangara chrysophrys guttata
Tangara cyanoptera whitelyi
*Piranga flava haemalea*¹
Catamenia homochroa duncani
Atlapietes personatus collaris
Zonotrichia capensis roraimae

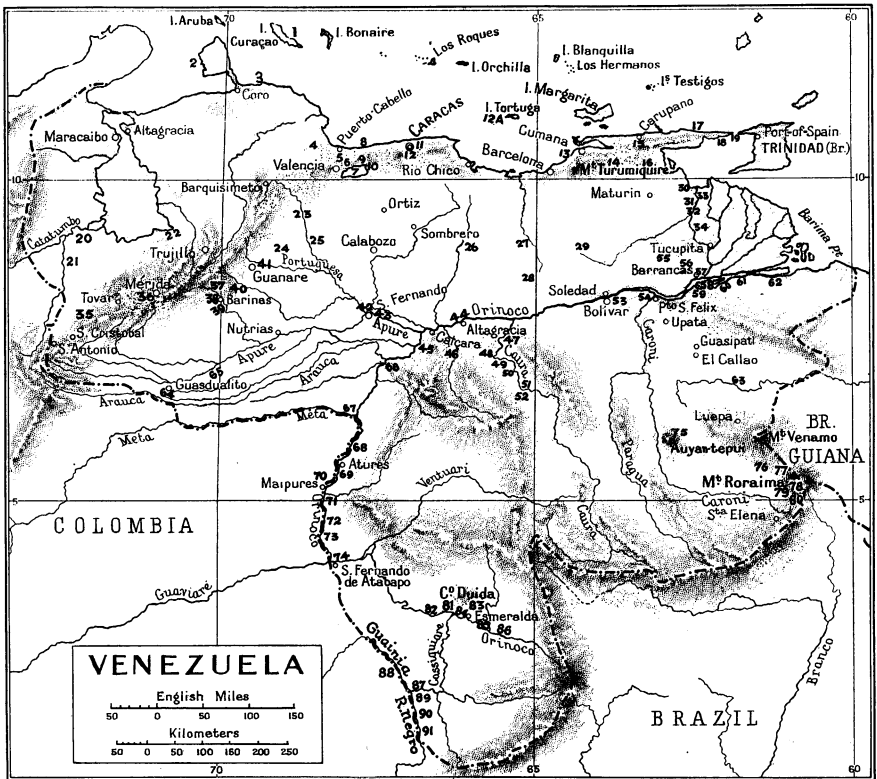
SOURCES OF DISTRIBUTIONAL INFORMATION

Information regarding distribution has been obtained from the following sources:

- 1916, Bds. Brit. Guiana, 2 vols., by C. Chubb (in which are included the Schomburgk, Whitely, and McConnell, Mt. Roraima records).
- 1918-1939, Cory and Hellmayr. Catalogue of the Birds of the Americas.
- 1931, The Upper Zonal Bird-Life of Mts. Roraima and Duida, Bull. Amer. Mus. Nat. Hist., LXIII, by F. M. Chapman.
- 1931-1940, Miscellaneous references to the Duida birds found in John Todd Zimmer's Studies of Peruvian Birds, Amer. Mus. Novit.
- 1931-1940, Check List of the Birds of the World, by J. L. Peters.
- 1938, The Geographical Status of the Birds Collected at Mt. Roraima. Bol. Soc. Ven. Cien. Nat., No. 36, Caracas, by W. H. Phelps.
- 1939, The Upper Zonal Birds of Mt. Auyan-tepui, Venezuela. Amer. Mus. Novit. 1051, by F. M. Chapman.
- 1939, Observations on the Birds of Northern Venezuela, Proc. U. S. Nat. Mus., Vol. 87, by Alexander Wetmore.
- 1939, Contribución Ornitológica. Revista de Fomento, Caracas, No. 19, Dec. 1939, by Ventura Barnés.
- A. S. Pinkus collection from Mt. Roraima Region (unpublished) in the Phelps Ornithological Collection at Caracas. Specimens in the Phelps Ornith. Coll., Caracas.

¹ Ranges down into the Tropical Zone.

**MAP
OF
VENEZUELAN LOCALITIES CITED IN THIS PAPER**



ALL VENEZUELAN LOCALITIES CITED IN THIS PAPER

- | | |
|---|-----------------------------------|
| Acarigua—23 | Econtrados—20 |
| Altamira—44 | El Baul—25 |
| Altamira (Barinas)—37 | El Hacha—4 |
| Arabupu—80 | El Pilar—15 |
| Atures—69 | El Raudal (Río Toro)—60 |
| Barinitas—38 | El Valle—12 |
| Barinas—39 | El Yagual (= El Llagual)—47 |
| Baruta—12 | Esmeralda—85 |
| Boca de Sina—81 | Foot of Mt. Duida—84 |
| Buena Vista, Río Cassiquiare—87 | Guania River—88 |
| Caicara—45 | Guanare—41 |
| Camaguan—42 | Guanipa—31 |
| Caño León—84 | Guanoco—16 |
| Caño San Felix (San Felix R. of Cherrie)—46 | Guasqualito—64 |
| Cantaura—29 | Isla Morocotico (Manamo River)—33 |
| Caracas—12 | La Brea (Guanoco)—16 |
| Cariaquito—19 | La Ceiba—22 |
| Chorrera de Vegas (Duida)—83 | La Laguna (F. W. Ulrich)—14 |
| Catatumbo River—20 | La Laja—84 |
| Ciudad Bolívar—53 | La Lajita (Río Mato)—49 |
| Colón—35 | La Prisión—51 |
| Cristóbal Colón—18 | La Trilla, Ocumare de la Costa—8 |
| Cumaná—13 | La Unión—50 |
| Cumarebo—3 | La Veguita—40 |
| Cumbre de Valencia—6 | Lake Valencia—7 |
| Cunucunuma River—82 | Las Barrancas—57 |
| Curaçao—1 | Las Guacas (San Felix River)—46 |

Las Quiguas—5
 Maipures—70
 Maipures Rapids—70
 Manamo River—34
 Manoa—62
 Maracay—10
 Maripa—47
 Mataben Rapids—71
 Mérida—36
 Meta River—67
 Mt. Auyan-tepui—75
 Mt. Duida—83
 Mt. Kukenam—77
 Mt. Roraima—78
 Munduapo—72
 Nericagua—73
 Nicare (River)—52
 Ocumare de la Costa—8
 "Our Village" = Paulo—79
 Orocoima (Río Toro)—60
 Oropé—21
 Ospino—24
 Palenque—26
 Palmarito—65
 Paraguaná Peninsula—2
 Paria Peninsula—17
 Paulo—79
 Perico (Pto. Ayacucho)—68
 Piacoa—59
 Pie del Cerro (Duida)—84

Puerto Ayacucho (Perico)—68
 Quiribana de Caicara—45
 Rancho Grande—9
 Río Guainia—88
 Río Guarapiche—30
 Río Mato—49
 Río Negro—91
 Río Ocamo—86
 Río Yuruán—63
 Sacupana—60
 San Carlos, Río Negro—90
 San Esteban—5
 San Felix—54
 San Fernando de Apure—43
 San Fernando de Atabapo—74
 San Mateo de Caicara—45
 Silla de Caracas—11
 Solano, Río Cassiquiare—89
 Sta. Maria de Ipire—28
 Suapure—48
 Temblador—55
 Tortola Isl.—58
 Tortuga Isl.—12-A
 Uracoa—56
 Urbana (La Urbana)—66
 Vagre River—32
 Valle de los Monos—84
 Yuruán River—63
 Yuruani River—76
 Zaraza—27

ANNOTATED LIST OF SPECIES

TINAMIDAE

TINAMOUS

Tinamus major major (Gmelin)

Tetrao major Gmelin, 1789, Syst. Nat., 1, pt. 2, p. 767 (Cayenne and Guiana).

1 ♂, 1 ♀, 460 m.; 1 (?), 1100 m.

Southern Venezuela (Mts. Auyan-tepui and Roraima), the Guianas and northern Brazil.

Our skins are slightly more olivaceous, less rufescent on upperparts than are 5 nearly topotypical birds. One skin from Arabupu, Mt. Roraima (collected by A. S. Pinkus, in the Phelps Ornithological Collection), likewise is more olive, but even darker than Mt. Auyan-tepui specimens. It has rich olive-green upperparts as against reddish olive-brown. Since tinamous are quite variable we merely call attention to these plumage differences.

Venezuela has not been included in the range of this race. Previous Venezuelan records from Mt. Roraima were credited to British Guiana.

Crypturellus soui soui (Hermann)

Tinamus soui HERMANN, 1783, Table Affinit. Anim., p. 165 (Cayenne).

1 ♂, 1 ♀, 460 m.; 1 (?), 1100 m.

From the eastern base of the Andes, east through Venezuela (Mts. Roraima and Auyan-tepui, and foot of Mt. Duida, etc.), the Guianas and northern Brazil.

In color of back, our specimens show a slight tendency to be more reddish than 4 from Mt. Roraima and 4 from the foot of Mt. Duida. They are generally similar to 1 Caura River and 1 middle Orinoco River specimen.

Crypturellus variegatus variegatus (Gmelin)

Tetrao variegatus Gmelin, 1789, Syst. Nat., 1, pt. 2, p. 768 (Guiana).

1 ♀, 460 m.; 1 ♀, 1 (?), 1100 m.

Southeastern Colombia, southern Venezuela (Caura River; Mts. Auyan-tepui and Roraima, etc.), the Guianas and northern Brazil.

Comparison with 2 specimens from

Potaro Landing and with 2 from Kama-kusa, British Guiana, indicates that, generally, ours show a tendency to have broader, darker barring above. It is noteworthy that our specimens and those from British Guiana are at variance with 2 from La Prisión, 1 from Suapure and with 2 from other localities (unknown) on the Caura River. The Orinoco-Caura series is more pallid above, having dark brown instead of sooty black barring on upperparts.

COLYMBIDAE

GREBES

Colymbus dominicus subspecies (?)

CHAPMAN, 1939, Amer. Mus. Novit., No. 1051, p. 6.

1 ♂¹ (Jan. 23), 1 ♀² (Jan. 11), 1850 m. Subtropical Zone of Mt. Auyan-tepui, Venezuela.

Both appeared to be juvenile and were seen in company with one adult. Observed through eight power glasses this wary adult had upperparts decidedly darker than its three companions (or young).

One of the skins (the male) is of a flightless bird which has no primaries or secondaries on either wing. This condition (brought on by a form of molt not uncommon in ducks and grebes which hide until the power of flight is regained) indicates that probably the skins are of birds which are almost a year old and just entering the post juvenile molt.

PHALACROCORACIDAE

CORMORANTS

Phalacrocorax olivaceus olivaceus (Humboldt)

Pelecanus olivaceus HUMBOLDT, 1805, in Humboldt and Bonpland, "Rec. d'Observ. Zoöl. et d'Anat. Comp.," p. 6 (banks of the Magdalena River, lat. 8° 55' N., Colombia).

1 ♀, 460 m.

Central and South America.

ARDEIDAE

HERONS, BITTERNS

Ardea cocoi Linné

Ardea Cocoi LINNÉ, 1766, Syst. Nat., 12th Ed. 1, p. 237 (Cayenne).

¹ Testes approximately the size of large pinheads.

² Ovary about size of a "dime" and with undeveloped white eggs.

1 ♀, 1 (?), 460 m.; 1 ♂ juv., 1100 m.
The greater part of South America.

Casmerodius albus egretta (Gmelin)

Ardea Egretta GMELIN, 1789, Syst. Nat., 1, pt. 2, p. 629 (Santo Domingo, Falkland Islands, South America to Louisiana).

1 ♀, 460 m.; 1 ♀, 1100 m.

Southern United States, south to Patagonia.

Agamia agami (Gmelin)

Ardea Agamia GMELIN, 1789, Syst. Nat., 1, pt. 2, p. 629 (Cayenne).

1 ♂, 460 m.

Mexico, south to Peru and Brazil.

Tigrisoma lineatum lineatum (Boddaert)

Ardea lineata BODDAERT, 1783, Tabl. Pl. enl., p. 52 (Cayenne, ex Daubenton, Pl. enl., no. 860).

1 ♂, 460 m.

Central America, south to Ecuador, the Guianas and Brazil.

Botaurus pinnatus (Wagler)

Ardea pinnata WAGLER, 1829, Isis, col. 662 (State of Bahia, Brazil).

1 ♂, 460 m.

Colombia, Venezuela (Mt. Auyan-tepui), the Guianas and Brazil.

Extension of range to Venezuela.

CICONIIDAE

STORKS, JABIRUS

Euxenura galeata (Molina)

Ardea Galeata MOLINA, 1782, Sagg. Stor. Nat. Chili, p. 235 (Chili).

1 (?), 460 m.³; 1 ♀, 1100 m.

From southern Venezuela (the middle and lower Orinoco: Las Barrancas; Altargracia; San Mateo de Caicara; San Felix River; Guanoco. Mt. Auyan-tepui) to Chile and southern Argentina.

Peters (Vol. 1, p. 129) and Chubb (Vol. 1, p. 156) cite British Guiana as the northern range of *galeata*. Cherrie (p. 369) writes: "Although no specimens were collected, this species was seen sufficiently near to make identification certain." He noted it at Las Barrancas, Altargracia, San

³ Sight record.

Mateo de Caicara and on the San Felix River. In the American Museum Collection I found a skin from Guanoco, Venezuela. Thus this skin and our specimen extend the range formally to Venezuela.

THRESKIORNITHIDAE

IBISES, SPOONBILLS

Mesembrinibis cayennensis (Gmelin)

Tantalus cayennensis GMELIN, 1789, Syst. Nat., 1, pt. 2, p. 652 (Cayenne).

1 ♂, 460 m.

From Panama south to Argentina.

CATHARTIDAE

VULTURES

[*Sarcorampus papa* (Linné)]¹

Vultur Papa LINNÉ, 1758, Syst. Nat., 10th Ed., 1, p. 86 ("India occidentalis" = Surinam).

1 (?), 460 m. (sight record).

Mexico south to northern Argentina.

FIELD NOTES.—March 5, 1938: "Two observed flying over a fox carcass."

[*Coragyps atratus foetens* (Lichtenstein)]

Cathartes foetens LICHTENSTEIN, 1818, Verz. ausgest. Säug. und Vög., p. 30 (Paraguay).

1 (?), 1100 m. (sight record).

South America.

One bird descended to a meat trap within thirty yards of camp early in December, 1937, and for ten minutes walked around the "set" speculatively eyeing it. Jim Dillon and I, sitting in the skinning tent, could have shot the bird but we did not dream that this would be our last opportunity. The species was never seen again.

Cathartes aura ruficollis Spix

Cathartes ruficollis SPIX, 1824, Av. Bras., 1, p. 2 (interior of Bahia and Piahy).

2 ♂, 2 (?), 460 m.; 1 ♂, 1100 m.; 4 ♀, 1100 m.; 2 (?), nestlings, 1100 m.

Venezuela, the Guianas, south to Paraguay.

Our specimens are decidedly darker both above and below than are the 2 more nearly topotypical Brazil specimens listed with the following comparative series, all of which

are essentially similar in measurements (1 Matto Grosso and 1 São Paulo, Brazil; 5 Caicara, Orinoco River, Venezuela).

Venezuelan birds agree essentially with ours and disagree correspondingly with the Brazilian skins. Close analysis with a view of determining the extent of foxing or fading of the Brazilian examples indicates that although they are but 37 years old—those from Caicara which agree with our fresh skins are thirty-two years old—they must have been exposed to light extensively because the color change seems due to fading or foxing.

The nestlings collected by Indians, February 11, 1938, on the 1100-meter level, indicate that our series are resident birds and give some idea of the nesting cycle. I judge from their plumage that by late March they would have been ready for flight.

ACCIPITRIDAE

HAWKS, OSPREYS, ETC.

[*Elanoides forficatus yetapa* (Vieillot)]

Milvus yetapa VIEILLOT, 1818, Nouv. Dict. Hist. Nat., 20, p. 564 (Paraguay, ex Azara).

4 (?), 1100 m. (sight record).

Central America southward to the Argentine.

Observed several times during February and early March.

FIELD NOTES.—February 19, 1938: "Swallow-tailed kite observed flying over 1100-m. cliffs."

Accipiter pectoralis (Bonaparte)

Falco pectoralis BONAPARTE, 1850, Rev. et Mag. Zool., p. 490 (Brazil).

1 (♀), 1100 m.

From southern Venezuela (Mt. Auyan-tepui) and the Guianas (?), southward.

Peters writes²: "Range not exactly known but probably from the Guianas to southeastern Brazil and west to Ecuador."

Essentially similar to the only example in the Museum collection. Our specimen, an adult female, has less brown on the chest and fewer black bars on the breast and abdomen. This difference appears to

¹ Names in italics and square brackets indicate sight records.

² 1931, Check List of Birds of the World, Vol. 1, p. 218.

be either sexual or due to individual variation because I find that the description (Catalogue of Bds. Brit. Mus.) of the partially immature female in the British Museum agrees closely with our bird. In measurement ours is slightly larger than the American Museum skin from Río Suno, Ecuador: wing 271 mm., tail 194, exposed culmen 20; Mt. Auyan-tepui: wing 266, tail 193; exposed culmen 19.5.

Dr. Chapman¹ points out the amazing similarity of color pattern between *Spizaetus ornatus* and this rare hawk.

Extension of range to Venezuela.

***Buteo albicaudatus colonus* Berlepsch**

Buteo albicaudatus colonus BERLEPSCH, 1892 Journ. f. Orn., 40, p. 91 (Island of Curacao).

2 ♂, 460 m; 1 ♀, 1100 m.

Colombia, east of the Andes, Venezuela (Maripa; Guanare; Mts. Auyan-tepui and Roraima), Dutch Guiana; also Islands of Aruba, Bonaire, Curaçao and Trinidad.

There should be no doubt as to the identity of this subspecies found nesting on the 1100-meter level; however, it was only after careful study that we have been able to ascertain its standing. Our 2 examples and the comparative series (1 Cayenne, 1 Surinam, 1 Bonaire Island, 1 Trinidad, 1 Maripa and 1 El Valle, Venezuela) exhibit a wide range of variation. For example, our 2 skins are widely different, the male is white below while the female is dark gray. Since one of the Museum series (Maripa) agrees closely with one of our skins and since the other Venezuelan race of *albicaudatus* is found far to the north of Mt. Auyan-tepui the identification seems likely.

FIELD NOTES.—February 20, 1938: "Nest built of dry sticks (each freshly broken and apparently recently taken from the crown of the forest) which ranged from an inch to two and a half feet in length. Together they formed a substantial nest two and a half feet wide and 18 inches deep. This structure was found in a small tree growing in a large savanna and it was about seven feet above ground. The egg cavity was about the size of a soup dish.

"While examining the nest, two large

hawks kept up a screaming vigil. They soared menacingly to windward and occasionally the darker of the two, the ♀, approached to within 100 yards. This bird which I shot was almost completely blue-gray while its mate had under wing-coverts, breast and rump, pure white. About half a mile distant in the same 1100-meter savanna I found an old nest of similar design. In it were found many feathers including those of various parrots and several primaries of *Eurypyga helias helias*."

***Buteo magnirostris magnirostris* (Gmelin)**

Falco magnirostris GMELIN, 1788, Syst. Nat., 1, pt. 1, p. 282 (Cayenne, ex Daubenton, Pl. enl., no. 464).

1 (?), 5 ♂, 460 m.; 3 ♀, 1100 m.

Eastern and southern Venezuela (Mts. Auyan-tepui and Roraima, etc.), the Guianas and northern Brazil.

Several of our skins agree with one topotypical example from Cayenne but the majority of this variable series are slightly darker above. (Compared with 5 Dutch Guiana, 1 French Guiana, 3 British Guiana, 2 Mt. Roraima and 9 Caicara, Venezuela.)

This hawk which frequently utters a piercing cry is the most common and easily obtained bird of prey at Auyan-tepui; it was usually to be found along the edges of the savannas. Stomach dissections showed that it, like the Arecuna Indian boys, was especially fond of large green grasshoppers.

***Leucopternis melanops* (Latham)**

Falco melanops LATHAM, 1790, Ind. Orn., 1, p. 37 (Cayenne).

1 ♀, 1100 m.

Southern Venezuela (Caura River; Mt. Auyan-tepui), the Guianas to northern Brazil and eastern Ecuador.

Comparison with 4 nearly topotypical examples indicates that our specimen may prove worthy of recognition when more material is obtained. Chiefly the Auyan-tepui specimen disagrees with the series at hand by having ground color on head and neck white, not suffused with buff; by having broader darker shaft streaks on head, nape, shoulders, malar region, auriculars and anterior flanks; by having dark

¹ 1926, Bull. Amer. Mus. Nat. Hist., LV, p. 223.

upperparts, including tail, black instead of brownish black, and, finally, by having no suggestion of the white tail tipping, present on all others. It averages larger than true *melanops*: wing, 234.5; tail, 147; culmen from base, 29.5; exposed culmen, 21; tarsus, 66.

Mr. Zimmer who has examined these specimens recommends that it be included with *melanops* for the time being.

The unrecorded Caura skin and our specimens are an extension of range to Venezuela.

SPECIMENS EXAMINED

L. melanops.—VENEZUELA: Mt. Auyan-tepui, 1 ♀; Caura River, 1 [♀(?)]. BRITISH GUIANA: Essequibo River, 1 [♂(?)], 1 (?); Minnehaha Creek, Potaro River, 1 ♂. DUTCH GUIANA: Demerara, 1 (?). ECUADOR: Rio Suno, 2 ♂; Voco, Curaray 1 (?).

FALCONIDAE

FALCONS, CARACARAS

Micrastur ruficollis gilvicollis (Vieillot)

Sparvius gilvicollis VIEILLOT, 1817, Nouv. Dict. Hist. Nat., 10, p. 323 (no locality = Cayenne, substituted by Hellmayr, 1910, Nov. Zool., 17, p. 410).

2 ♀, 460 m.; 1 ♂, 1 ♀, 1100 m.

Southern Venezuela (Mt. Auyan-tepui), the Guianas, southward.

Our specimens exhibit a tendency to be more strongly barred on the lower abdomen and under tail-coverts.

Extension of range to Venezuela.

Daptrius americanus americanus (Boddaert)

Falco americanus BODDAERT, 1783, Tabl. Pl. enl., p. 25 (Daubenton, pl. 417, no type locality = Cayenne, ex Buffon).

2 ♂, 460 m.

Panama, south through Venezuela and the Guianas to southern Brazil and Peru.

Milvago chimachima cordatus Bangs and Penard

Milvago chimachima cordata BANGS AND PENARD, 1918, Bull. Mus. Comp. Zool., 62, p. 35 (San Miguel Island, Pearl Islands, Bay of Panama).

1 ♂, 460 m.

Panama and Colombia eastward through Venezuela to British Guiana.

Comparison with 1 topotypical San José, Perlas Island, Panama, 6 Caicara, 1 Ciudad Bolívar, Venezuela and with 1 British Guiana skin, indicates that our specimen, like the topotypical example, is partially immature.

[*Polyborus cheriway cheriway* (Jacquin)]

Falco cheriway JACQUIN, 1784, Beytr., p. 17, pl. 4 (Aruba and coast of Venezuela).

2 (?) 1100 m. (sight records).

From Panama south to the Guianas and Peru.

Twice observed along the edge of the swamp just south of the 1100-m. camp but never obtained.

Gampsonyx swainsonii leonae Chubb

Gampsonyx swainsonii leonae CHUBB, 1918, Bull. Brit. Orn. Cl., 39, p. 22 (Leon, western Nicaragua).

1 ♂, 460 m.

Nicaragua, south through Colombia and Venezuela to British Guiana.

Falco albigularis albigularis Daudin

Falco albigularis DAUDIN, 1800, Traité d'Orn., 2, p. 131 (Cayenne).

1 ♀, 460 m.; 1 (?), 1100 m.

Mexico, through Central and South America (in Venezuela: Mts. Auyan-tepui and Roraima, etc.).

Odontriorchis palliatus (Temminck)

Falco palliatus "P. Max." TEMMINCK, 1822, Pl. Col., livr. 23, pl. 204 (Brazil and Guiana = Rio Peruhype, southern Bahia, accepted by Hellmayr as type locality).

1 ♀, 460 m.

Mexico through Central and South America (including Trinidad) to Bolivia and southeastern Brazil (in Venezuela: Mts. Auyan-tepui and Roraima, etc.).

In comparison with 3 Matto Grosso, Brazil, 1 Surinam, and a large series from Trinidad and Costa Rica, our specimen appears bluer on the lower aspect. Various Museum skins, notably one from Princetown, Trinidad, are almost as richly washed with blue-gray on the breast and abdomen. This character and the darker crowns, with

but slight difference in color between the nape and upper back, are the chief differences between our slightly unusual specimen and the average of the Museum series. Since the Auyan-tepui specimen is matched by one of the many skins in the Museum as regards the coloration of crown and nape and is nearly matched by 2 in regard to the coloration of the lower parts, we consider it to be merely a variant of the wide ranging tropical species, *palliatu*s.

Harpagus bidentatus bidentatus
(Latham)

Falco bidentatus LATHAM, 1790, Ind. Orn., 1, p. 38 (Cayenne).

1 ♀, 460 m.

Colombia, Venezuela, the Guianas, south to Peru, Bolivia and Brazil.

Compared with 1 British Guiana, 1 Surinam and a large series from Colombia, Venezuela, Brazil and Ecuador. While none of the Museum skins are precisely similar to ours there is little doubt as to its identification. The difference between our female and those which most nearly approximate it is chiefly to be seen on the lower aspect where none are quite as richly or extensively colored with reddish brown. We, in default of more satisfactory material and because it agrees in other respects with the series of this wide ranging tropical form, consider it to be a new plumage example of the variable race, *bidentatus*.

CRACIDAE

CURASSOWS, GUANS, CHACHALACAS

Crax nigra Linné

Crax nigra LINNÉ, 1758, Syst. Nat., 10th Ed., 1, p. 157 (South America).

1 ♂, 460 m.; 2 ♂, 4 ♀, 1100 m.

Eastern Colombia, southern Venezuela (Mts. Auyan-tepui and Roraima), the Guianas and upper Río Negro region of Brazil.

Penelope granti Berlepsch

P[enelope] granti BERLEPSCH, 1908, Nov. Zool., XV, p. 297 (new name for *Penelope marail* of Grant but not of Gmelin).—CHUBB, 1916, "Bds. British Guiana," 1, p. 25 (tropical localities).

1 ♂, 460 m.; 4 ♂, 2 ♀, 4 (?), 1100 m.

Southern Venezuela (Mts. Auyan-tepui

and Roraima, and base of Mt. Duida, etc.) and British Guiana.

Dr. Chapman¹ in his discourse on the range of *marail* and *granti* says that, "Size appears to be the most constant character separating the two forms, particularly the length of tail, which in *granti* averages 350, and in *marail* 250 mm." I have measured our series of 11 skins and find the following ranges of measurement. Five males: 320–345 mm. 2 females: 314–325. (Those of unknown sex come within the range of measurement as given for the males.) Taken as a whole, 10 of the 11 skins or mixed sexes average 323 mm. While this average is considerably lower than that given by Dr. Chapman, it is way above the average of *marail*. Our specimens otherwise are similar to Mt. Roraima specimens which have a range of measurement overlapping that of the Auyan-tepui series.

Ortalis motmot motmot (Linné)

Phasianus Motmot LINNÉ, 1766, Syst. Nat., 12th Ed., 1, p. 271 (Brazil and Guiana = Cayenne, accepted as type locality by Berlepsch and Hartert, 1902, Nov. Zool., 9, p. 120, ex Brissonian reference).

3 ♂, 2 ♀, 460 m.; 1 ♂, 1 ♀, 1100 m.

Southern Venezuela (Caura River; Mts. Roraima and Auyan-tepui, and Mt. Duida region, etc.) and the Guianas south to the Río Negro and the lower Amazon.

Agree essentially with 1 specimen from Arabupu, Mt. Roraima, with 2 topotypical specimens from British Guiana and with 4 from Dutch Guiana.

PHASIANIDAE

QUAILS, PHEASANTS, ETC.

Odontophorus gujanensis gujanensis
(Gmelin)

Tetrao Gujanensis GMELIN, 1789, Syst. Nat., 1, pt. 2, p. 767 (Cayenne and Guiana; Cayenne accepted as type locality by Berlepsch and Hartert, 1902, Nov. Zool., 9, p. 121).

2 ♂, 4 ♀, 460 m.; 1 ♂ (?), 3 ♀, 1 (?), 1100 m.

Southern Venezuela (Caura Valley; Mts. Auyan-tepui and Roraima²), the Guianas,

¹ 1931, Bull. Amer. Mus. Nat. Hist., LXIII, Art. 1, p. 61.

² Coll. by A. S. Pinkus. In the Phelps Ornith. Coll., Caracas.

etc. (southern limit to range not known).

Compared with 2 *Kamakusa*, 1 *Tacutu* River, 1 *Potaro* Landing and 2 *Quonga*, British Guiana; 3 *Surinam* and 1 *Demerara*. Our specimens are slightly more grayish, less brownish, on the upper back and they appear darker gray on the crescentic patch.

FIELD NOTES.—February 4, 1938: "Today Pedro shot two partridge in the deep woods. Both were females with blackish ovaries to which several large white eggs, nearing the detachment stage, were attached."

PSOPHIIDAE

TRUMPETERS

Psophia crepitans crepitans Linné

Psophia crepitans LINNÉ, 1758, *Syst. Nat.*, 10th Ed., 1, p. 154 (South America = Cayenne, ex Barrère).

1 ♂, 1 ♀, 460 m.

Southern Venezuela (Mt. Duida region; Mt. Auyan-tepui; Caura River, etc.), the Guianas and adjacent portions of Brazil, south to the north bank of the Amazon.

Agree with 7 specimens from British Guiana, and a large series from the Orinoco region of Venezuela.

RALLIDAE

RAILS, COOTS, GALLINULES

Aramides cajanea cajanea (P. L. S. Müller)

Fulica Cajanea P. L. S. MÜLLER, 1776, *Natursyst.*, Suppl., p. 119 (Cayenne, ex Daubenton, Pl. enl., pl. 352).

1 ♀, 460 m.

From Costa Rica south to Argentina.

Porzana albicollis typhoea Peters

Porzana albicollis typhoea PETERS, 1932, *Proc. New Engl. Zool. Cl.*, 13, p. 66 (Río Frio, Santa Marta, Colombia).

3 ♂, 2 ♀, 460 m.

Northern Colombia, southern Venezuela (Quiribana de Caicara; Mts. Auyan-tepui and Roraima), British, French (?), and Dutch Guiana.

Compared with 1 specimen from Mt. Roraima, Venezuela, and with 6 from Suri-

nam: our specimens are essentially similar although they average a tone darker on the upperparts, particularly in regard to dorsal feather centers. This may be due to foxing or to plumage conditions because one of our specimens agrees with one of the series from Surinam and with the Roraima skin.

Laterallus viridis viridis (P. L. S. Müller)

Rallus viridis P. L. S. MÜLLER, 1776, *Natursyst.*, Suppl., p. 120 (Cayenne, ex Daubenton, Pl. enl., no. 368).

2 ♀, 460 m.

Southern Venezuela (Mt. Auyan-tepui and Roraima), the Guianas, eastern Peru, Brazil to Matto Grosso.

Essentially similar in measurement to the average of 6 topotypical examples from French Guiana and to 5 from Dutch Guiana. On the upper aspect they appear darker, being slightly more olive and less brownish.

Venezuela has not been included in the range of this race. Previous Venezuelan records from Mt. Roraima were credited to British Guiana.

Micropygia schomburgkii schomburgkii (Richard Schomburgk)

Crex Schomburgkii "Cabanis," RICHARD SCHOMBURGK, 1848, *Reis. Brit. Guiana*, 2, p. 245 (interior of British Guiana).

9 ♂, 10 ♀, 1 (?), 460 m.; 3 ♀, 1100 m.

Southern Venezuela (Mts. Auyan-tepui and Roraima, and Mt. Duida region), British and French Guiana.

Compared with 3 Arabupu, 1 Paulo, Mt. Roraima and with 1 Esmeralda, Mt. Duida, Venezuela.

EURYPYGIDAE

SUN-BITTERNS

Eurypyga helias helias (Pallas)

Ardea helias PALLAS, 1781, *Neue Nord. Beytr.*, 2, p. 48, pl. 3 (Surinam).

2 ♂, 460 m.

Mexico, south to Argentina.

SCOLOPACIDAE

SNIFE, WOODCOCK, SANDPIPERS

Actitis macularia (Linné)

Tringa macularia LINNÉ, 1766, *Syst. Nat.*, 12th Ed., 1, p. 249 (Europe and North America =

Pennsylvania, ex reference to Edwards, pl. 277, f. 2).

1 ♂, March 3; 1 ♂, March 4; 3 ♂, March 5; 1 ♀ (?), March 5, 1938, 460 m.

North America, migrating south to southern Brazil.

Capella paraguaiae paraguaiae (Vieillot)

Scolopax Paraguaiae VIEILLOT, 1816, Nouv. Dict. d'Hist. Nat., III, p. 356 (Paraguay).

2 ♂, 1 ♀, 1100 m. (The snipe, seen several times on the plateau between 1850 and 2200 meters, is presumed to have been this subspecies.)

South America from Colombia east through Venezuela (Mts. Auyan-tepui, Roraima, etc.) and the Guianas, southward.

Resident *paraguaiae* may readily be distinguished from migratory *delicata* by applying the following diagnosis which is taken from a study made by Annie C. Meinertzhagen¹ in which she writes, "*C. p. brasiliensis* [J. L. Peters² has since synonymized this form with *paraguaiae*] closely approaches *C. delicata* and is only to be distinguished (1) by the blacker upperparts with fewer vermiculations and barring; (2) by the axillaries in which the white interspaces are usually broader than the sepia bars; (3) by the outer tail-feather which is usually narrower, 4-6 mm., in *C. delicata* the outer tail-feather measures 6-9 mm. (54 measured) at 8 mm. from tip; (4) by the smaller wing, 117-128 mm. as against 129-140 mm. in *C. delicata*; (5) by the longer bill, 68-84 mm. as against 64-78 in *C. delicata*."

Measurements and plumage comparisons indicate clearly that our specimens are examples of the resident form.

Capella undulata undulata (Boddaert)

Scolopax undulata BODDAERT, 1783, Tabl. Pl. enl., p. 54 (Cayenne, ex Daubenton, pl. 895).

1 ♀, 1 (?), 1100 m.

Southern Venezuela (Mts. Roraima and Auyan-tepui), British Guiana and Cayenne, probably also Surinam.

Venezuela has not been included in the range of this race. Previous Venezuela

records from Mt. Roraima were credited to British Guiana.

COLUMBIDAE

PIGEONS, DOVES

***Columba rufina andersoni* Cory**

Columba rufina andersoni CORY, 1915, Field Mus. Nat. Hist. Publ., Orn. Ser., 1, p. 294 (Serra da Lua, near Boa Vista, northern Brazil).

1 ♀, 460 m.

Southeastern Colombia and eastern Ecuador, eastward across southern Venezuela (Mts. Auyan-tepui and Roraima, etc.) and northern Brazil.

***Columba albilinea roraimae* Chapman**

Columba albilinea roraimae CHAPMAN, 1929, Amer. Mus. Novit., No. 341, p. 1 (Philipp Camp, 6000 ft., Mt. Roraima, Venezuela); 1931, Bull. Amer. Mus. Nat. Hist., LXIII, p. 63; 1939, Amer. Mus. Novit., No. 1051, p. 6 ("The Upper Zonal Birds of Mt. Auyan-tepui").

1 ♂, 1100 m.; 1 ♂ (?), 2100 m.

Subtropical Zone of southern Venezuela (Mts. Roraima, Auyan-tepui and Duida).

This species, an inhabitant of the Subtropical Zone, shows a marked preference for rocky, semi-soilless terrain. The first of the 2 specimens collected was obtained from a flock of at least 5 birds which was frequently seen in the vicinity of the sand banks at the base of the Zanjón cliffs (alt. 2000 meters). There, 500 meters above the middle talus shelf where the "shrubby or herbeous second-growth flora"³ begins, the birds were observed dwelling in company with *Troglodytes rufulus rufulus*, *Diglossa major gilliardi* and *Zonotrichia capensis roraimae*. The dune-like sand banks were covered with their tracks, feathers and droppings. This and the many low cave-roosts in the vicinity of the Zanjón, suggest an affinity of environment to the other Subtropical birds mentioned.

Surprisingly, however, the second specimen was collected in the Tropic Zone scrubs on the "rocky slope" near the 1100-meter camp. It was observed feeding in company with a flock of 4 or more of the same species and, despite the fact that various members of our party worked the region consistently for three months, it constitutes

¹ 1926, Ibis, II, 12th Ser., pp. 477-521.

² 1934, Check List Bds. World, II, p. 276.

³ G. H. H. Tate, 1938, Geo. Rev., XXVIII, No. 3, p. 469.

the only record. It would seem that our discovery of this mountain pigeon at so low an altitude corroborates Dr. Chapman's observation of the two specimens—the only previous records of *C. alb. roraimae* in the Tropical Zone—obtained on the Duida expedition¹ at an altitude of 212 meters. He wrote, "Possibly in pursuance of the long flights pigeons often make for food, they may have left their true zone to feed at lower levels." It is noteworthy that the only record we obtained at so low an altitude should come from the region of the comparatively barren "rocky slope" which, at the same altitude, is bordered by luxuriant tropical forests. There may be significance in the following observation made by Dr. G. H. H. Tate²: "Between the rocky, semi-soilless areas of the summit and similar areas at low levels ('Rocky Slope' at 1100-meter camp) there is relatively little difference in flora. Species after species is common at both levels, an indication that habitat rather than temperature plays the prime role in the lives of such plants."

A third record of this pigeon, a positive sight record from the 1850-meter plateau camp which was situated four miles in from the cliffs, was of a single bird which perched for some time on a small dead tree on the edge of one of the immense eroded fields of Cretaceous sandstone. Its perch was but a scant hundred yards from the most luxuriant of the three patches of forest we discovered and yet, when flushed, it winged off over the barren rocks.

Columba speciosa Gmelin

Columba speciosa GMELIN, 1789, Syst. Nat., 1, pt. 2, p. 783 (Cayenne, ex Daubenton, Pl. enl., pl. 213).

1 ♂, 460 m.

From Mexico south to Peru, Bolivia and southern Brazil (in Venezuela: Mts. Auyan-tepui and Roraima, etc.).

Columba purpureotincta Ridgway

Columba purpureotincta RIDGWAY, 1888, Proc. U. S. Nat. Mus., 10, p. 594, note (Demerara, British Guiana).

¹ F. M. Chapman, 1931, Bull. Amer. Mus. Nat. Hist., LXIII, Art. 1, p. 63.

² G. H. H. Tate, 1938, Geo. Rev., XXVIII, No. 3, pp. 469-470.

1 ♀, 460 m.; 2 ♂, 1 ♀, 1100 m.

Curaçao, Venezuela (Maipures; Río Yuruan; Mts. Roraima and Auyan-tepui) and the Guianas.

Columbigallina minuta minuta (Linné)

Columba minuta LINNÉ, 1766, Syst. Nat., 12th Ed., 1, p. 285 (America = Santo Domingo ex Brisson; error, Cayenne substituted as type locality by Berlepsch and Hartert, 1902, Nov. Zool., 9, p. 119).

1 ♀, 460 m.; 4 ♂, 1 ♀, 1100 m.

Southern Venezuela (Ciudad Bolívar; Mt. Duida region; Mts. Auyan-tepui and Roraima), British and French Guiana, Brazil, Peru and Paraguay.

Claravis pretiosa (Ferrari—Perez)

Peristera pretiosa FERRARI-PEREZ, 1886, Proc. U. S. Nat. Mus., 9, p. 175 (new name to replace *Columba cinerea* Temminck, 1811 (Brazil), not of Scopoli 1786).

1 ♂, 1 (?), 460 m.

Mexico south to Argentina.

Leptotila rufaxilla rufaxilla (Richard and Bernard)

Columba Rufaxilla RICHARD AND BERNARD, 1792, Actes Soc. Hist. Nat. Paris, 1, p. 118 (Cayenne).

4 ♂, 1 ♂ (?), 1 ♀, 1 (?), 460 m.

Southern Venezuela (Barinitas³; "... found on the upper and lower" Orinoco⁴; Mts. Auyan-tepui and Roraima), the Guianas and northern Brazil.

Oreopeleia montana (Linné)

Columba montana LINNÉ, 1758, Syst. Nat., 10th Ed., 1, p. 163 (Jamaica).

1 ♂, 1100 m.

Mexico south to Brazil, Peru, Bolivia and Paraguay (in Venezuela: Mts. Auyan-tepui and Roraima, etc.).

The only specimen obtained had testes much enlarged (half inch in length) and was discovered dusting its feathers on the semi-arid "rocky slope."

PSITTACIDAE

PARROTS, MACAWS

Ara chloroptera G. R. Gray

Ara chloropterus G. R. GRAY, 1859, List Bds. Brit. Mus., Psittacidae, p. 26 (new name for

³ In the Phelps Ornith. Coll., Caracas.

⁴ G. K. Cherrie, 1916, Brooklyn Inst. Science Bull., II, No. 6, p. 352.

Macrocercus macao Vieillot and authors, not Linné)

1 ♂, 1 ♀, 460 m.; 1 ♂, 1 (?), 1100 m.

Panama south to Bolivia, Argentina and Paraguay.

***Ara manilata* (Boddaert)**

Psittacus manilatus BODDAERT, 1783, Tabl. Pl. enl., p. 52 (Cayenne ex Daubenton, pl. 864).

5 ♂, 5 ♀, 460 m.

Southern Venezuela (Río Guarapiche; Mts. Roraima and Auyan-tepui) and the Guianas, southward.

***Ara nobilis nobilis* (Linné)**

Psittacus nobilis LINNÉ, 1758, Syst. Nat., 10th Ed., 1, p. 97 (South America = Surinam ex Mus. Ad. Frid., Prodr., p. 13).

1 ♂, 1 ♀, 460 m.; 5 ♂, 1 ♂ (?), 1100 m.

Southern Venezuela (Suapure; Mts. Auyan-tepui and Roraima), British and French Guiana and northern Brazil.

***Pyrrhura egregia* (Sclater)**

Conurus egregius SCLATER, 1881, Ibis, p. 130, pl. 4 ("Supposed to be from Demerara").

2 ♂, 2 ♀, 1100 m.

Southern Venezuela (Mts. Auyan-tepui and Roraima), British Guiana (Merumé Mountains, Kamarang River and Annai) and Dutch Guiana.

Two Roraima skins obtained by the Lee Garnett Day expedition which are in new plumage appear similar to our series, while 4 Roraima examples obtained by H. Whitely are slightly faded and appear to be more brownish on the crown and more yellowish green on the back. It is interesting to observe that some of the Whitely skins have a rim of minute crimson pinfeathers at the base of the upper mandible. This feature is very variable, some specimens having none at all.

Venezuela has not been included in the range of this species. Previous Venezuelan records from Mt. Roraima were credited to British Guiana.

SPECIMENS EXAMINED

VENEZUELA.—Mt. Auyan-tepui, 2 ♂, 2 ♀; Mt. Roraima, Arabupu, 1 ♂, 1 ♀; Mt. Roraima, 3 ♀, 1 ♂. BRITISH GUIANA.—Kamarang River, 1 ♀; Minnehaha Creek, 1 ♂.

***Nannopsittaca panychlora* (Salvin and Godman)**

Brotoperys panchlorus SALVIN AND GODMAN, 1883, Ibis, p. 211, pl. 9, f. 1 (Mt. Roraima, Venezuela).—CHAPMAN, 1931, Bull. Amer. Mus. Nat. Hist., LXIII, p. 66.

1 ♀, 1100 m.; 1850 m.¹; 2200 m.¹

Subtropical and Tropical Zones of southern Venezuela (Mts. Duida, Auyan-tepui and Roraima) and British Guiana (Kamarang River).

Similar to a series of 16 topotypical skins collected on the summit of Mt. Roraima.

Large flocks were observed from the plateau of Mt. Auyan-tepui (2200 meters) flying very high and at great speed. Followed with binoculars, the flocks usually disappeared in the region of the "crashed airplane" plateau, where we concluded the flora and fauna were more abundant.

With skill and good fortune Coultas succeeded in bringing down a bird from a flock which, apparently confused by fog, descended noisily to just above the crown of the 1100-meter terrace in the upper Tropical Zone.

Dr. Chapman (*op. cit.*), referring to the occurrence of this species in the Tropical Zone at the base of Mt. Duida as well as on the plateau, writes that "it may breed in the Subtropical Zone and descend to the tropics in search of food."

***Touit purpurata purpurata* (Gmelin)**

Psittacus purpuratus GMELIN, 1788, Syst. Nat., 1, pt. 1, p. 350 (Cayenne).

2 ♂, 460 m.

Southern Venezuela (Mts. Roraima and Auyan-tepui), the Guianas, southward.

Venezuela has not been included in the range of this race. Previous Venezuelan records from Mt. Roraima were credited to British Guiana.

***Pionites melanocephala melanocephala* (Linné)**

Psittacus melanocephalus LINNÉ, 1758, Syst. Nat., 10th Ed., 1, p. 102 (Mexico = Caracas, i.e., Venezuela, ex Edwards, pl. 169).

1 ♂, 1 ♂ (?), 2 ♀, 460 m.; 2 ♂, 4 ♀, 1 (?), 1100 m.

Southern Venezuela (Munduapo; Neri-

¹ Many sight records.

cagua; Guanoco; Caura River; Mt. Auyan-tepui) the Guianas, southward.

Pionus menstruus (Linné)

Psittacus menstruus LINNÉ, 1766, Syst. Nat., 12th Ed., 1, p. 148 (Surinam).

1 ♂, 2 ♀, 460 m.; 5 ♂, 1 ♀, 1100 m.

Costa Rica south to the Guianas, Brazil, Peru and Bolivia (in Venezuela: Mt. Auyan-tepui and Roraima, etc.).

Amazona amazonica amazonica (Linné)

Psittacus amazonicus LINNÉ, 1766, Syst. Nat., 12th Ed., 1, p. 147 (Surinam, error = "le pays des Amazones," Hellmayr, 1910, Nov. Zool., 17, p. 406).

1 ♀, 1 (?), 460 m.; 1 ♂, 1100 m.

Northern Colombia, eastward through Venezuela (Mts. Auyan-tepui and Roraima, etc.) and the Guianas to eastern Brazil, and southward.

CUCULIDAE

CUCKOOS, ANIS

Piaya cayana cayana (Linné)

Cuculus cayanus LINNÉ, 1776, Syst. Nat., 12th Ed., 1, p. 170 (Cayenne).

3 ♂, 460 m.; 3 ♂, 2 ♀, 1 (?), 1100 m.

Eastern (Sta. Maria de Ipire¹; Temblador¹) and southern Venezuela (Mts. Duida, Auyan-tepui and Roraima; Caura Valley; upper and lower Orinoco River).

Crotophaga ani Linné

Crotophaga ani LINNÉ, 1758, Syst. Nat., 10th Ed., 1, p. 105 (America, Africa = Jamaica).

1 ♂, 1 ♀, 1 (?), 460 m.; 1 ♂, 1 ♀, 1100 m.

Mexico south to Argentina (in Venezuela: Mts. Auyan-tepui and Roraima, etc.).

Neomorphus rufipennis nigrogularis

Chapman

Neomorphus nigrogularis CHAPMAN, 1914, Bull. Amer. Mus. Nat. Hist., XXXIII, p. 194 (foot of Mt. Duida, 700 ft., Venezuela).

1 ♂, 460 m.

Southern Venezuela (foot of Mt. Duida and Mt. Auyan-tepui), British Guiana and extreme northern Brazil, etc.

¹ In the Phelps Ornith. Coll., Caracas.

Similar to the type of *N. r. nigrogularis* from Mt. Duida and closely approaching certain of the Caura Valley (series of 5) *rufipennis*.

TYTONIDAE

BARN-OWLS

Tyto alba hellmayri Griscom and Greenway

Tyto alba hellmayri GRISCOM AND GREENWAY, 1937, Bull. Mus. Comp. Zool., 81, p. 421 (Paramaribo, Surinam).

1 ♂, 460 m.

Southern Venezuela (Mts. Auyan-tepui and Roraima) and the Guianas south to the Amazon Valley.

Our example agrees with a topotypical male of *hellmayri* from Surinam. It has lighter vermiculations on upperparts, more grayish, less brownish, but this variation is not as extreme as that which exists between the British Guiana specimens at hand and the topotypical example. In view of the geographical proximity of *hellmayri* it seems advisable to include our single specimen with that form and not with *sticta* which was described from a Mérida specimen which I cannot distinguish from the Temperate Zone form, *contempta*.

Venezuela has not been included in the range of this race. Previous Venezuelan records from Mt. Roraima were credited to British Guiana.

STRIGIDAE

OWLS

Otus choliba crucigerus (Spix)

Strix crucigera SPIX, 1824, Av. Bras., I, p. 22, pl. 9 ("Juxta flumen Amazonum").

1 ♀, 460 m.

Eastern Colombia, southern Venezuela (base of Mt. Duida; Mts. Auyan-tepui and Roraima, etc.), the Guianas, south to Brazil, Peru, etc.

Our skin differs from *O. c. duidae* in being less chocolate-brown on the dark areas of the head, nape and back, and also by having narrower dark brownish shaft streaks on the breast. It agrees with 2 Mt. Duida skins in having the light ochraceous-

buff ground color of the breast, shanks and under tail-coverts, which in *decussatus* and *crucigerus* is gray-white.

Our specimen disagrees with Kelso's description of the species *roraimae* in that it does not have large circular white areas on the breast, and instead of having white underparts it has them ochraceous-buff. It appears that our bird is most nearly related to the wide ranging tropical race *crucigerus* but it averages darker above and richer ochraceous-buff below. It may be an intermediate between *duidae* and *crucigerus*, but is almost precisely similar to one example of the latter in the series of 65 skins at hand.

Pulsatrix perspicillata perspicillata
(Latham)

Strix perspicillata LATHAM, 1790, Index Orn., I, p. 58 (Cayenne).

1 ♂, 1 ♀, 460 m.

Northern Colombia, Venezuela (Cariacuito; El Yagual (= El Llagual), Caura River; Mts. Auyan-tepui and Roraima), the Guianas to Matto Grosso and Peru, etc.

Glaucidium brasilianum olivaceum
Chapman

Glaucidium brasilianum olivaceum CHAPMAN 1939, Amer. Mus. Novit., No. 1051, p. 6 (Mt. Auyan-tepui, 1100 m.).

6 ♂, 1100 m. (including type).

Mt. Auyan-tepui, Venezuela.

Ciccaba virgata macconnelli Chubb

Ciccaba supercilialis macconnelli CHUBB, 1916, Bds. Brit. Guiana, I, p. 290 (Ituribisi River, British Guiana).

1 ♂, 1100 m.

Southern Venezuela (Mts. Roraima and Auyan-tepui) and the Guianas.

Our specimen is darker on upperparts and has darker brown barring on the anterior chest. We attribute the differences to individual variation.

Venezuela has not been included in the range of this race. A previous record from Mt. Roraima was credited to British Guiana.

Rhinoptynx clamator clamator (Vieillot)

Bubo clamator VIEILLOT, 1807, Ois. Am. Sept., I, p. 52, pl. 20 (Cayenne to Hudson Bay, re-

stricted to Cayenne by Hellmayr, 1906, Abh. K. Bayer. Akad. Wiss., Kl. 2, 22, p. 574).

1 ♂, 460 m.

Mexico south to southern Brazil and Peru.

CAPRIMULGIDAE

GOATSUCKERS

Nyctibius griseus griseus (Gmelin)

Caprimulgus griseus GMELIN, 1789, Syst. Nat., I, pt. 2, p. 1029, No. 5 (Cayenne).

1 ♂, 460 m.; 2 ♂, 1100 m.

Trinidad, southern Venezuela (Mts. Roraima and Auyan-tepui), the Guianas, southward.

Venezuela has not been included in the range of this race. A previous record (Whitely) from Mt. Roraima was credited to British Guiana.

Podager nacunda minor Cory

Podager nacunda minor CORY, 1915, Field Mus. Nat. Hist. Publ., Orn. Ser., I, p. 300 (Bôa Vista, Rio Branco, Brazil).

1 ♂, 1 ♀, 460 m.

Colombia, Venezuela (San Mateo de Cai-cara, Mt. Auyan-tepui), Tobago, Trinidad, British Guiana, Surinam and the Rio Branco region of Brazil.

Caprimulgus longirostris roraimae
(Chapman)

Stellura ruficervix roraimae CHAPMAN, 1929, Amer. Mus. Novit., No. 341, p. 2 (Mt. Roraima, 6000 ft.); 1931, Bull. Amer. Mus. Nat. Hist., LXIII, p. 68; 1939, Amer. Mus. Novit., No. 1051, p. 7 ("The Upper Zonal Birds of Mt. Auyan-tepui").

1 ♂, 2200 m.

Subtropical Zone of southern Venezuela (Mts. Roraima, Auyan-tepui and Duida).

Caprimulgus cayennensis cayennensis
(Gmelin)

Caprimulgus cayennensis GMELIN, 1789, Syst. Nat., I, pt. 2, p. 1031 (Cayenne).

1 ♂, 4 ♀, 460 m.; 6 ♂, 1 ♂ (?), 14 ♀, 1100 m.

Eastern Colombia, southern Venezuela (Barinas¹; Camaguan¹; Altagracia; Cai-cara; Maripa; Mts. Auyan-tepui and

¹ In the Phelps Ornith. Coll., Caracas.

Roraima), the Guianas and northern Brazil (?).

Caprimulgus nigrescens nigrescens
Cabanis

Caprimulgus nigrescens CABANIS, 1848, Schomburgk Reis. Brit. Guiana, 3, p. 710 (lower Essequibo River, British Guiana).

5 ♂, 5 ♀, 1 (?), 460 m.

Colombia, southern Venezuela (Caura River: Suapure, La Unión. Mts. Roraima and Auyan-tepui), the Guianas, northern Brazil, etc.

APODIDAE

SWIFTS

Streptoprocne zonaris albicincta
(Cabanis)

Hemiprocne albicincta CABANIS, 1862, Journ. für Ornith., 10, p. 165 (Guiana to Mexico).

1 ♀, 460 m.; 2 ♀, 1100 m.

From Honduras and Panama south to British Guiana, Matto Grosso and Peru (in Venezuela: Mts. Auyan-tepui and Roraima, etc.).

This swift is very numerous in the region of Auyan-tepui although the few specimens we were able to obtain seem to indicate rarity. Actually the great speed at which they fly as they course along anywhere from just above the savannas to the clouds, makes them extremely difficult to collect.

Observed frequently at both the 460-meter and the 1100-meter camps but never on the plateau.

Chaetura cinereiventris guianensis
Hartert

[*Chaetura cinereiventris*] subsp. a *Chaetura guianensis* HARTERT, 1892, Cat. Bds. Brit. Mus., XVI, p. 486 (Guiana, Venezuela, Trinidad and Grenada; type locality restricted to Merumé Mountains, British Guiana, by Hellmayr, antea, p. 155).

1 ♀, 1100 m.

Southern Venezuela (Mts. Roraima and Auyan-tepui) and British Guiana (Merumé Mts.).

The measurements given by Hartert¹ of *guianensis* are similar to those of our specimens which measures as follows: wing,

102.5 mm.; tail, 40; culmen from base, 7.5; exposed culmen, 4.5; tarsus, 9.

This swift was seen quite frequently but since it always flew over the crown of the forest it proved very difficult to collect.

Chaetura rutila rutila (Vieillot)

Hirundo rutila VIEILLOT, 1817, Nouv. Dict. d'Hist. Nat., 14, p. 528 (Locality unknown = Guiana).

1 ♂, 1 ♀, 460 m.; 6 ♂, 11 ♀, 1 ♀ (?), 1100 m.

Trinidad, southern Venezuela (Mt. Auyan-tepui) and the Guianas.

This is the commonest swift in the region of Mt. Auyan-tepui. Frequently clouds of them passed over our camps, both on the 1100-meter plane and down at the 460-meter level, their erratic spiral flight bringing them back again and again so that often the flock remained within sight for upward of half an hour. During the afternoon of February 14, 1938, a flock which was composed of an estimated 5000 birds came over camp flying exceptionally low. We blazed away at them for almost half an hour and obtained most of the fine series listed above. The shooting, strange to say, did not scare these fearless birds whose flight is their greatest protection.

They comprise an extension of range to Venezuela from British Guiana and are the first examples of this species to reach the American Museum.

C. r. rutila is represented in the British Museum by 2 specimens (?) from the Merumé Mts., British Guiana.

Although we have been unable to compare our extensive series with any skins, they agree with the description of *rutila*.² No description of the female exists except for a hazarded guess in the Catalogue of Birds in the British Museum (*op. cit.*) which is wrong. The female does have a brown collar. The following is a brief description based on the average coloration of 5 females: similar to the male except that the chin, throat, malar region, upper chest, sides of neck and nape are less brightly cinnamon-brown, these areas being sprinkled finely with dark gray. Collar on hind neck generally similar to the male.

¹ 1892, Cat. Bds. Brit. Mus., XVI, p. 486.

² 1892, Cat. Birds Brit. Mus., XVI, p. 493.

Females are smaller than males as shown by the following range of measurement, based on 4 males and 4 females. Wing, 135–139 mm.; tail, 61–64. Wing, 129–135; tail, 56–62.

FIELD NOTES.—February 15, 1938: "The brown-collared swifts, with one exception, had testes and ovaries contracted as in the non-breeding season. One ♂ however had testes half an inch long which were white."

Cypseloides fumigatus (Streubel)

Hemiprocne fumigata STREUBEL, 1848, Isis von Oken, Col. 366 (Brazil, ex Natterer, Ms.).

1 (?), 1100 m.

Eastern Panama, eastern Ecuador, southern Venezuela (Mt. Auyan-tepui), British Guiana (Kaieteur Falls, Potaro River), Brazil and western Peru.

Extension of range to Venezuela (A) and to British Guiana (B):

(A) Our specimen was collected by Captain Felix Cardona on Oct. 2, 1937, two months before the arrival of the American Museum Expedition. He found it at the place where the Museum Expedition later established Base Camp (1100 m.).

(B) An old skin found in the American Museum Collection, not heretofore recorded in literature, from Kaieteur Falls, Potaro River, British Guiana (W. L. S. Loat Coll.).

Aëronautes montivagus tatei (Chapman)

Duidia tatei CHAPMAN, 1929, Amer. Mus. Novit., No. 380, p. 11 (Mt. Duida); 1931, Bull. Amer. Mus. Nat. Hist., LXIII, p. 68; 1939, Amer. Mus. Novit., No. 1051, p. 7 ("The Upper Zonal Birds of Mt. Auyan-tepui").

2 ♂, 1100 m.

Southern Venezuela (Mts. Duida and Auyan-tepui).

Dr. Chapman (*op. cit.*, 1931) separated the race *tatei* from *montivagus* on the basis of its blacker and glossier plumage with bluish reflections as opposed to sooty plumage with somewhat olivaceous reflections. His observations of the single and heretofore only known example are substantiated by our 2 specimens which exhibit the same characters. When compared with a series of 3 *montivagus*, these

differences are most pronounced. The 2 Auyan-tepui birds have frontal tarsi feathered to the base of toes while the Duida example is completely naked. Dr. Chapman (*op. cit.*, 1931) in his discourse on the Duida example (when he compared it with a large series from Venezuela) considers the naked tarsus as an example of variation and, it would seem, our specimens corroborate this.

This species was very probably the swift which was observed several times flying over the plateau.

The range of *tatei* is considerably enlarged by the discovery of their presence at Mt. Auyan-tepui. They probably inhabit most of the Guiana Highlands.

SPECIMENS EXAMINED

Aëronautes montivagus montivagus.—PERU: Urubamba Canon, Santa Rita, 1 ♀. BOLIVIA: Vermejo, province of Santa Cruz, 1 ♂, 1 ♀.

A. m. tatei.—VENEZUELA: Mt. Duida (summit), 1 ♂ (type); Mt. Auyan-tepui (1100-m. camp), 2 ♂.

FIELD NOTES.—February 7, 1938: "Shot a small black swift similar to the bird taken by Bill Phelps 2 days ago, from a flock of a hundred or more which, in company with many *Pygochelidon cyanoleuca cyanoleuca*, were flying low over the 1100-m. cliffs."

Reinarda squamata squamata (Cassin)

Cypselus squamata CASSIN, 1853, Proc. Acad. Nat. Sci., Phila., VI, p. 369 (British Guiana).

4 ♂, 7 ♀, 460 m.

Southern Venezuela (Altagracia, Caicara, Mt. Auyan-tepui), the Guianas, northern Brazil and eastern Peru.

Study of the upper aspect of the 30 skins listed below indicates that all belong to the typical form, including those from Altagracia and Caicara. Certainly none have the "upperparts a shining greenish black instead of brownish black," which appears to be the chief diagnostic character separating *semota* from *squamata* as described by Riley.¹ The lower Orinoco examples average a tone more pallid on the upperparts and show signs of the greenish-black plumage. However, certain of the Auyan-tepui skins are greenish black as are a few

¹ 1933, Proc. Biol. Soc. Wash., 46, p. 39.

of the Brazilian examples. I attach no significance to this because the green hue is variable and was observed by Riley. At the end of his description of *R. s. semota*, he mentions that he used the series of Brazilian *squamata*, which I am now using, in determining that the El Mango, Brazo Cassiquiare, series was distinct from *squamata*. . . . On upperparts the variation ranges from birds with sooty brownish plumage with only faint squamations, consisting of semi-obsolete grayish fringes, to examples with prominent white fringing, set against greenish-black plumage. Most of the lower Orinoco skins show prominent fringing but one from Caicara is as dark as any from Brazil (A. M. N. H. No. 177,148). . . . In regard to the lower aspect the series is essentially similar to the single almost topotypical specimen from Guiana (A. M. N. H. No. 43,606) except possibly that the lower Orinoco series are lighter below (the dark areas at sides of chest being more restricted and less inclined to join as a band across the chest) and on the under tail-coverts which all are gray-white on their inner vanes in contrast to several in the Auyan-tepui and Brazilian series which are dark on both vanes. All are essentially similar in size and consequently the Auyan-tepui and the lower Orinoco series which are *squamata*, extend the range of that race north from British Guiana to the lower Orinoco in Venezuela.

SPECIMENS EXAMINED

R. s. squamata.—GUIANA: 1 (?). BRAZIL: Bahia, 2 ♂, 1 ♀, 1 (?); Piahy, 1 ♂, 1 ♂ (?); Parahyba, 1 ♂, 1 (?); Pindahyba, 1 ♀; Ceará, 1 (?). VENEZUELA: Mt. Auyan-tepui, 4 ♂, 7 ♀; Altigracia, 3 ♂, 2 ♀; Caicara, 2 ♂.

TROCHILIDAE

HUMMINGBIRDS

Doryfera johannae guianensis (Boucard)

Hemistephania guianensis guian [sic] BOUCARD, 1891, "Hummingbird," III, p. 10 (Merumé Mts., British Guiana).

1 ♂, 1 (?), 1100 m.

Southern Venezuela (Mts. Duida, Auyan-tepui and Roraima) and British Guiana (Merumé Mts.).

Our male is similar to the topotypical

male from the Merumé Mts. except that ours has subobsolete purplish-gray tipping on the glossy blue-black rectrices while the Merumé specimen is solid blue-black. Four of the 5 Duida males have these markings (slightly broader and lighter), but the other shows no trace of it. Because of this variability (which may be due to age or individual variation but not to sexual differences), we agree that the synonymized race *dissita* is not recognizable. All specimens examined are therefore essentially similar and those from Mt. Auyan-tepui are added to the range of *guianensis*.

SPECIMENS EXAMINED

BRITISH GUIANA.—Merumé Mts., 1 ♂.

VENEZUELA.—Mt. Roraima, 1 ♀; Mt. Auyan-tepui, 1 ♂, 1 ♀; Mt. Duida, 3 ♂, 5 ♀, 2 [♂(?)].

Threnetes leucurus leucurus (Linné)

Trochilus leucurus LINNÉ, 1766, Syst. Nat., 12th Ed., I, p. 190 ("America Meridionali" = Surinam).

1 ♀, 1 (?), 460 m.

Southern Venezuela (Mt. Auyan-tepui), British Guiana, Dutch Guiana and northern Brazil.

The topotypical specimens are essentially similar to the Mt. Auyan-tepui specimen of unknown sex. Our female is closely similar to the "Mines District" skin from British Guiana. The range of *leucurus* consequently is extended northward to Venezuela.

SPECIMENS EXAMINED

DUTCH GUIANA: 2 ♂, 1 ♀, 3 (?). BRITISH GUIANA: Minnehaha Creek, 1 ♀; Mines District, 1 (?). VENEZUELA: Mt. Auyan-tepui, 1 ♀, 1 (?).

Phaethornis superciliosus superciliosus (Linné)

Trochilus superciliosus LINNÉ, 1766, Syst. Nat., 12th Ed., I, p. 189 ("Cayenne").

2 ♂, 460 m.; 1 ♂, 2 ♀, 1100 m.

Southern Venezuela (Munduapo; Necagua; La Prisión; Suapure; Mt. Auyan-tepui), British and French Guiana, and northern Brazil.

Our specimens agree with a large series from the Guianas and with lower Orinoco specimens. Two specimens from Oyapock, French Guiana (A. M. N. H. Nos. 233,751 and 233,752), are similar to the series from

Mt. Auyan-tepui. I mention this because Cory¹ only questionably includes French Guiana in the range of *superciliosus*.

SPECIMENS EXAMINED

P. s. superciliosus.—BRITISH GUIANA: Annai, 1 ♂, 1 ♀; Minnehaha Creek, 1 ♂; Essequibo River, 1 (?) ; Ourumu, 1 ♂; Atapuw River, 1 ♂. FRENCH GUIANA: Oyapock, 2 (?). VENEZUELA: Mt. Auyan-tepui, 3 ♂, 2 ♀; La Prisión, 1 ♂, 1 ♀, 4 (?); Suapure, 3 ♂, 5 ♀.

Phaethornis augusti incanescens (Simon)

Anisoterus augusti incanescens SIMON, 1921, "Hist. Nat. Trochil.", pp. 16, 257 (Quonga; Mts. Merumé and Roraima).

1 ♂, 460 m.

Southern Venezuela (Mts. Roraima and Auyan-tepui) and British Guiana (Quonga and Merumé Mts.).

Our specimen shot, at 1400 ft., agrees with a series of 4 from Mt. Roraima all of which were collected between the altitudes of 4000 and 6000 ft. Dr. Chapman,² in writing of this bird says: "This race appears to be more of a Subtropical than Tropical form."

Venezuela has not been included in the range of this race. Previous Venezuelan records from Mt. Roraima were credited to British Guiana.

SPECIMENS EXAMINED

P. a. incanescens.—VENEZUELA: Mt. Roraima, 1 ♂, 2 ♀, 1 ♀ (?); Mt. Auyan-tepui, 1 ♂.

Phaethornis ruber episcopus Gould

Phaethornis episcopus GOULD, 1857, Proc. Zool. Soc. London, p. 14 (Demerara, British Guiana).

1 ♀, 460 m.

Southern Venezuela (Caura River; Munduapo; Nericagua; Boca de Sina; Mts. Auyan-tepui and Roraima) and British Guiana.

British Guiana specimens are similar to a large series from the Caura and Orinoco Rivers. The single Auyan-tepui specimen appears to be slightly more pallid below and the vanes of the central rectrices have (in some unknown manner) been finely cut so that each of the two long white-tipped feathers show three fine bar-like markings.

¹ 1918, F. eld Mus. Nat. Hist., Zool. Ser., XIII, p. 154.

² 1931, Bull. Amer. Mus., LXIII, p. 70.

These appear as dusky bars to the casual observer. None of the skins in the large series at hand are similarly marked.

SPECIMENS EXAMINED

P. r. episcopus.—BRITISH GUIANA: Kamakusa, 1 (?); Potaro Landing, 1 ♂; Annai, 1 ♂. VENEZUELA: Mt. Auyan-tepui, 1 ♀; Suapure, 3 ♂, 1 ♀ (?); La Prisión, 1 ♂; Munduapo, 3 ♂, 2 ♀; Nericagua, 1 ♂ (?), 1 ♀; Boca de Sina, 1 ♀.

Campylopterus largipennis Boddaert

Trochilus largipennis BODDAERT, 1783, Tabl. Pl. enl., p. 41 (Cayenne).

1 ♂, 1 ♂ (?), 460 m.; 4 ♂, 1 ♀, 1100 m.

Southern Venezuela (Nericagua; Sacupana; Suapure), the Guianas and northern Brazil.

The large series at hand exhibits variation principally on the upperparts which range from copperish green to rich bronze-green. I notice that this variation in plumage exists in the nearly topotypical British Guiana specimens as well as in those from Mt. Auyan-tepui and the lower Orinoco.

SPECIMENS EXAMINED

C. largipennis.—BRITISH GUIANA: Merumé Mts., 1 ♀; Kamakusa, 2 ♂, 1 ♀; Tumatumari, 1 ♀; Potaro Landing, 1 ♂, 1 ♀. VENEZUELA: Mt. Auyan-tepui, 5 ♂, 1 ♂ (?), 1 ♀; Nericagua, 5 ♂, 2 ♀; Sacupana, 1 ♂, 1 (?); Suapure, 1 ♀; Caura River, 1 ♀.

Campylopterus hyperythrus Cabanis

Campylopterus hyperythrus CABANIS, 1848, Schomburgk Reis. Brit. Guiana, 3, p. 709 (British Guiana).—CHAPMAN, 1931, Bull. Amer. Mus. Nat. Hist., LXIII, p. 71 (Mt. Roraima); 1939, Amer. Mus. Novit., No. 1051, p. 7 ("The Upper Zonal Birds of Mt. Auyan-tepui").

2 ♂, 1 ♂ (?), 1850 m.; 2 ♂, 1 ♂ (?), 2200 m.

Subtropical Zone of southern Venezuela (at Mts. Auyan-tepui and Roraima) and in the Tropical Zone of British Guiana (at Bartica [?]).³

Two males are adult and have the first primary shaft broadly flanged and crooked, two are of males which still bear the straight shaft similar to that of the female and two are of doubtful sex and may represent females. There is some doubt as to when the "crooked wing" first replaces the straight shaft. Mr. Zimmer thinks it

³ Chubb, 1916, Bds. Brit. Guiana, Vol. 1, p. 391.

is acquired not as a post-juvenile change but pre-nuptially.

Previous Venezuelan records from Mt. Roraima were credited to British Guiana.

***Florisuga mellivora mellivora* (Linné)**

Trochilus mellivorus LINNÉ, 1758, Syst. Nat., 10th Ed., 1, p. 121 ("India," error = Guiana).

2 ♀, 460 m.

Mexico, south to southern Brazil and Peru.

We obtained one young and one adult female of this wide ranging tropical race. They are precisely similar to certain skins in the large series of Guianan and Venezuelan examples at hand.

***Agyrtrina lactea zimmeri*, new subspecies**

TYPE from Mt. Auyan-tepui, Venezuela, No. 324,308, American Museum of Natural History. Adult female, collected December 11, 1937, by the Phelps Venezuela Expedition of The American Museum of Natural History. Altitude 1100 meters.

DIAGNOSIS.—Chin and throat patch appearing much less brilliant than in typical form; more broadly fringed with light gray; each feather with a concealed pre-subterminal white bar (which is only present subobsoletely, if at all, in *lactea*); reflections of throat and sides of neck lighter, more violet-blue, and much less extensive, with a stronger greenish tone at the margin of the sides of chest; flanks with a richer bronze-green cast, less violet-green; central chest, anteriorly, more broadly white, appearing to have a larger white patch between the throat and abdomen.

RANGE.—Known only from the type locality.

DESCRIPTION OF TYPE.—Upperparts iridescent bronze-green, becoming slightly darker, less bronzy, on the crown; lores sooty green; auriculars pallid gray-brown faintly washed with green; throat, malar region, sides of neck, mottled with glittering violet-blue and gray-white (each feather is dark brownish gray on its basal half and is barred medially with a pre-subterminal white bar, subterminally with a broad, partially ovate, violet-blue bar and terminally with spiny subobsolete light gray fringing); abdomen white at mid-line; under tail-coverts white, faintly streaked on feather bases with brownish gray; tail below, dark glossy blue-black, tipped subobsoletely with dark gray, more strongly on outer rectrices; upper wing-coverts similar to back; primaries and secondaries, brownish sooty; upper tail-coverts like back; central pair of rectrices above, bronzy green, becoming dark glossy blue with greenish reflections on tips; successive outer rectrices, to the outermost pair, showing decreasing amounts of bronzy green, especially on inner vanes; outer rectrix almost

completely brownish blue-black with but a suggestion of green reflections at base of outer vane; light tipping as described for the under surface of tail; primaries below dull purplish brown. Bill (in life), "black"; feet, "black"; iris, "brown." Wing, 52.5 mm.; tail, 29.5; exposed culmen, 18; culmen from base, 21.

REMARKS.—Two specimens from "Brazil" (A. M. N. H. Nos. 479,774 and 479,775) have throats and chins that exhibit a tendency to be like *zimmeri* in coloration. Since they are closer to *lactea* and since they lack specific geographical data we are compelled to assign them, somewhat uncertainly, to the typical form.

Both *lactea* and *zimmeri* are essentially similar in size. Males and females also are similar.

It is a privilege to be able to name this bird in honor of Mr. John Todd Zimmer who has done much of the research on it and on so many of the other difficult species treated in this paper.

SPECIMENS EXAMINED

A. l. zimmeri.—VENEZUELA: Mt. Auyan-tepui, 2 ♂, 3 ♀, 1 (?) (1100 m.).

A. l. lactea.—BRAZIL: São Paulo, 2 ♂; Bahia, 1 ♀; "Brazil," 2 ♂, 5 (?).

A. bartletti.—PERU: Chanchamayo, 1 ♂; Rioja, 1 ♂; "Peru," 1 ♂.

A. n. nitidifrons.—BRAZIL: Prata (near Pará), 5 ♂, 2 ♀.

A. milleri.—VENEZUELA: Caicara, 3 ♂, 2 ♀, 1 (?); Nericagua, 5 ♀; Suapure, 1 ♂, 2 ♀; Munduapo, 1 (?). COLOMBIA: "Bogotá," 6 (?); "Colombia," 2 (?).

***Saucerottia tobaci caurensis* Berlepsch and Hartert**

Saucerottia erythronotus caurensis BERLEPSCH AND HARTERT, 1902, Nov. Zool., IX, p. 84 (Suapure, Caura River, Venezuela).

3 ♂, 3 ♀, 460 m.; 5 ♂, 4 ♀, 1100 m.

Southern Venezuela (Ciudad Bolívar; Caura River; Mts. Auyan-tepui and Roraima).¹

Our males show the wide degree of variation which is present in a large series from Trinidad, to which they are very closely allied. Principally, the under tail-coverts vary from bluish black with grayish edgings (No. 324,336) to dull buffy brown with obsolete edgings (No. 324,332) while those from Trinidad vary from dull brownish

¹ Coll. by A. S. Pinkus. In the Phelps Ornith. Coll., Caracas.

gray with gray-buff edgings (No. 480,134) to bright rufous-brown (No. 480,141). Since the color of the tail-coverts is the chief diagnostic character distinguishing *caurensis* from *erythronotus*, it is significant that the type (and only skin at hand) of *caurensis* has under tail-coverts which are a tone darker than the darkest in the Trinidad series. Our specimens have under tail-coverts which barely average darker than *erythronotus* but one (No. 323,368) agrees precisely with the type of *caurensis*. I cannot see any consistent difference in the color of breast and abdomen as reflected or otherwise.

SPECIMENS EXAMINED

S. t. erythronotus.—TRINIDAD (various localities), 18 ♂, 4 ♀.

S. t. caurensis.—VENEZUELA: mountains west of Suapure, 1 ♂ (type); Mt. Auyan-tepui, 8 ♂, 7 ♀.

Hylocharis sapphirina sapphirina
(Gmelin)

Trochilus sapphirina GMELIN, 1788, Syst. Nat., 1, p. 496 (Guiana).

1 ♂, 1100 m.

Southern Venezuela (Nericagua; Suapure; Mts. Auyan-tepui and Roraima), the Guianas and northern Brazil.

Four nearly topotypical adult males from Annai, British Guiana, agree with 4 adults from Nericagua, Venezuela. Our single specimen is partially immature and is not precisely matched by any in the extensive series at hand.

SPECIMENS EXAMINED

H. s. sapphirina.—VENEZUELA: Suapure, 1 ♀; Nericagua, 6 ♂, 6 ♀. BRITISH GUIANA: Annai, 4 ♂, 1 ♀; Essequibo River, 1 (?).

Hylocharis cyanus viridiventris
Berlepsch

Hylocharis viridiventris BERLEPSCH, 1880, Ibis, p. 113 (Mérida).

4 ♂, 3 ♀, 1 (?), 460 m.; 1 ♂, 1100 m.

Venezuela (Mérida, Cariaquito, Suapure, La Prisión, Nericagua, Mts. Auyan-tepui and Roraima), the Guianas and northern Brazil.

Chlorostilbon prasinus subfurcatus
Berlepsch

Chlorostilbon subfurcatus BERLEPSCH, 1887, Ibis, XX, p. 297 (Mt. Roraima, Venezuela).

2 ♂, 2 (?), 1100 m.

Southern Venezuela (Mts. Duida, Auyan-tepui and Roraima; Puerto Ayacucho [?]) and British Guiana.

Duida and Auyan-tepui specimens agree with topotypical Roraima skins.

SPECIMENS EXAMINED

C. p. subfurcatus.—VENEZUELA: Mt. Duida (various localities), 17 ♂, 5 ♀, 1 (?); Mt. Roraima, 12 ♂, 5 ♀.

Thalurania furcata fissilis Berlepsch and
Hartert

Thalurania furcata fissilis BERLEPSCH AND HARTERT, 1902, Nov. Zool., IX, p. 87 (Caura River, Venezuela).

3 ♂, 2 ♂ (?), 1 ♀, 1 ♀ (?), 460 m.; 2 ♂, 4 ♂ (?), 3 ♀, 1 ♀ (?), 1100 m.

Southern Venezuela (Caicara; Suapure; Guanoco; Mts. Auyan-tepui and Roraima) and British Guiana.

I have before me the types of *fissilis* and of *orinocensis* and 4 topotypical *fissilis*—*orinocensis* differs from *fissilis* in having upperparts, chiefly the crown, lighter, more copperish green, less dusky green and by having the iridescent band across the shoulders (above) broader and richer, deeper purplish blue, less violet. Our specimens are essentially similar to *fissilis*.

SPECIMENS EXAMINED

T. f. fissilis.—Suapure, 1 ♂ (type).

T. f. orinocensis.—Nericagua, 5 ♂ (including type).

Colibri germanus (Salvin and Godman)

Petasophora germana SALVIN AND GODMAN, 1884, Ibis, p. 451 (Mt. Roraima).—CHAPMAN, 1931, Bull. Amer. Mus. Nat. Hist., LXIII, p. 74; 1939, Amer. Mus. Novit., No. 1051, p. 7 ("The Upper Zonal Birds of Mt. Auyan-tepui").

1 ♂, 1850 m.; 1 (?), 2400 m.

Subtropical Zone of southern Venezuela (Mts. Roraima, Auyan-tepui and Duida).

We have found no valid British Guiana records for this species. That range given by Simon, Boucard, Chubb and Cory is based on Mt. Roraima specimens.

Polytmus thaumantias chrysobronchus
(Shaw)

Trochilus chrysobronchus SHAW, 1812, Gen. Zool., VIII, p. 287 (Guiana).

2 ♂, 1 ♀, 1 (?), 460 m.; 1 (?), 1100 m.
Colombia, southern Venezuela (San Fernando¹; Mts. Auyan-tepui and Roraima), Trinidad and the Guianas.

Similar to a series of nearly topotypical birds from British Guiana.

SPECIMENS EXAMINED

P. t. chrysobronchus.—BRITISH GUIANA: Annai, 3 ♂. VENEZUELA: Roraima, 1 ♀, La Laguna, 2 ♂, 1 ♀.

Waldronia milleri Chapman

Waldronia milleri CHAPMAN, 1929, Amer. Mus. Novit., No. 380, p. 14 (Mt. Duida); 1931, Bull. Amer. Mus. Nat. Hist., LXIII, p. 76; 1939, Amer. Mus. Novit., No. 1051, p. 7 ("The Upper Zonal Birds of Mt. Auyan-tepui").

2 (?), 1850 m.; 6 ♂, 1 (?), 2200 m.

Subtropical Zone of Mts. Duida and Auyan-tepui in southern Venezuela.

FIELD NOTES.—December 27, 1937: "Nest under construction, almost completed." December 30: "Two oval white eggs, almost as large as those of a Phoebe flycatcher. Nest in crotch of an open bush 2 feet above ground in the midst of a clearing. The structure is about an inch and a half in diameter and two inches in depth. It is made of a sticky reddish substance which in texture is rather similar to 'milkweed down' and is camouflaged with a few greenish lichens." January 6, 1938: "The ♀ (?) up to now has been extremely wary but today I was able to approach to within five yards and to make a positive identification." January 16: "Found hummingbird incubating. Was allowed to approach to within two yards before parent fled, leaving an egg and a youngster just hatched." January 22: "One of the young is just beginning to open its eyes while the other, which is probably a day younger, is still blind."

Polyplancta aurescens (Gould)

Trochilus (Lampornis) aurescens GOULD, 1846, Proc. Zool. Soc. London, p. 88 (Río Negro).

1 ♀, 1100 m.

Southern Venezuela (Mt. Auyan-tepui), northwestern Brazil, eastern Peru and eastern Ecuador.

¹ Simon writes (1921, Hist. Nat. Troch., p. 101), "bassin de l'Orénoque (San Fernando)."

Essentially similar to Peruvian and Ecuadorian specimens at hand. Our specimen is partially immature as indicated by its undeveloped purple forehead patch.

Extension of range to Venezuela.

SPECIMENS EXAMINED

P. aurescens.—EASTERN ECUADOR: Below San José de Sumarco, 1 ♂, 1 ♀; San José Abajo, 1 ♂, 1 ♀; Voca R. Curceroy, 1 ♂, 1 ♀. PERU: Pebas, 1 ♂, 1 (?); "Peru," 1 (?).

Anthoscenus longirostris longirostris (Vieillot)

Trochilus longirostris VIEILLOT, 1901, Ois. Dores, 1, livr. 10, p. 107, pl. 59 (Trinidad).

1 ♀, 460 m.; 2 ♂, 1100 m.

Colombia, Venezuela (San Esteban; Cumaná; Maipures; Suapure and La Prisión; Mts. Auyan-tepui and Roraima), Trinidad, the Guianas, etc.

Calliphlox amethystina (Gmelin)

Trochilus amethystinus GMELIN, 1788, Syst. Nat., 1, p. 496 (Cayenne).

1 (?), 1100 m.

Trinidad, southern Venezuela (Caicara; Suapure; Mts. Roraima, Auyan-tepui and Duida), British and French Guiana, etc.

Our single specimen has darker green, less bronzy green upperparts than have the males in the large series at hand. However, our specimen is matched by one from Mt. Roraima (No. 484,577) while 4 remaining Roraima males agree in color of upperparts with topotypical and Venezuelan skins.

SPECIMENS EXAMINED

C. amethystina.—CAYENNE: 2 ♂, 1 ♀, 2 (?). BRITISH GUIANA: Annai, 2 ♀, 1 (?). VENEZUELA: Mt. Roraima, 5 ♂; 2 ♀; Mt. Duida, 2 ♀; Suapure, 1 ♂; Sacupana, 1 ♂, 1 (?); Caicara, 4 ♂, 4 ♀.

Lophornis ornatus (Boddaert)

Trochilus ornatus BODDAERT, 1873, Tabl. Pl. enl., p. 39 (Cayenne).

1 ♂, 1 ♀, 460 m.

Trinidad, southern Venezuela (Caicara, Mts. Auyan-tepui and Roraima) and British Guiana.

Our specimens, both of which are in immature plumage, agree with certain examples in the extensive Museum series.

TROGONIDAE

TROGONS

Trogonurus personatus roraimae

Chapman

Trogonurus personatus roraimae CHAPMAN, 1929, Amer. Mus. Novit., No. 341, p. 3 (Mt. Roraima, 6800 ft.); 1931, Bull. Amer. Mus. Nat. Hist., LXIII, p. 77; 1939, Amer. Mus. Novit., No. 1051, p. 7 ("The Upper Zonal Birds of Mt. Auyan-tepui").

1 ♂, 1 ♀, 1100 m.

Subtropical and upper Tropical Zones of Mts. Roraima and Auyan-tepui, southern Venezuela.

Our bird has breast and abdomen brighter rose than the type of *roraimae*. This plumage difference is attributed to the fading of the delicate "trogon color" and, accordingly, we include our record in the range of *roraimae*. The type of *duida* though "closely related to" (Chapman, 1931, *op. cit.*) *roraimae* may be easily distinguished by comparison of tail colors. . . . *duida* tails are tinted greenish blue while *roraimae* is bronzy, tinted with green.

We have found no valid British Guiana records for this race (the range "British Guiana," given by Chubb, is based on Mt. Roraima records).

Trogonurus curucui curucui (Linné)

Trogon curucui LINNÉ, 1766, Syst. Nat., 12th Ed., p. 1, 167 (South America).—IHERING, 1907, Aves do Brazil, p. 157.

1 ♂, 460 m.

Eastern Colombia, southern Venezuela (Mt. Auyan-tepui), the Guianas, most of Brazil, south to Peru and Argentina.

Extension of range to Venezuela.

Chrysotrogon violaceus (Gmelin)

Trogon violaceus GMELIN, 1788, Syst. Nat., 1, p. 404 (Surinam).

1 ♂, 1 ♀, 460 m.; 6 ♂, 5 ♀, 1100 m.

Trinidad, Venezuela (Orope, Zulia; Munduapo; Mts. Auyan-tepui and Roraima), British Guiana and northern Brazil.

Trogon strigilatus strigilatus Linné

Trogon strigilatus LINNÉ, 1766, Syst. Nat., 12th Ed., 1, p. 167 (Cayenne).

5 ♂, 2 ♀, 460 m.

Eastern Colombia, Venezuela (the Ori-

noco basin; Mts. Auyan-tepui and Roraima, etc.), Trinidad, the Guianas, most of Brazil to Peru and Bolivia.

ALCEDINIDAE

KINGFISHERS

Streptoceryle torquata torquata (Linné)

Alcedo torquata LINNÉ, 1766, Syst. Nat., 12th Ed., p., 180 (Mexico).

1 ♂, 460 m.

Mexico south to Argentina.

Chloroceryle amazona (Latham)

Alcedo amazona LATHAM, 1790, Index Orn., 1, p. 257 (Cayenne).

4 ♂, 2 ♀, 1 ♀ (?), 460 m.; 1 (?), 1100 m.

Mexico south to Argentina.

Chloroceryle americana americana

(Gmelin)

Alcedo americana GMELIN, 1788, Syst. Nat., 1, p. 451 (Cayenne).

2 ♀, 460 m.

Colombia, Venezuela, Trinidad, the Guianas, etc.

MOMOTIDAE

MOTMOTS

Momotus momota momota (Linné)

Ramphastos momota LINNÉ, 1766, Syst. Nat., 12th Ed., 1, p. 152 (Cayenne).

5 ♂, 4 ♀, 460 m.; 1 ♀, 1100 m.

Southern Venezuela (Nericagua; Suapure; Nicare; La Prisión; Manoa; Mts. Auyan-tepui and Roraima), British Guiana and northern Brazil.

GALBULIDAE

JACAMARS

Psilopornis albirostris albirostris
(Latham)

Galbula albirostris LATHAM, 1790, Index Orn., 1, p. 245 ("America Austral" = Cayenne).

2 ♂, 1100 m.

Southern Venezuela (La Prisión; La Unión; Nicare; Mts. Auyan-tepui and Roraima), the Guianas and northern Brazil.

BUCCONIDAE

PUFFBIRDS

Bucco capensis Linné

Bucco capensis LINNÉ, 1766, Syst. Nat., 12th Ed., 1, p. 168 (Guiana).

1 ♀, 1200 m.

Southeastern Colombia, southern Venezuela (Mataben Rapids; Mts. Auyan-tepui and Roraima), the Guianas, northern Brazil, etc.

Notharchus hyperrhynchus hyperrhynchus (Sclater)

Bucco hyperrhynchus SCLATER, 1855. Proc. Zool. Soc. London, p. 193, Pl. 105 (Upper Amazons).

1 ♂, 1 ♀, 460 m.

Southern Venezuela (Mt. Auyan-tepui), northern Brazil and eastern Peru.

Extension of range to Venezuela.

Monasa niger (Müller)

Cuculus niger MÜLLER, 1776, Syst. Nat., Suppl., p. 90 (Cayenne).

4 ♂, 2 ♀, 460 m.

Southern Venezuela (mouth of the Meta River; San Felix River; Nericagua; Munduapo; La Prisión; La Unión; Mt. Auyan-tepui), the Guianas and northern Brazil.

Chelidoptera tenebrosa tenebrosa (Pallas)

Cuculus tenebrosus PALLAS, 1782, Neue Nord. Beytr., III, p. 3 (Surinam).

1 ♂, 1 ♀, 460 m.; 4 ♂, 1 ♂ (?), 7 ♀, 1100 m.

Southeastern Colombia, Venezuela (Ospino, Barinas¹; Mérida; Camaguan¹; Caicara; Altagracia; Sta. Maria de Ipire¹; Cd. Bolivar; Piacoa¹; Munduapo; Mts. Auyan-tepui and Roraima), the Guianas, etc.

CAPITONIDAE

BARBETS

Capito auratus aurantiicinctus Dalmas

Capito aurantiicinctus DALMAS, 1900, Bull. Soc. Zool. France, p. 178 (Caura River).

1 ♂, 1 ♀, 460 m.

¹ In the Phelps Ornith. Coll., Caracas.

Southern Venezuela (Nericagua; Boca de Sina; Nicare; La Unión; Mt. Auyan-tepui).

RAMPHASTIDAE

TOUCANS

Ramphastos tucanus tucanus Linné

(?) *R[amphastos] tucanus* LINNÉ, 1758, Syst. Nat., 10th Ed., 1, p. 103.

2 ♂, 460 m.; 2 ♂, 1 ♀, 1 (?), 1100 m.

Southern Venezuela (La Prisión; Manoa; Guanipa; Guanoco; Mts. Auyan-tepui and Roraima), the Guianas and northern Brazil.

Ramphastos vitellinus Lichtenstein

Ramphastos vitellinus LICHTENSTEIN, 1823, Verz. Doubl., p. 7 ("Cayana").

1 ♂, 3 ♀, 460 m.; 1 ♂, 1100 m.

Southern Venezuela (Caura River: Suapure; La Prisión. Mt. Auyan-tepui), Trinidad, the Guianas and northeastern Brazil.

Pteroglossus aracari atricollis (P. L. S. Müller)

Ramphastos atricollis P. L. S. MÜLLER, 1776, Syst. Nat., Suppl., p. 83 (ex Buffon, Daubenton, Pl. enl., 166—"Brazil," error = Cayenne).

2 ♂, 2 ♀, 1 (?), 460 m.

Eastern and southern Venezuela (Guanoco; Guanipa River; Cariaquito; Suapure; Mts. Auyan-tepui and Roraima) and the Guianas.

Pteroglossus viridis (Linné)

Rhamphastos viridis LINNÉ, 1766, Syst. Nat., 12th Ed., 1, p. 150 ("Cayana").

2 ♂, 1 ♀, 460 m.

Southern Venezuela (Suapure; La Unión; Mt. Auyan-tepui), the Guianas and northern Brazil.

Aulacorhynchus derbianus whitelyanus (Salvin and Godman)

Aulacorhamphus whitelyanus SALVIN AND GODMAN, 1882, Ibis, p. 83 (Merumé Mts.).—CHAPMAN, 1931, Bull. Amer. Mus. Nat. Hist., LXIII, p. 79; 1939, Amer. Mus. Novit., No. 1051, p. 7 ("The Upper Zonal Birds of Mt. Auyan-tepui").

1 ♂, 1 ♀, 1100 m.

Southern Venezuela (Mts. Auyan-tepui and Roraima) and British Guiana.

Previous Venezuelan records from Mt. Roraima were credited to British Guiana.

PICIDAE

WOODPECKERS AND PICULETS

Tripsurus rubrifrons (Spix)

Picus rubrifrons SPIX, 1824, Av. Bras., 1, p. 61, pl. LV, figs. 1-2 ("in sylvis Parae").

4 ♂, 3 ♀, 460 m.; 3 ♂, 2 ♀, 1100 m.

Southern Venezuela (Suapure; La Unión; Mt. Auyan-tepui), the Guianas, north and northeastern Brazil.

Tripsurus cruentatus (Boddaert)

Picus cruentatus BODDAERT, 1783, Tabl. Pl. enl., p. 43 (Cayenne).

1 ♂, 1 ♀, 460 m.; 1 ♂, 2 ♀, 1100 m.

Eastern base of the eastern Andes of Colombia, southern Venezuela (Munduapo; Barinitas, Barinas¹; Suapure; Mt. Auyan-tepui), the Guianas, southward.

Piculus flavigula flavigula (Boddaert)

Picus flavigula BODDAERT, 1783, Tabl. Pl. enl., p. 49 (Cayenne).

1 (?), 1100 m.

Southern Venezuela (Mt. Duida region; above falls of Atures; Nericagua; Munduapo; Mt. Auyan-tepui), the Guianas, etc.

Study of 20 skins, many of which are nearly topotypical, shows a wide degree of variation in size and color and in the pattern of the light areas of the underparts. Our specimen is darker olive on the breast and flanks than the average, but one Museum skin is as dark (No. 44,075); it has long-oval shaft streaks on the breast in contrast to the average of the series which are inclined toward wide subterminal irregular barring. One Museum skin, however, has similar markings (No. 487,351). Although our bird has wings and tail longer than any in the series, we consider it to be merely an extreme example of individual variation.

Piculus rubiginosus guianae (Hellmayr)

Chloronerypes rubiginosus guianae HELLMAYR, 1918, Verh. Orn. Ges. Bayern, XIII, 3, p. 314 (Yuruani River, alt. 2700 ft., west of Roraima,

S. E. Venezuela).—CHAPMAN, 1931, Bull. Amer. Mus. Nat. Hist., LXIII, p. 81; 1939, Amer. Mus. Novit., No. 1051, p. 7 ("The Upper Zonal Birds of Mt. Auyan-tepui").

3 ♂, 8 ♀, 1100 m.

Southern Venezuela (Mts. Duida, Auyan-tepui and Roraima; Yuruani River) and British Guiana.

Piculus rubiginosus viridissimus Chapman

Piculus rubiginosus viridissimus CHAPMAN, 1939, Amer. Mus. Novit., No. 1051, p. 8 (Mt. Auyan-tepui, Venezuela) ("The Upper Zonal Birds of Mt. Auyan-tepui").

4 ♀, 1850 m.; 2 ♂, 2200 m.

Subtropical Zone of Mt. Auyan-tepui, southern Venezuela.

Celeus jumana (Spix)

Picus jumana SPIX, 1824, Av. Bras., 1, p. 57, Pl. XLVII, figs. 1-2 ("in sylvis fl. Amazonum").

2 ♀, 460 m.; 3 ♀, 1100 m.

Southern Venezuela (Perico; Maipures; Mt. Auyan-tepui), French Guiana and northern Brazil.

Our series shows considerable variation especially on the crown which ranges from light rufous-brown (No. 323,450) to deep reddish brown (No. 324,280), and the rump, flanks and under wing-coverts which (generally similar in color on each individual) vary from a pale orange-yellow (No. 324,279) to greenish yellow (No. 323,451). This variability and that of the back, which ranges almost as extensively as the crown, is present in a series of 4 females from Brazil as well as in 5 from the middle and upper Orinoco. It is to be noted, however, that our skins show a strong tendency to average more greenish on rumps and flanks, but, since the extremes are matched by certain of the Museum skins, we merely call attention to this.

Celeus grammicus (Malherbe)

Picus grammicus MALHERBE, 1848, Men. Soc. Roy. Liège, p. 69 ("Bresil," probably Rio Negro).

1 ♀, 460 m.

Southern Venezuela (Munduapo; Nericagua; Mt. Auyan-tepui), French Guiana, northern Brazil, etc.

Our example differs from most of the

¹ In the Phelps Ornith. Coll., Caracas.

Museum skins by having wing-covert bars reduced in prominence (but not narrowed) and by having strong barring on rump, upper tail-coverts and at base of median tail-feathers while specimens in the large Museum series rarely show any suggestion of barring.

Mr. Zimmer, who pointed out the dissimilarities noted above, feels fairly certain that our single specimen is of a partially immature bird. This accounts somewhat for the differences, especially since each of 4 partially immature Museum skins exhibit one or more of the unusual characters which appear on our skin.

Ceophloeus lineatus lineatus (Linné)

Picus lineatus LINNÉ, 1766, Syst. Nat., 12th Ed., 1, p. 174 (Cayenne).

6 ♂, 1 (?), 460 m.; 1 ♂, 1 ♀, 1100 m.

Eastern Colombia, Venezuela (Mts. Auyan-tepui and Roraima, etc.), Trinidad, the Guianas, southward.

Scapanus melanoleucos melanoleucos (Gmelin)

Picus melanoleucos GMELIN, 1788, Syst. Nat., 1, p. 426 (Surinam).

1 ♂, 460 m.

Venezuela (Mérida; Rancho Grande; La Veguita¹; Palenque¹; Maipures, Ciudad Bolívar; Manoa; Suapure; La Prisión; Mt. Auyan-tepui), Trinidad, the Guianas, southward.

Scapanus rubricollis (Boddaert)

Picus rubricollis BODDAERT, 1783, Tabl. Pl. enl., p. 37, No. 612 (Cayenne).

1 ♂, 460 m.; 3 ♂, 3 ♀, 1100 m.

Southern Colombia, southern Venezuela (Munduapo; Suapure; La Prisión; Mts. Auyan-tepui and Roraima), the Guianas, etc.

Veniliornis cassini (Malherbe)

Mesopicus cassini MELHERBE, 1862, Mon. Picidae, II, p. 55 ("Bresil?"-Cayenne).

1 ♂, 3 ♀, 1 (?), 460 m.; 4 ♂, 1 ♀, 1 (?), 1100 m.

Southern Venezuela (Suapure; La Prisión; Mts. Auyan-tepui and Roraima), the Guianas and northeastern Brazil.

¹ In the Phelps Ornith. Coll., Caracas.

Picumnus undulatus Hargitt

Picumnus undulatus HARGITT, 1889, Ibis, p. 354 (Mt. Roraima, Venezuela).

4 ♀, 1 (?), 460 m.; 1 ♂, 1 ♀ (?), 1100 m.

Southern Venezuela (La Unión; Suapure; La Prisión; Nicare; Perico; Nericagua; Cunucunuma River; Mts. Duida, Auyan-tepui and Roraima).

DENDROCOLAPTIDAE

WOOD-HEWERS

Dendrocolaptes certhia certhia (Boddaert)

Picus certhia BODDAERT, 1783, Tabl. Pl. enl., p. 38 (based on "Le Picucule, de Cayenne," Daubenton, Pl. enl., 621, Cayenne).

4 ♂, 460 m.; 7 ♂, 2 ♀, 1 (?), 1100 m.

Southern Venezuela (Caura and Orinoco Rivers; Mt. Duida region; Mts. Auyan-tepui and Roraima), the Guianas, northern Brazil, etc.

Xiphorhynchus pardalotus (Vieillot)

Dendrocopus pardalotus VIEILLOT, 1818, Nouv. Dict. Hist. Nat., nouv. éd., 26, p. 117 (based on "Le Grimpair flambé" Levaillant, Hist. Nat. Promérois, p. 74, pl. 30, Cayenne).

9 ♂, 1 ♀, 460 m.; 9 ♂, 7 ♀, 4 (?), 1100 m.

Southern Venezuela (Nericagua; Suapure; La Prisión; La Unión; Mts. Duida, Auyan-tepui and Roraima), the Guianas, northern Brazil, etc.

Glyphorhynchus spirurus spirurus (Vieillot)

Neops spirurus VIEILLOT, 1819, Nouv. Dict. Hist. Nat., nouv. éd., 31, p. 338 (Cayenne).

3 ♂, 2 ♀, 460 m.

Southern Venezuela (Mts. Auyan-tepui and Roraima), the Guianas, northern Brazil, etc.

Sittasomus griseicapillus axillaris Zimmer

Sittasomus griseicapillus axillaris ZIMMER, 1934, Amer. Mus. Novit., No. 757, p. 9 (São José, near Faro, Rio Jamundá, Brazil).

5 ♂, 6 ♀, 1 (?), 1100 m.

Southern Venezuela (Mts. Auyan-tepui and Roraima) and northern Brazil.

Mr. Zimmer writes (*op. cit.*, p. 10) that the status of birds from "Suapure, Rio

Caura, Venezuela, is of doubtful reference and must await examination of the specimens." We find that our specimens are referable to *axillaris*, which Mr. Zimmer states is the race found in the vicinity of Mt. Roraima.

Dendrocincla fuliginosa fuliginosa
(Vieillot)

Dendrocopus fuliginosus VIEILLOT, 1818, Nouv. Dict. Hist. Nat., nouv. éd., 26, p. 117 (based on "Le Grimpar enfumé," Levaillant, Hist. Nat. Promérops, p. 70, pl. 28, Cayenne).

1 ♀, 2 (?), 460 m.; 2 ♂, 1100 m.

Southern Venezuela (Mts. Auyan-tepui and Roraima), the Guianas and northern Brazil.

FURNARIIDAE

OVENBIRDS, ETC.

Cranioleuca demissa (Salvin and Godman)

Synallaxis demissa SALVIN AND GODMAN, 1884, Ibis, (5) 2, p. 449 (Mt. Roraima, Venezuela).—CHAPMAN, 1931, Bull. Amer. Mus. Nat. Hist., LXIII, p. 88; 1939, Amer. Mus. Novit., No. 1051, p. 8 ("The Upper Zonal Birds of Mt. Auyan-tepui").

2 ♂, 2 ♀, 1850 m.

Subtropical Zone of southern Venezuela (Mts. Duida, Auyan-tepui and Roraima), British (?) and French Guiana.

Synallaxis albescens josephinae Chubb

Synallaxis albigularis josephinae CHUBB, 1919, Bull. Brit. Orn. Club, XXXIX, p. 60 (Mt. Roraima, Venezuela).

3 ♂, 2 ♀, 460 m.; 4 ♂, 1 ♂ imm., 4 ♀, 1 ♀ (?), 1100 m.

Southern Venezuela (Mt. Duida region; Mts. Auyan-tepui and Roraima), British and Dutch Guiana and northern Brazil.

Mr. Zimmer was consulted in reference to the apparent darker plumage of Mt. Auyan-tepui birds as compared to 10 topotypical skins from Mt. Roraima. He attributes the slight differences to the freshness of our specimens. Many of our males are darker both above and below but several agree very well with the fresh skins collected by the Lee Garnett Day Expedition in 1927. They are all darker, more richly cinnamon-brown on the crown than are the Whitely specimens collected in 1881.

Roraimia adusta adusta (Salvin and Godman)

Synallaxis adusta SALVIN AND GODMAN, 1884, Ibis, (5) 2, p. 450 (Mt. Roraima, Venezuela).—CHAPMAN, 1931, Bull. Amer. Mus. Nat. Hist., LXIII, p. 93; 1939, Amer. Mus. Novit., No. 1051, p. 8 ("The Upper Zonal Birds of Mt. Auyan-tepui").

1 ♂, 1 ♀, 1850 m.

Subtropical Zone of southern Venezuela (Mts. Auyan-tepui and Roraima) and British Guiana.

FIELD NOTES.—January 22, 1938: "Yesterday at 9 A.M. I collected two ovenbirds of a species not observed before during our 22 days at this camp. Coming upon a little 'wave' of *Atlappetes personatus collaris* and *Troglodytes rufulus rufulus* hunting on the jungle floor, I noticed the 2 ovenbirds climbing up and down on the butts of trees."

Philydor ruficaudatus (Lafresnaye and D'Orbigny)

Anabates ruficaudatus LAFRESNAYE AND D'ORBIGNY, 1838, Syn. Av., 2, in Mag. Zool., 8, cl. 2, p. 15 (Yuracares, Bolivia).

1 (?), 460 m.

Eastern Colombia, southern Venezuela (Mt. Duida region; Mt. Auyan-tepui), French Guiana, northern Brazil, etc.

Automolus infuscatus cervicalis (Selater)

Philydor cervicalis SELATER, 1889, P. Z. S. London, p. 33 (Bartica Grove, Camacusa, British Guiana).

4 ♂, 460 m.; 2 ♂, 2 ♀, 1 (?), 1100 m.

Southern Venezuela (Nericagua, Orinoco River; La Prisión; La Unión; Nicare; Mt. Auyan-tepui), the Guianas and northern Brazil.

Automolus rubiginosus obscurus
(Pelzeln)

Anabates obscurus PELZELN, 1859, Sitzungsber. math. naturw. Kl. Ak. Wiss. Wien, 34, p. 110 (Cayenne).

1 ♀, 460 m.

Southern Venezuela (Mt. Auyan-tepui) and French Guiana.

Extension of range to Venezuela.

Our single specimen is similar in coloration and measurement to the only skin of *obscurus* in the American Museum (1 ♀,

Ipousin, Cayenne). It differs from the type of *cinnamomeigula*, described from Bogotá, by reason of its decidedly deeper olive-rufous breast, being less ochraceous, especially on the abdomen; by its more olivaceous, less cinnamon-rufous under tail-coverts, and by its more dusky, less cinnamon-rufous upper wing-coverts.

Automolus roraimae roraimae Hellmayr

Automolus roraimae HELLMAYR, 1917, Verh. orn. Ges. Bayern, XIII, p. 199; new name for *Philydor albigularis* Salvin and Godman (not of Spix), 1884, Ibis, p. 450 (Mt. Roraima).—CHAPMAN, 1931, Bull. Amer. Mus. Nat. Hist., LXIII, p. 93; 1939, Amer. Mus. Novit., No. 1051, p. 9 ("The Upper Zonal Birds of Mt. Auyan-tepui").

1 ♂, 1 ♀, 1850 m.; 2 ♂, 2 ♀, 2 (?), 1100 m.

Subtropical Zone of southern Venezuela (Mts. Auyan-tepui and Roraima).

We have found no valid British Guiana records for this race. That range, given by Chubb and Hellmayr, is based on Mt. Roraima skins.

Automolus ochrolaemus turdinus
(Pelzelin)

Anabates turdinus PELZELN, 1859, Sitzungsber. math. naturw. Kl. Ak. Wiss. Wien, 34, pp. 110, 131 (Borba [Rio Maderia], Barra do Rio Negro [= Manáos]).

5 ♂, 460 m.

Eastern Colombia, southern Venezuela (Munduapo; Mt. Duida region; Mt. Auyan-tepui, etc.), the Guianas and northern Brazil.

Xenops minutus ruficaudus (Vieillot)

Neops ruficaudus VIEILLOT, 1816, Analyse nouv. Orn. élém., p. 68 ("La Guiana" = Cayenne).

2 ♂, 1 (?), 460 m.; 8 ♂, 1 ♀, 1 (?), 1100 m.

Eastern slopes of Colombian Andes, southern Venezuela (La Unión; Suapure; Cristóbal Colón; Mt. Duida region; Mts. Auyan-tepui and Roraima, etc.), the Guianas, etc.

Sclerurus rufigularis fulvicularis Todd

Sclerurus rufigularis fulvicularis TODD, 1920, Proc. Biol. Soc. Wash., 33, p. 74 (Tamanor, French Guiana).

1 ♂, 1 ♀, 1100 m.

Southern Venezuela (Upper Caura River; Mt. Duida region and Mt. Auyan-tepui), French and British Guiana and northern Brazil.

Our ♀ agrees with the large Museum series from British Guiana, southern Venezuela (Mt. Duida region) and northern Brazil; the ♂, however, is darker below, less rufescent, its throat being dusky instead of ochraceous rufous. One ♀ from Savanna Grande near Mt. Duida is almost similar so it would seem that age is responsible for the darker plumage.

Sclerurus caudacutus insignis Zimmer

Sclerurus caudacutus insignis ZIMMER, 1934, Amer. Mus. Novit., No. 757, p. 21 (Faro [Castanhal], Rio Jamundá, Brazil).

1 ♂, 460 m.

Southern Venezuela (Mt. Auyan-tepui) and northern Brazil (to the north bank of the lower Amazon in the vicinity of the Rio Jamundá).

Extension of range to Venezuela.

Lochmias nematura castanonota Chubb

Lochmias nematura castanonota CHUBB, 1918, Bull. Brit. Orn. Cl., XXXVIII, p. 87 (Mt. Kukenam, 5000 ft., Venezuela).—CHAPMAN, 1939, Amer. Mus. Novit., No. 1051, p. 9 ("The Upper Zonal Birds of Mt. Auyan-tepui").

3 ♂, 1 ♀, 1850 m.

Subtropical Zone of southern Venezuela (Mts. Auyan-tepui, Roraima and Kukenam).

We have found no valid British Guiana records for this race. That range, given by Chubb and Hellmayr, is based on a record from Mt. Kukenam.

FORMICARIIDAE

ANTBIRDS, ETC.

Thamnophilus murinus murinus Sclater and Salvin

Thamnophilus murinus (Natterer Ms.) SCLATER AND SALVIN, 1867, P. Z. S. London, pp. 750, 756 (Xeberos, e. Peru; Cayenne; Marabitanas, Barra do Rio Negro [= Manáos]; Manáos accepted as type locality, cf. Berlepsch and Hartert, 1902).

2 ♂, 460 m.; 8 ♂, 1 ♂ (?), 6 ♀, 2 (?), 1100 m.

Southern Venezuela (Suapure; La Unión; La Prisión; Mt. Duida region; Mt. Auyan-tepui), the Guianas, Amazonia and northern and eastern Peru.

Thamnophilus punctatus punctatus
(Shaw)

Lanius naevius GMELIN, 1788, Syst. Nat., 1, p. 308 (Cayenne).

12 ♂, 10 ♀, 3 (?), 460 m.

Eastern and southern Venezuela (Paria Peninsula; La Veguita¹; Barinitas¹; the Orinoco Valley from the delta up to Munduapo, and on its tributary, the Caura River; Mts. Auyan-tepui and Roraima, etc.), the Guianas, northern Brazil, etc.

***Thamnophilus insignis* Salvin and Godman**

Thamnophilus insignis SALVIN AND GODMAN, 1884, Ibis, p. 450 (Mt. Roraima, Venezuela).—CHAPMAN, 1931, Bull. Amer. Mus. Nat. Hist., LXIII, p. 84; 1939, Amer. Mus. Novit., No. 1051, p. 8 ("The Upper Zonal Birds of Mt. Auyan-tepui").

1 ♂, 1850 m.; 2 ♂, 1 ♀, 2200 m.

Subtropical Zone of southern Venezuela (Mts. Duida, Auyan-tepui and Roraima).

We have found no valid British Guiana records for this species. That range, given by Chubb and Hellmayr, is based on Mt. Roraima specimens.

***Dysithamnus mentalis spodionotus* Salvin and Godman**

Dysithamnus spodionotus SALVIN AND GODMAN, 1883, Ibis, p. 211 (Mt. Roraima, Venezuela).

7 ♂, 1 ♂ (?), 7 ♀, 1100 m.

Southern Venezuela (Mts. Duida, Auyan-tepui and Roraima) and British Guiana.

Dysithamnus ardesiacus obidensis
Snethlage

Dysithamnus ardesiacus obidensis SNETHLAGE, 1914, Ornith., Monatsber., 22, p. 40 (Obidos, north bank of lower Amazon, n. Brazil).

1 (?), 460 m.; 3 ♂, 2 ♀, 3 (?), 1100 m.

Southern Venezuela (Suapure; Nicare; La Prisión; La Unión; Munduapo; Nericagua; Mt. Duida region; Mts. Auyan-tepui and Roraima), the Guianas and northern Brazil.

¹ In the Phelps Ornith. Coll., Caracas.

Myrmotherula haematonota pyrrhonota
Sclater and Salvin

Myrmotherula pyrrhonota SCLATER AND SALVIN, 1873, Nomencl. Av. Neotrop., p. 160 (Marabitanas, Río Negro, Brazil).

2 ♂, 1 ♂ (?), 1 ♀, 1100 m.

Southeastern Colombia, southern Venezuela (Mt. Duida region; Caura River; La Unión; Suapure. Mt. Auyan-tepui) northern Brazil, etc.

Myrmotherula axillaris axillaris
(Vieillot)

Myrmothera axillaris VIEILLOT, 1817, Nouv. Dict. d'Hist. Nat., nouv. éd., 12, p. 113 ("La Guyane" = Cayenne).

3 ♂, 5 ♀, 1 (?), 460 m.

Trinidad, southern Venezuela (Caura River; Sacupana; Cd. Bolivia [Barinas]¹; Mt. Auyan-tepui), the Guianas, northern Brazil, etc.

Myrmotherula longipennis longipennis
Pelzeln

Myrmotherula longipennis PELZELN, 1868, Orn. Bras., 2, pp. 82, 153 (Río Negro, Marabitanas).

6 ♂, 2 ♀, 4 (?), 1100 m.

Southeastern Colombia, southern Venezuela (Caura River: Suapure, Nicare, La Unión, La Prisión. Mt. Duida region; Río Yuruan; Mts. Auyan-tepui and Roraima²), the Guianas, northern Brazil, eastern Peru and eastern Ecuador.

Myrmotherula menetriesii cinereiventris
Sclater and Salvin

Myrmotherula cinereiventris SCLATER AND SALVIN, 1868, P Z. S. London, "1867," p. 756 (part; descr. ♂; Cayenne, Surinam; type locality is Cayenne).

3 ♂, 2 ♀, 1 (?), 460 m.

Southern Venezuela (Mts. Auyan-tepui and Roraima³), the Guianas, northern Brazil, etc.

Herpsilochmus sticturus nigrescens
Todd

Herpsilochmus sticturus nigrescens TODD, 1915, Proc. Biol. Soc. Wash., 28, p. 80 (Maripa, Caura River, Venezuela).

² Coll. by A. S. Pinkus. In the Phelps Ornith. Coll., Caracas.

³ See Zimmer, Studies of Peruvian Birds, 1932, Amer. Mus. Novit., No. 524, p. 14.

1 ♂, 1 ♀, 1 (?), 460 m.; 4 ♂, 4 ♀, 1 ♀ (?), 1100 m.

Southern Venezuela (Maripa; Mts. Auyan-tepui and Roraima¹).

***Terenura spodiophtila spodiophtila* (?)**

Sclater and Salvin

Terenura spodiophtila SCLATER AND SALVIN, 1881, Ibis, p. 270, pl. 9, fig. 1 (= ♂) (Bartica Grove, British Guiana).

1 (?), 1100 m.

Southern Venezuela (Suapure, Caura River; Mt. Duida region and Mt. Auyan-tepui) and British Guiana.

Comparison with a large series including 4 nearly topotypical males indicates that special mention should be made of several unusual conditions present in our skin, in one example from British Guiana and in the description of *elaopteryx* from French Guiana. Our male differs by having a stronger greenish wash on the outer edges of the primaries and secondaries (this character is faintly suggested in 1 ♂ from Tumatumari); by having axillaries brightly tinted with citron-yellow instead of being white (or white with a citron wash as seen in the Tumatumari skin); by having anterior mantle more brightly tinted, more brownish, less grayish. In view of the variability exhibited in the ♂ from Tumatumari which, alone among the British Guiana skins, approaches our unusual specimen, we hesitate to recognize our single example as new. Furthermore, *T. s. elaopteryx*, which is doubtfully of French Guiana origin (of Cayenne "make," still without confirmation) and which was described from a single specimen, is described as having olive-green (instead of slate-gray) edges to the remiges. Thus it approximately fits both the Tumatumari variant and our specimen and, in addition, places *elaopteryx* in a doubtful light.

SPECIMENS EXAMINED

T. s. spodiophtila.—BRITISH GUIANA: Tumatumari, Potaro River, 3 ♂; Potaro Landing, 1 ♂. VENEZUELA: Caura River, 1 ♂, 1 ♀; Suapure, 1 ♂, 1 ♀; Solano, Río Cassiquiare, 1 ♀; Foot of Mt. Duida, 1 ♂, 1 ♀; Pié del Cerro, Mt. Duida, 1 ♀.

T. s. elaopteryx (?).—BRAZIL: R. Jamundá, S. José, 1 (?); R. Jamundá, Castanhal, 3 ♂.

¹ Coll. by A. S. Pinkus. In the Phelps Ornith. Coll., Caracas.

MEASUREMENTS

	WING	TAIL
Type of <i>elaopteryx</i> (copied)	48.5	37.0
<i>T. s. spodiophtila</i> 1 ♂, Potaro Landing	48.0	37.0
<i>T. s. spodiophtila</i> 1 ♂, Tumatumari	48.5	35.5
<i>T. s. spodiophtila</i> 1 ♂, Tumatumari	48.0	40.0 (Post-juv. plum.)
<i>T. s. spodiophtila</i> 1 ♂, Tumatumari	50.5	38.0
<i>T. s. spodiophtila</i> 1 ♂, Suapure	48.0	37.0

***Cercomacra cinerascens* (Sclater)**

Formicivora cinerascens SCLATER, 1857, P. Z. S. London, 25, p. 131 (part; descr. of specimen from Río Napo, e. Ecuador).

5 ♂, 1 ♀, 460 m.

Southeastern Colombia, southern Venezuela (Mt. Duida region; Munduapo; La Prisión; La Unión; Mt. Auyan-tepui), British and French Guiana, Ecuador and Peru.

***Schistocichla leucostigma saturata* (Salvin)**

Heterocnemis saturata SALVIN, 1885, Ibis, p. 427 (Mt. Roraima, Venezuela).

1 ♂, 1 ♀, 1100 m.

Southern Venezuela (Mts. Auyan-tepui and Roraima).

We have found no valid British Guiana records for this race. That range, given by Chubb and Hellmayr, is based on Mt. Roraima skins.

In comparison with 1 topotypical male and 5 topotypical females, our female agrees but our male appears different from the single Roraima male. It disagrees by having a darker back, more blue-black, less dark gray (tinged with brown, especially on the rump), a shorter tail and a longer culmen. The following are measurements of the Mt. Roraima and Mt. Auyan-tepui males: Mt. Roraima, wing 69 mm., tail 56, culmen from base 21; Mt. Auyan-tepui, wing 69, tail 60, culmen from base 18.

Because of lack of conclusive evidence that these divergencies are not due to individual variation, or to the immaturity of the Roraiman male, we merely call attention to them.

Myrmeciza atrothorax atrothorax
(Boddaert)

Formicarius attothorax (typog. error) BODDAERT, 1783, Tabl. Pl. enl., p. 44 (based on "L'Alapi, de Cayenne," Daubenton, Pl. enl., 701, fig. 2; = ♂).

6 ♂, 7 ♀, 2 (?), 460 m.; 3 ♂, 3 ♀, 1 (?), 1100 m.

Eastern Colombia, southern Venezuela (Mt. Duida region; Munduapo; Caura River; Maripa; La Prisión; Nicare; La Unión. Mt. Auyan-tepui), the Guianas and northern Brazil.

Formicarius colma colma Boddaert

Formicarius Colma BODDAERT, 1783, Tabl. Pl. enl., p. 44 (based on "Le Colma, de Cayenne," Daubenton, Pl. enl., 703, fig. 1; = juv.).

5 ♂, 1 ♂ (?), 2 ♀, 460 m.

Colombia, Venezuela (upper Orinoco and Caura Rivers; Mt. Duida region; Mt. Auyan-tepui, etc.), British and French Guiana.

Chamaeza brevicauda fulvescens Salvin
and Godman

Chamaeza fulvescens SALVIN AND GODMAN, 1882, Ibis, (4), 6, p. 79 (Merumé Mts., "Camacusa," British Guiana and Mt. Roraima, Venezuela).—CHAPMAN, 1931, Bull. Amer. Mus. Nat. Hist., LXIII, p. 86; 1939, Amer. Mus. Novit., No. 1051, p. 8 ("The Upper Zonal Birds of Mt. Auyan-tepui").

2 ♂, 1100 m.

Subtropical Zone of southern Venezuela (Mts. Auyan-tepui and Roraima) and British Guiana (Merumé Mts.).

Previous Venezuelan records from Mt. Roraima were credited to British Guiana.

Pithys albifrons albifrons (Linné)

Pipra albifrons LINNÉ, 1766, Syst. Nat., 12th Ed., 1, p. 339 (based on "The Whitefaced Manakin" Edwards, 1764, Glean. Nat. Hist., 3, p. 280, pl. 344, fig. 1; "Guiana" = Cayenne).

1 ♂, 1 ♀, 1 (?), 460 m.; 6 ♂, 9 ♀, 1 (?), 1100 m.

Southern Venezuela (Munduapo; Nerigagua; Mt. Duida region; Caura River; Suapure; Nicare. Mts. Auyan-tepui and Roraima), the Guianas and northern Brazil.

Hylophylax naevia subspecies (?)
(Gmelin)

Pipra naevia GMELIN, 1789, Syst. Nat., 1, pt. 2, p. 1003 (based on "Le Fourmillier tacheté, de

Cayenne," Daubenton, Pl. enl., 823, fig. 2; = ♂ ad.).

3 ♂, 2 ♀, 3 (?), 1100 m.

Mt. Auyan-tepui, southern Venezuela.

Comparison with four nearly topotypical males and with one British Guiana male indicates a strong difference based on one character, the black chest band. In French Guiana specimens the deep V-like black feather tipplings are more restricted and fewer, with a resultant increase of the white ground color showing between the black areas. In our specimens the band appears more nearly solid black due to the much larger black tipping and the consequent narrowing of the white interspacing. A single male from British Guiana is partially intermediate but much more like our specimens.

Subsequent studies of these interesting birds, to be made by Mr. J. T. Zimmer, will result in the correct allocation of our examples; meanwhile we record them as subspecies undetermined.

Hylophylax poecilonota poecilonota
(Cabanis)

(?) *Myrmothera caerulescens* VIEILLOT, 1817, Nouv. Dict. d'Hist. Nat., nouv. éd., 12, p. 110 ("Guyane" = Cayenne).

1 ♀, 460 m.; 2 ♂, 1 ♀, 3 (?), 1100 m.

Southern Venezuela (Munduapo; Nerigagua; Mt. Duida region; Caura River; Suapure; La Prisión; Nicare. Mts. Auyan-tepui and Roraima), British Guiana and northern Brazil.

Myrmothera simplex simplex (Salvin and Godman)

Grallaria simplex SALVIN AND GODMAN, 1884, Ibis, (5), 2, p. 451 (Mt. Roraima, Venezuela).—CHAPMAN, 1931, Bull. Amer. Mus. Nat. Hist., LXIII, p. 87.

2 ♂, 2 ♀ (?), 1850 m.

Subtropical Zone of southern Venezuela (Mts. Auyan-tepui and Roraima).

We have found no valid British Guiana records for this bird. That range, given by Chubb and Hellmayr, is based on Mt. Roraima specimens.

Essentially similar to 2 topotypical *simplex* from above 5000 ft. on Mt. Roraima.

FIELD NOTES.—January 6, 1938: "After

10 minutes in the densest part of the 1850-meter forest, during which time I had kept up a soft sobbing 'squeak,' I was greeted by a hollow whistle, emitted about 50 yards away. I imitated the whistle and induced *Myrmothera* to approach. Its call became loud and piercing and finally the long-legged bird revealed itself by hopping 'Grallaria-like' onto a low log."

CONOPOPHAGIDAE

GNAT EATERS

Corythopsis torquata anthoides

(Pucheran)

Muscicapa anthoides PUCHERAN, 1855, Arch. Mus. d'Hist. Nat. Paris, 7, p. 334 (Cayenne).

1 ♂, 1 ♀, 460 m.; 2 ♂, 2 ♀, 1100 m.

Southern Venezuela (Mts. Auyan-tepui and Roraima), the Guianas and northern Brazil.

Venezuela has not been included in the range of this race. Previous Venezuelan records from Mt. Roraima were credited to British Guiana.

COTINGIDAE

COTINGAS

Cotinga cotinga (Linné)

Ampelis cotinga LINNÉ, 1766, Syst. Nat., 12th Ed., 1, p. 298 [based on "Le Cotinga," Brisson (1760, Orn., 2, p. 340, pl. 34, fig. 1), "Brésil"].

1 ♂, 460 m.; 1 ♂, 1100 m.

Southern Venezuela (Mt. Auyan-tepui), the Guianas and southern Brazil.

Extension of range to Venezuela.

Xipholena punicea (Pallas)

Turdus puniceus PALLAS, 1764, in Vroeg's Catalogue, Adumbrat., p. 2—"Zuyd America." (Hellmayr suggests Surinam.)

7 ♂, 8 ♀, 1100 m.

Southern Venezuela (Mt. Auyan-tepui), the Guianas and northern Brazil.

Extension of range to Venezuela.

Attila spadiceus spadiceus (Gmelin)

Muscicapa spadicea GMELIN, 1789, Syst. Nat., 1, pt. 2, p. 937 (based on "Yellow-rumped Flycatcher," Latham, Gen. Syn. Birds, 2 (1), p. 354, Cayenne).

1 ♀, 460 m.

Venezuela (El Hacha; Río Yuruán; Caura Valley; Cristóbal Colón), Trinidad, the Guianas, northern Brazil, etc.

Laniocera hypopyrrha (Vieillot)

Ampelis hypopyrra VIEILLOT, 1817, Nouv. Dict. Hist. Nat., nouv. éd., 8, p. 164 ("la Guyane" = Cayenne).

1 ♂, 460 m.

Eastern slopes of the Colombian Andes, southern Venezuela (Mt. Duida region; middle Orinoco River; Caura River; Mts. Auyan-tepui and Roraima¹), the Guianas and southward.

Rhytipterna simplex frederici (Bangs and Penard)

Lipaugus simplex frederici BANGS AND PENARD, 1918, Bull. Mus. Comp. Zool., 62, p. 71 (vicinity of Paramaribo, Surinam).

3 ♂, 1 (?), 460 m.; 2 ♂, 1 ♀, 1100 m.

Base of the eastern Andes of Colombia and Ecuador, Venezuela (Mt. Duida region; Orinoco River; Caura River; Mt. Auyan-tepui), the Guianas, Brazil, etc.

Lipaugus cineraceus (Vieillot)

Ampelis cinerea VIEILLOT, 1817, Nouv. Dict. Hist. Nat., nouv. éd., 8, p. 162 (based on "Le Cotinga cendré," Levaillant, 1801, Hist. Nat. Ois. Nouv. et Rares Amér. et Indes, 1, p. 98, pl. 44, Cayenne).

1 ♂, 460 m.; 10 ♂, 8 ♀, 1100 m.

Eastern Colombia, southern Venezuela (Munduapo; Nericagua; Suapure; La Unión; La Prisión; Manoa; Mts. Auyan-tepui and Roraima), the Guianas, Brazil, etc.

Tityra cayana cayana (Linné)

Lanius cayanus LINNÉ, 1766, Syst. Nat., 12th Ed., 1, p. 137 (based on "La Pie-grièsche grise de Cayenne," Brisson, 1760, 2, p. 158, pl. 14, fig. 1 [= male], Cayenne).

4 ♂, 1 ♀, 460 m.; 7 ♂, 5 ♀, 1100 m.

Eastern Colombia, Venezuela (Manoa; Mts. Auyan-tepui and Roraima, etc.), Trinidad, the Guianas, northern Brazil, etc.

Perissocephalus tricolor (Müller)

Corvus tricolor P. L. S. MÜLLER, 1776, Natursyst., Suppl., p. 85 (based on "Choucas chauve

¹ Coll. by A. S. Pinkus. In the Phelps Ornith. Coll., Caracas.

de Cayenne," Daubenton, Pl. enl., 251, Cayenne).

5 ♂, 1100 m.

Southern Venezuela (Mts. Auyan-tepui and Roraima), the Guianas and northern Brazil, etc.

Venezuela has not been included in the range of this species. Previous Venezuelan records from Mt. Roraima were credited to British Guiana.

FIELD NOTES.—January 30, 1938: "Today while preparing the skin of a Capuchin bird I discovered a large palm nut in its crop. This nut was approximately one and a half inches long and similar to the many nuts which were found under a beautiful nest in the Guava cave on the 1500-meter level. That structure which clung to the cave wall in the style of a 'Phoebe fly-catcher nest' was approximately five feet above the ground. It was built of sticks and grass and lined with fine black rootlets. Undoubtedly the nest of a Cotinga, this nest may well have been built by a Capuchin bird."

Procnias alba (Hermann)

Ampelis alba HERMANN, 1783, Tab. Affin. Anim., p. 213 (based on "Le Guira Panga ou Cotinga Blanc," Montbeillard in Buffon, Hist. Nat. Ois., 4, p. 454, Cayenne).

7 ♂, 1 ♂ in ♀ plumage, 10 ♀, 1100 m.

Southern Venezuela (Mts. Auyan-tepui and Roraima), the Guianas and northern Brazil.

Venezuela has not been included in the range of this species. Previous Venezuelan records from Mt. Roraima were credited to British Guiana.

FIELD NOTES.—January 28, 1938: "A peculiar penetrating tolling, like the strikes of a medium pitched bell reached our ears at the edge of the 1500-m. level, fully 1200 ft. above the forest in which dozens of male Bell Birds were performing. The incredibly penetrating call is emitted not only during the courtship proceedings but as a defensive or danger call. This I unfortunately determined on Feb. 2, 1938, when a wounded male was caught as it tried to flee into deep underbush. As I gave chase, it turned and at a distance of hardly a yard emitted a series of high-pitched 'tolls' which

rasped my ears with their astonishing volume. The wattle which appeared contracted to about half of its length when relaxed after death, hung downward on the left side of the bill, the tip at least half an inch below the lower mandible. In life, the feet, eyes and skin of wattle are black."

Rupicola rupicola (Linné)

Pipra rupicola LINNÉ, 1766, Syst. Nat., 12th Ed., 1, 338 (based on "Rupicola," Brisson [1760, Orn., 4, p. 437, pl. 34, fig. 1], "Surinam et toute la Guyane").

6 ♂, 3 ♀, 1100 m.

Southern Venezuela (Maipures Rapids; Suapure; Mts. Auyan-tepui and Roraima), the Guianas, northern Brazil, etc.

PIPRIDAE

MANAKINS

Ceratopipra cornuta (Spix)

Pipra cornuta SPIX, 1825, Av. Bras., 2, p. 5, pl. 7, fig. 2 ("in sylvis flum. Amazonum").

14 ♂, 12 ♀, 1 (?), 1100 m.

Venezuela (El Yagual [= El Llagual], Caura River; Mts. Duida, Auyan-tepui and Roraima, etc.), British Guiana and northern Brazil.

Piprites chloris chlorion (Cabanis)

Hemipipo chlorion CABANIS, 1847, Arch. Naturg., 13, (1), p. 234 (Cayenne).

1 ♀, 1100 m.

Southern Venezuela (Mt. Duida region; Mts. Auyan-tepui and Roraima), the Guianas, northern Brazil, etc.

Attention is called to the fact that our lone example has a brighter, more yellowish-green back and rump than any in the Museum series (listed below) and it is a larger bird. It measures: wing, 72.5 mm.; tail, 49; culmen from base, 13; tarsus, 17.5. The largest Museum specimen measures: wing, 69; tail, 49; culmen from base, 12.5; tarsus, 16.5.

SPECIMENS EXAMINED

FRENCH GUIANA: Oyopock, 1 ♂. BRITISH GUIANA: "Quoga," 1 (?). VENEZUELA: El Meray, Río Cassiquiare, 1 ♂; foot of Mt. Duida, 1 ♂, 3 ♀. BRAZIL: Río Jamundá, S. José, 2 ♂, 1 ♀; Río Jamundá, Castanhal, 3 ♂, 1 ♀.

Pipra serena suavisissima Salvin and Godman

Pipra suavisissima SALVIN AND GODMAN, 1882, Ibis, (4), 6, p. 79, pl. 1 (Merumé Mts. and Bartica, Grove, British Guiana).

16 ♂, 8 ♀, 5 (?), 1100 m.

Tropical and Subtropical Zones of southern Venezuela (Mts. Duida, Auyan-tepui and Roraima; "Our Village" = Paulo, near Mt. Roraima [Schomburgk]) and British Guiana.

Dr. Chapman¹ calls attention to the fact that Mt. Roraima and Mt. Duida birds have richer orange underparts than do those from British Guiana. We confirm this. Moreover we notice that richly colored Mt. Auyan-tepui males are similar to Mt. Duida birds, while Roraima examples appear intermediate between Duida-Auyan-tepui and British Guiana skins. All specimens at hand from British Guiana and Roraima are much older and the fresher ones among this series are nearer to ours in coloration though there is a little distinction. Furthermore, the plate appearing in the Ibis (*op. cit.*) is as brightly colored as any specimen seen.

Pipra erythrocephala erythrocephala (Linné)

Parus erythrocephalus (LINNÉ), 1758, Syst. Nat., 10th Ed., 1, p. 191 (based on Edwards, Nat. Hist. Birds, 1, p. 21, lower figure, Surinam).

5 ♂, 1 ♀, 460 m.; 12 ♂, 1 ♀, 1100 m.

Parts of Panama and Colombia, Venezuela (Altamira,² Mts. Auyan-tepui and Roraima, etc.), Trinidad, the Guianas, extreme northeastern Brazil, etc.

Pipra pipra pipra (Linné)

Parus pipra (LINNÉ), 1758, Syst. Nat., 10th Ed., 1, p. 190 (based on "Cacototol," Seba, Thes., 2, p. 102, pl. 96, fig. 5, "in Indiis" = Surinam).

6 ♂, 5 ♀, 1 (?), 460 m.

Venezuela (Río Mato, Caura Valley; Buena Vista, Río Cassiquiare; mouth of Río Ocamo; Mts. Duida and Auyan-tepui), the Guianas, northern Brazil, etc.

Chloropipo uniformis uniformis Salvin and Godman

Chloropipo uniformis uniformis SALVIN AND GODMAN, 1884, Ibis, (5), 2, p. 447 (Mt. Roraima, Venezuela).—CHAPMAN, 1931, Bull. Amer. Mus. Nat. Hist., LXIII, p. 102; 1939, Amer. Mus. Novit., No. 1051, p. 10 ("The Upper Zonal Birds of Mt. Auyan-tepui").

2 ♂, 1 ♀, 1850 m.

Subtropical Zone of southern Venezuela (at Mts. Auyan-tepui and Roraima) and British Guiana.

Previous Venezuela records from Mt. Roraima were credited to British Guiana.

Tyrannetes virescens (Pelzeln)

Pipra virescens PELZELN, 1868, Orn. Bras., 2, pp. 128, 187, (part, descr. of adult male only from Barra do Rio Negro [= Manáos], Brazil).

2 ♂, 1 (?), 460 m.

Southern Venezuela (Mt. Auyan-tepui), British Guiana and northern Brazil.

Extension of range to Venezuela.

Corapipo gutturalis (Linné)

Pipra gutturalis (LINNÉ), 1766, Syst. Nat. 12th Ed., 1, p. 340 (based on "Le Manakin à gorge blanche," Brisson, 1760, Ornith., 4, p. 444, pl. 36, fig. 1—"in America," hab. subst. Cayenne [auct. Berlepsch, 1908]).

4 ♂, 1100 m.

Southern Venezuela (Mts. Auyan-tepui and Roraima) and the Guianas.

Venezuela has not been included in the range of this species. Previous Venezuelan records from Mt. Roraima were credited to British Guiana.

Schiffornis turdinus olivaceus (Ridgway)

Scotothorus olivaceus RIDGWAY, 1906, Proc. Biol. Soc. Wash., 19, p. 118 (Río Mato, Caura, Venezuela).

3 ♂, 1 ♀, 1 ♀ (?), 1100 m.

Southern Venezuela (Caura Valley; Mts. Auyan-tepui and Roraima) and British Guiana.

TYRANNIDAE**FLYCATHERS****Muscivora tyrannus monachus** (Hartlaub)

Tyrannus (Mivulus) monachus HARTLAUB 1844, Rev. Zool., VII, p. 214 (Guatemala [= juv.]).

¹ 1931, Bull. Amer. Mus. Nat. Hist., LXIII, p. 105.

² In the Phelps Ornith. Coll., Caracas.

1 ♂, 3 ♀, 460 m.; 1 ♀, 1100 m.

Almost the whole of Tropical and Subtropical South America.

Our specimens, which show the characters assigned by Zimmer in his review of *M. tyrannus*,¹ agree with *monachus*. They have backs pale gray, less dusky than in *tyrannus* and have 2 notched primaries instead of 3, as in *tyrannus*.

Tyrannus melancholicus melancholicus
Vieillot

Tyrannus melancholicus VIEILLOT, 1819, Nouv. Dict. Hist. Nat., nouv. éd., 35, p. 48 (based on Azara, No. 198, Paraguay).

4 ♂, 1 ♀, 460 m.; 3 ♂ 8 ♀, 1100 m.

Venezuela (Cassiquiare River; Río Negro; Esmeralda and La Laja; Colón, Táchira; La Ceiba, Trujillo; Encontrados and the Catatumbo River, Zulía; Guainia River; Mts. Duida, Auyan-tepui and Roraima), British Guiana, Brazil, etc.

Mr. Zimmer, with 750 specimens of the species *melancholicus*² spread out before him, came to the conclusion that "This species is exceedingly unsatisfactory taxonomically." He writes: "There is a great deal of individual variation in different directions with a concentration of certain averages of different sorts in certain geographical areas without very clear distinctions." He adds that: "It would be possible to describe and name at least five new subspecies, each with a certain combination of characters not possessed by the others although most of them would represent populations intermediate between better marked extremes."

Aware of the above studies, it seems best that our 16 skins, which were obtained within the range allotted to the subspecies *melancholicus* by Mr. Zimmer, be considered as such.

Legatus leucophaius leucophaius
(Vieillot)

Platyrrhynchus leucophaius VIEILLOT, 1818, Nouv. Dict. Hist. Nat., nouv. éd., 27, p. 11 ("l'Amérique méridionale" = Cayenne).

1 ♂, 460 m.

¹ 1937, Amer. Mus. Novit., No. 962, p. 9.

² 1937, Amer. Mus. Novit., No. 962, p. 14.

Central America through Colombia, Venezuela to northern Argentina, etc.

Myiodynastes maculatus difficilis
Zimmer

Myiodynastes maculatus difficilis ZIMMER, 1937, Amer. Mus. Novit., No. 963, p. 9 (Bebedero, Costa Rica).

2 ♂, 460 m.; 4 ♂, 1100 m.

From Costa Rica south through Colombia to southern Venezuela as far as the Caura River and Mt. Auyan-tepui (excepting northeastern Venezuela).

Coryphotriccus parvus parvus (Pelzeln)

Pitangus parvus PELZELN, 1868, Orn. Bras., 2, pp. 111, 181 (Marabitanas, Río Negro).

2 ♂, 460 m.; 2 ♂, 1 ♀, 1100 m.

Southern Venezuela (Mt. Auyan-tepui), French and British Guiana and northern Brazil.

Extension of range to Venezuela.

Myiozetetes cayanensis cayanensis
(Linné)

Muscicapa cayanensis LINNÉ, 1766, Syst. Nat., 12th Ed., 1, p. 327 (based on Brisson, 1760, Orn., 2, p. 404, pl. 38, fig. 4, Cayenne).

3 ♂, 2 ♀, 460 m.

Southern Venezuela (Río Guarapiche [Beebe]; Mts. Auyan-tepui and Roraima), the Guianas, northern Brazil, etc.

Tyrannopsis sulphurea (Spix)

Muscicapa sulphurea SPIX, 1825, Av. Bras., 2, p. 16, pl. 20 (Brazil).

1 ♂, 2 ♀, 460 m.

Southern Venezuela (Quiribana de Caicara; Manoa; Mt. Auyan-tepui), the Guianas, Brazil, etc.

Myiarchus tyrannulus tyrannulus
(Müller)

Muscicapa tyrannulus P. L. S. MÜLLER, 1776, Natursyst., Suppl., p. 169 (based on Daubenton, Pl. enl., 571, fig. 1, Cayenne).

1 ♀, 460 m.

Northern Colombia, Venezuela, Trinidad, the Guianas and northern Brazil.

Myiarchus swainsoni phaeonotus Salvin
and Godman

Myiarchus phaeonotus SALVIN AND GODMAN, 1883, Ibis, (4), 1, p. 207 (Merumé Mountains, British Guiana).

1 ♂, 460 m.; 4 ♂, 3 ♀, 1100 m.

Tropical and Subtropical Zones of southern Venezuela (Mt. Duida region; Mts. Auyan-tepui and Roraima) and mountains of British Guiana.

Our series is essentially similar to the series of 6 from Mt. Roraima but attention is called to a slight divergency noticeable on underparts. Auyan-tepui specimens have throat areas lighter and extending farther down on chest. This may be due to the make of the skin.

Myiarchus tuberculifer tuberculifer
(Lafresnaye and D'Orbigny)

Tyrannus tuberculifer LAFRESNAYE AND D'ORBIGNY, 1837, Syn. Ave., 1, in Mag. Zool., 7, cl. 2, p. 43 (Guarayos, Bolivia).

2 ♂, 2 ♀, 460 m.; 1 ♀, 1100 m.

Colombia, Venezuela (Mts. Duida, Auyan-tepui, Roraima, etc.), Trinidad, British Guiana, northern Brazil, etc.

We notice that Auyan-tepui specimens have darker upperparts than northern Venezuela specimens. . . Mr. Zimmer makes special mention of this condition.¹ He writes: "The series of *tuberculifer* shows some definite differences in different parts of the range that may be taxonomically important. The birds from northern Bolivia, eastern Peru, eastern Ecuador, the upper Amazon, the Río Negro (Brazil) and the region near Mt. Duida (Venezuela) are rather uniformly dark olive on the back and rather dark gray on the chest, with the top of the head sooty-brown. Skins from the northern coast of Venezuela and the Santa Marta region of Colombia are, for the most part, distinctly paler and more greenish on the back, with the top of the head slightly paler and the chest whiter; the outer margins of the secondaries, furthermore, often show a decided cinnamonaceous cast which is not certainly due to immaturity since various immature specimens are recognizably distinct in various particulars."

Our specimens compare with those from the region of Mt. Duida which Mr. Zimmer observes are generally similar to the nearly topotypical specimens he had at hand. They consequently differ from the series

from the northern coast of Venezuela. Perhaps an early solution to the status of these north Venezuela specimens can be obtained by examination of the fresh material in the Phelps Ornithological Collection in Caracas. Mr. Zimmer (*op. cit.*) feels that: "A good series of fresh specimens from Santa Marta, the Orinoco and the north coast of Venezuela will be needed to establish" positive distinction.

Terenotriccus erythrurus erythrurus
(Cabanis)

Myiobius erythrurus CABANIS, 1847, Arch. Naturg., 13, (1), p. 249, pl. 5, fig. 1 (Guiana and Cayenne).

1 ♂, 460 m.

Southern Venezuela (Mt. Auyan-tepui), the Guianas and northern Brazil.

Extension of range to Venezuela (see Zimmer, 1939, Amer. Mus. Novit., No. 1042, p. 6).

Myiobius barbatus barbatus (Gmelin)

Muscicapa barbata GMELIN, 1789, Syst. Nat., 1, pt. 2, p. 933 (based on Daubenton, Pl. enl., 830, fig. 1, Cayenne).

1 ♂, 1 ♀, 460 m.; 2 ♂, 2 ♀, 2 (?), 1100 m.

Southeastern Colombia, Venezuela (Mt. Duida region: Río Guainia at junction of the Cassiquiare. Caura Valley; Caicara; Mts. Auyan-tepui and Roraima), the Guianas and northern Brazil.

Myiophobus roraimae (Salvin and Godman)

Myiobius roraimae SALVIN AND GODMAN, 1883, Ibis, (5), 1, p. 207 (Mt. Roraima, Venezuela).—CHAPMAN, 1931, Bull. Amer. Mus. Nat. Hist., LXIII, p. 98.

1 (?), 1100 m.

Subtropical Zone of southern Venezuela (Mts. Duida, Auyan-tepui and Roraima) and British Guiana.

Hirundinea ferruginea ferruginea
(Gmelin)

Todus ferrugineus GMELIN, 1788, Syst. Nat., 1, pt. 1, p. 446 (based on "Ferruginous—Bellied Tody," Latham, Gen. Syn. Birds, 1 (2), p. 662, Cayenne).

1 ♀, partially immature, 1 (?), 1100 m.; numerous sight records, 2400 m.

¹ 1938, Amer. Mus. Novit., No. 994, p. 19.

Tropical and Subtropical Zones of southern Venezuela (Mts. Duida, Auyan-tepui and Roraima), and Tropical Zone of French and British Guiana and northern Brazil.

FIELD NOTES.—December 26, 1937: "Temperature 58° at 7 A.M. . . . At half past seven, as I edged along the brink of Cat Canyon (near the southern cliffs of Mt. Auyan-tepui) I heard a new call. A twittering whistle drifted up to my ears from the throat of a copper-winged flycatcher. After almost an hour of hunting during which time I employed every lure I knew or could devise, I gave up trying to entice this beautiful bird away from the cliff walls. It frequently flew up the side of the canyon to the summit where it perched on an overhanging twig, about 400 ft. above the inaccessible canyon floor, but most of the time it lit on a little ledge well down the face, from where it forayed in flycatcher fashion, in little fluttering circles for insects." This species was often hunted and more often observed in the vicinity of the southern cliffs and, while it could frequently have been shot but not retrieved, it never was seen to fly so much as a foot over the plateau itself.

Platyrinchus coronatus gumia (Bangs and Penard)

Placostomus coronatus gumia BANGS AND PENARD, 1918, Bull. Mus. Comp. Zool., 62, p. 74 (vicinity of Paramaribo, Dutch Guiana).

2 ♂, 4 ♀, 1100 m.

Southern Venezuela (Mts. Auyan-tepui and Roraima), the Guianas and northern Brazil.

Venezuela has not been included in the range of this race. Previous Venezuelan records from Roraima were credited to Brazil Guiana.

Tolmomyias flavotectus examinatus (Chubb)

Rhynchocyclus sulphureus examinatus CHUBB, 1920, Bull. Brit. Orn. Club, XL, p. 168 (Bartica Grove, British Guiana).

1 ♂, 1100 m.

Southern Venezuela (Mt. Auyan-tepui),¹ the Guianas and northern Brazil.

¹ See Zimmer, 1939, Studies of Peruvian Birds, Amer. Mus. Novit., No. 1045, p. 19.

Tolmomyias poliocephalus poliocephalus² (Taczanowski)

Rhynchocyclus poliocephalus TACZANOWSKI, 1884, Orn. Pérou, II, p. 285 (Nauta, Peru).

2 ♂, 1 (?), 460 m.; 1 ♂, 1100 m.

Colombia, southern Venezuela (Mairapures; Maripa; Caura River; Mt. Duida region; Mt. Auyan-tepui) and northern Brazil.

Rhynchocyclus olivaceus guianensis McConnell

Rhynchocyclus olivaceus guianensis McCONNELL, 1911, Bull. B. O. C., 27, p. 106 (British Guiana).

1 ♂, 460 m.; 1 ♂, 1100 m.

Southern Venezuela (Río Yuruán; Mt. Duida region; Caura River; Mts. Auyan-tepui and Roraima),³ French and British Guiana and northern Brazil.

Todirostrum cinereum cinereum (Linné)

Todus cinereus LINNÉ, 1766, Syst. Nat., 12th Ed., 1, p. 178 (based on "The Grey and Yellow Flycatcher," Edwards, Glean. Nat. Hist., 2, p. 110, pl. 262, Surinam).

2 ♂, 6 ♀, 460 m.

Colombia, Venezuela (Mts. Auyan-tepui and Roraima, etc.), the Guianas, northern Brazil, etc.

Euscarthmornis russatus (Salvin and Godman)

Euscarthmus russatus SALVIN AND GODMAN, 1884, Ibis, (5), 2, p. 445 (Mt. Roraima, Venezuela).—CHAPMAN, 1931, Bull. Amer. Mus. Nat. Hist., LXIII, p. 96; 1939, Amer. Mus. Novit., No. 1051, p. 9 ("The Upper Zonal Birds of Mt. Auyan-tepui").

3 ♂, 1 ♀, 1850 m.

Subtropical Zone of southern Venezuela (at Mts. Auyan-tepui and Roraima).

We have found no valid British Guiana records for this species. That range given by Chubb and Hellmayr is based on Mt. Roraima records.

FIELD NOTES.—"This bird which was infrequently encountered at the lowest plateau camp (1850 m.) inhabited the thickly wooded area near the stream. It was probably the bird which constructed

² 1939, Amer. Mus. Novit., No. 1045, p. 14.

³ Coll. by A. S. Pinkus. In the Phelps Ornith. Coll., Caracas.

small 'retort' nests which were found in the deep woods. These were about seven inches long and located within four feet of the ground. Its call is a brief explosive rasp."

***Euscarthmornis margaritaceiventer*
ayuantepui, new subspecies**

TYPE from Mt. Auyan-tepui, southern Venezuela, No. 324,578, American Museum of Natural History. Adult male, collected December 16, 1937, by the Phelps Venezuelan Expedition of The American Museum of Natural History. Altitude 1100 meters.

DIAGNOSIS.—Approaching *E. m. wucheri* of northeastern Brazil, but with throat streaks and flanks darker and more prominent, as in *E. m. duidae*. Differs from *E. m. duidae* by having abdomen gray-white, almost as pallid as in *E. m. wucheri*, not ochraceous buff as in the Duida bird. Upperparts about intermediate in tone between light grayish olive *E. m. wucheri* and dark sooty olive *E. m. duidae*.

RANGE.—Known only from Mt. Auyan-tepui, Venezuela.

DESCRIPTION OF TYPE.¹—Forehead dark gray with an olive wash and with traces of subobsolete dusky edgings, becoming lighter, mouse-gray, on nape and sides; back Grayish Olive, becoming brighter, more yellowish, on rump; lores Pale Smoke-Gray with fine blackish tipping; malar region and auriculars mouse-gray, the former tinged with light gray; chin and throat dull grayish white with rather prominent mouse-gray stripes; sides dull mouse-gray suffused with light gray-white, tinged with Grayish Olive posteriorly, with a tinge of the flank color spreading across the chest which is striped less sharply than the throat; lower chest and belly at mid-line dull buffy white without stripes; shanks Grayish Olive; under tail-coverts buffy white; wings dusky brown; primaries and outer secondaries narrowly margined externally with Straw Yellow (slightly more pallid on outer secondaries), subobsolete on outer halves of first 6 primaries; lesser upper wing-coverts like the back; median and greater series dusky brown broadly tipped with light buffy white and faintly washed with greenish yellow, tipping broader on median series; under wing-coverts buffy white, becoming strongly yellow on wrist; axillaries buffy white faintly washed with yellow; inner margins of remiges narrowly edged with dull white; tail dusky brown with outer margins Amber Yellow. Bill: upper mandible (in dried skin), Blackish Brown (3); lower mandible, lighter, more sepia; feet, Mikado Brown. Wing, 51.5 mm.; tail, 42; exposed culmen, 13.5; culmen from base, 15.5; tarsus, 21.

A second male from the same locality is

virtually identical with the type. Our examples form a new link in the distributional pattern of this species, being clearly endowed with a combination of characters, any of which may be seen on one or the other of *E. m. wucheri* or *E. m. duidae*.

SPECIMENS EXAMINED

E. m. ayuantepui.—VENEZUELA: Mt. Auyan-tepui, 2 ♂ (1100 m.).

E. m. duidae.—VENEZUELA: Mt. Duida, Chorrera de Vegas, 7 ♂ (including type), 8 ♀, 2 (?).

***Colopteryx galeatus* (Boddaert)**

Motacilla galeata BODDAERT, 1783, Tabl. Pl. enl., p. 24 (based on Daubenton, Pl. enl., 391, fig. 1, Cayenne).

5 ♂, 2 ♀, 460 m.; 1 ♂, 2 ♀, 1 (?), 1100 m.

Eastern and southern Venezuela (El Pilar and Cariaquito, Bermudez; Orinoco River from the delta up to beyond the falls of Maipures; the Caura River and Mt. Auyan-tepui), the Guianas and northern Brazil.

***Mecocerculus leucophrys roraimae*
Hellmayr**

Mecocerculus leucophrys roraimae HELLMAYR, 1912, Anz. Orn. Ges. Bayern, 4, p. 30 (Mt. Roraima, Venezuela).—CHAPMAN, 1931, Bull. Amer. Mus. Nat. Hist., LXIII, p. 94; 1939, Amer. Mus. Novit., No. 1051, p. 9 ("The Upper Zonal Birds of Mt. Auyan-tepui").

3 ♂, 4 ♀, 2 (?), 1100 m.; 1 ♀, 1 (?), 1850 m.

Subtropical Zone of southern Venezuela (Mts. Duida, Auyan-tepui and Roraima).

We have found no valid² British Guiana records for this race. That range given by Chubb and Hellmayr is based on Mt. Roraima records.

***Elaenia flavogaster* flavogaster
(Thunberg)**

Pipra flavogaster THUNBERG, 1822, Mém. Ac. Sci. St. Pétersb., 8, p. 286 (Brazil = Río de Janeiro).

4 ♀, 460 m.

Colombia, Venezuela (Mts. Auyan-tepui and Roraima, etc.), the Guianas, Brazil, etc.

² Chubb cites the following British Guiana records: Supenaam River, Bartica and Bonasika River. Hellmayr considers these to be "no doubt incorrect" because "this form is certainly not found in the Tropical Zone."

¹ Names of colors are capitalized when direct comparisons have been made with Ridgway's "Color Standards and Color Nomenclature."

Elaenia cristata Pelzelin

Elaenia cristata PELZELIN, 1868, Orn. Bras., 2, pp. 107, 177 (City of Goyaz, Brazil).

1 ♀, 460 m.; 5 ♂, 1 ♀, 1100 m.

Venezuela (Orinoco River from Piacoa¹ to Quiribana de Caicara; Barinas¹; Cantaura¹; Zaraza¹; La Trilla, Ocumare de la Costa; Mts. Auyan-tepui and Roraima), British and French Guiana, Brazil, etc.

Elaenia chiriquensis albivertex Pelzelin

Elaenia albivertex PELZELIN, 1868, Orn. Bras., 2, pp. 107, 177 (Ypanema, São Paulo [type], Goyaz, and Forte do Rio Branco, Brazil).

8 ♂, 2 ♀, 460 m.; 1 ♂, 2 ♀, 1100 m.

Colombia, Venezuela (Mts. Auyan-tepui and Roraima, etc.), Trinidad, French and British Guiana, southward.

Elaenia ruficeps Pelzelin

Elaenia ruficeps PELZELIN, 1868, Orn. Bras., 2, pp. 108, 178 (Borba, Rio Madeira).

3 ♂, 6 ♀, 1100 m.

Southern Venezuela (Mts. Auyan-tepui and Roraima), the Guianas and northern Brazil.

Venezuela has not been included in the range of this species. A previous Venezuelan record from Mt. Roraima was credited to British Guiana.

Elaenia olivina Salvin and Godman

Elaenia olivina SALVIN AND GODMAN, 1884, Ibis, (5), 2, p. 446 (Mt. Roraima, Venezuela).—CHAPMAN, 1931, Bull. Amer. Mus. Nat. Hist., LXIII, p. 97; 1939, Amer. Mus. Novit., No. 1051, p. 10 ("The Upper Zonal Birds of Mt. Auyan-tepui").

1 ♂, 1850 m.

Subtropical Zone of southern Venezuela (at Mts. Duida, Auyan-tepui and Roraima) and British Guiana (at Kamakusa).

Elaenia gaimardii gaimardii (D'Orbigny)

Muscicapa albicilla LAFRESNAYE AND D'ORBIGNY, 1837, Syn. Av., 1, in Mag. Zool., 7, cl. 2, p. 52 (Yuracares, Bolivia).

3 ♂, 460 m.

Venezuela (Altamira¹ and Barinitas,¹ Barinas; Guanare¹ and Acarigua,¹ Portuguesa; Camaguan,¹ Guarico; Caicara; Maipures; Munduapo; Piacoa¹; Suapure

and La Unión, Caura River; Mt. Auyan-tepui), the upper Río Negro through eastern Peru to Bolivia, etc.

Elaenia dayi dayi Chapman

Elaenia dayi CHAPMAN, 1929, Amer. Mus. Novit., No. 340, p. 3 (Mt. Roraima, Venezuela); 1931, Bull. Amer. Mus. Nat. Hist., LXIII, p. 97; 1939, Amer. Mus. Novit., No. 1051, p. 10 ("The Upper Zonal Birds of Mt. Auyan-tepui").

2 ♂, 2 ♀, 1850 m.; 4 ♂, 1 ♀, 2200 m.

Subtropical Zone of southern Venezuela (Mts. Auyan-tepui and Roraima).

Phyllomyias griseiceps (Selater and Salvin)

Tyranniscus griseiceps SCLATER AND SALVIN, 1871, P. Z. S. London (1870), pp. 841, 843 (Babahoyo [type] and Pallatanga, Ecuador, and Lake Valencia, Venezuela).

1 ♂, 3 ♀, 1 (?), 460 m.

Tropical and Subtropical Zones of Colombia, Ecuador, Venezuela (Ospino¹; Lake Valencia; Las Quiguas, Carabobo; Mts. Auyan-tepui and Roraima) and British Guiana.

Tyranniscus gracilipes gracilipes Selater and Salvin

Tyranniscus gracilipes SCLATER AND SALVIN, 1867, P. Z. S. London, p. 981 (Pebas, Peru).

4 ♂, 1 ♀, 1100 m.

Southern Venezuela (Maipures; Mts. Auyan-tepui and Roraima), northern Brazil, etc.

We have found no British Guiana records for this race. That range given by Chubb and Hellmayr is based on Mt. Roraima specimens.

Tyrannulus elatus elatus (Latham)

Sylvia elata LATHAM, 1790, Ind. Orn., 2, p. 549 (based on Daubenton, Pl. enl., 708, fig. 2, Cayenne).

4 ♂, 1 (?), 460 m.

Eastern Colombia, Venezuela (La Ceiba, Trujillo; Catatumbo River, Zulia; Orinoco River; Altagracia; Nericagua; Maipures; Tortola Island. Suapure, Caura River; Mts. Auyan-tepui and Roraima), the Guianas, northern Brazil, etc.

¹ In the Phelps Ornith. Coll., Caracas.

Leptopogon amaurocephalus peruvianus
Sclater and Salvin

Leptopogon peruvianus SCLATER AND SALVIN, 1867, P. Z. S. London, p. 757 (Chyavetas, Peru).

2 ♂, 1 ♂ (?), 1 ♀, 2 (?), 1100 m.

Eastern Peru, north to Colombia (?) and east to Venezuela (Barinitas,¹ La Veguita¹; Acarigua,¹ Portuguesa; Mts. Auyan-tepui and Roraima) and British Guiana.

Pipromorpha macconnelli roraimae
Chubb

Pipromorpha macconnelli roraimae CHUBB, 1919, Ann. Mag. Nat. Hist., (9), 4, p. 303 (Mt. Roraima, Venezuela [type], and Merumé Mts.). —CHAPMAN, 1931, Bull. Amer. Mus. Nat. Hist., LXIII, p. 98.

1 ♂ (?), 460 m.; 5 ♂, 1 ♀, 1100 m.

Subtropical and Tropical Zones in southern Venezuela (Mts. Duida, Auyan-tepui and Roraima) and British Guiana.

OXYRUNCIDAE

SHARP-BILLS

Oxyruncus cristatus phelpsi Chapman

Oxyruncus cristatus phelpsi CHAPMAN, 1939, Amer. Mus. Novit., No. 1047, p. 1. "The Riddle of *Oxyruncus*" (Mt. Auyan-tepui); 1939, Amer. Mus. Novit., No. 1051, p. 10 ("The Upper Zonal Birds of Mt. Auyan-tepui").

7 ♂, 2 ♀, 1100 m.

Subtropical Zone of southern Venezuela (Mt. Auyan-tepui) and the British Guiana-Brazil boundary.²

HIRUNDINIDAE

SWALLOWS

Stelgidopteryx ruficollis cacabatus Bangs
and Penard

Stelgidopteryx ruficollis cacabatus BANGS AND PENARD, 1918, Bull. Mus. Comp. Zool., 62, p. 83 (vicinity of Paramaribo, Surinam).

2 ♂, 1 ♀, 460 m.

Southern Venezuela (Mts. Auyan-tepui and Roraima), the Guianas, etc.

In reference to the identity of *S. ruficollis* from Mt. Roraima Hellmayr writes,³ "Birds from Roraima are doubtful. The

five specimens before me, all collected by H. Whitely in the early eighties, are appreciably paler and browner above than any other example from South America and have the rump buffy brown, these peculiarities having already been noticed by Sharpe (1888). Chapman, however, in discussing recently collected material from Roraima, describes the upperparts as being as dark as *ruficollis*, which leads me to believe that the coloration of the Whitely skins must have undergone a post-mortem change." Hellmayr then proceeds to agree with Dr. Chapman that the Mt. Roraima birds "cannot well be united" with *aequalis* although he notes that "by their somewhat lighter rump they mark a certain approach in that direction." On the following page (*op. cit.*) I find that Hellmayr has listed the Roraiman birds (which had been called both *ruficollis* and *aequalis*, the former by Hellmayr and the latter by Chapman) as *cacabatus*.

This brief history serves to show the inconsistency which has arisen regarding these difficult and closely related forms. I find that our specimens from Mt. Auyan-tepui are inclined to have rumps even lighter than the specimens on hand from Mt. Roraima, and they certainly do not agree with the average of the topotypical series of *cacabatus* from Surinam. However, because 2 of the topotypical skins have upperparts, including rump, as light as the darker specimens in the Auyan-tepui-Roraima series, we follow Hellmayr.

FIELD NOTES.—March 3, 1938: "In the Aicha River near the airfield, I shot 2 swallows which were hovering next to a 15-foot sand bank in which a new hole had been started about 6 feet above the water. I believe that the birds were building a nest in the newly excavated hole because one of the birds was seen to hover close to its entrance."

Neochelidon tibialis griseiventris
Chapman

Neochelidon griseiventris CHAPMAN, 1924, Amer. Mus. Novit., No. 138, p. 9 (Candamo, southeastern Peru).

1 ♂, 4 ♀, 1 (?), 460 m.

Base of the eastern Andes of Colombia,

¹ In the Phelps Ornith. Coll., Caracas.

² See "The Riddle of *Oxyruncus*," by F. M. Chapman (*op. cit.*).

³ 1935, Field Mus. Nat. Hist., Zool. Ser., XIII, p. 40.

southern Venezuela (Mt. Auyan-tepui), south through eastern Ecuador to eastern Peru.

Extension of range to Venezuela.

Although we have 6 skins, only 2 are of adult birds. These 2 agree with 1 example of *griseiventris* (of doubtful sex) from Tulumayo, Prov. of Junin, Peru, both in measurement and in color of plumage.

Pygochelidon cyanoleuca cyanoleuca
(Vieillot)

Hirundo cyanoleuca VIEILLOT, 1817, Nouv. Dict. Hist. Nat., nouv. éd., 14, p. 509 (based on "Golondrina de los timoneles negros" Azara, No. 303, Paraguay).—CHAPMAN, 1931, Bull. Amer. Mus. Nat. Hist., LXIII, p. 106 (Mt. Roraima, Venezuela); 1939, Amer. Mus. Novit., No. 1051, p. 10 ("The Upper Zonal Birds of Mt. Auyan-tepui").

7 ♂, 3 ♀, 1100 m.; 1 (?), 1500 m. (sight record).

Costa Rica to Colombia, east through the mountain ranges of Venezuela (Mérida; Silla de Caracas; Cumaná; Mts. Duida, Auyan-tepui and Roraima, etc.), Trinidad, British Guiana, eastern Brazil, etc.

FIELD NOTES.—January 19, 1938: "Mr. Phelps saw a white-bellied, blue-backed swallow at the 'Danto' (1500 m.)."

***Hirundo rustica erythrogaster* Boddaert**

Hirundo erythrogaster BODDAERT, 1783, Tabl. Pl. enl., p. 45 (based on "Hirondelle à ventre roux de Cayenne" Daubenton, Pl. enl., pl. 724, fig. 1, Cayenne).

1 ♂, Dec. 3, 1937, 460 m.

Breeds as far north as Alaska and Canada and winters as far south as Argentina and Chile.

***Iridoprocne albiventer* (Boddaert)**

Hirundo albiventer BODDAERT, 1783, Tabl. Pl. enl., p. 32 (based on "Hirondelle à ventre blanc de Cayenne" Daubenton, Pl. enl., pl. 546, fig. 2, Cayenne).

1 ♀, 460 m.

South America, to Peru and Paraguay.

CORVIDAE

CROWS AND JAYS

***Cyanocorax cayanus* (Linné)**

Corvus Cayanus LINNÉ, 1766, Syst. Nat., 12th Ed., 1, p. 157 (Cayenne).

1 ♂, 1 ♂ (?), 460 m.; 3 ♂, 2 ♀, 1 (?), 1100 m.

Venezuela (Caura Valley: Suapure, La Prisión; Mt. Auyan-tepui), the Guianas and extreme northeastern Brazil.

TROGLODYTIDAE

WRENS

***Thryothorus coraya ridgwayi* Berlepsch**

Thryothorus ridgwayi BERLEPSCH, 1889, Journ. Orn., 37, p. 293 (Bartica Grove, British Guiana).—CHAPMAN, 1931, Bull. Amer. Mus. Nat. Hist., LXIII, p. 106 (Mt. Roraima, Venezuela); 1939, Amer. Mus. Novit., No. 1051, p. 10 ("The Upper Zonal Birds of Mt. Auyan-tepui").

4 ♂, 1 ♀, 1 ♀ (?), 2 (?), 1100 m.

Subtropical Zone in southern Venezuela (Mts. Auyan-tepui and Roraima) and British Guiana.

***Troglodytes musculus clarus* Berlepsch and Hartert**

Troglodytes musculus clarus BERLEPSCH AND HARTERT, 1902, Nov. Zool., 9, p. 8 (Bartica Grove, British Guiana).

1 ♂, 460 m.

Eastern Colombia, Trinidad, Venezuela (Altamira, Barinas¹; Mts. Auyan-tepui and Roraima, etc.), the Guianas, parts of Brazil, etc.

***Troglodytes rufulus rufulus* Cabanis**

Troglodytes rufulus CABANIS, "1848" = 1849, in Schomburgk, Reis. Brit. Guiana, 3, p. 672 (Mt. Roraima, Venezuela).—CHAPMAN, 1931, Bull. Amer. Mus. Nat. Hist., LXIII, p. 108; 1939, Amer. Mus. Novit., No. 1051, p. 10 ("The Upper Zonal Birds of Mt. Auyan-tepui").

2 ♂, 1 ♂ (?), 1850 m.; 1 ♂, 2 ♂ (?), 3 ♀, 2200 m.

Subtropical Zone in southern Venezuela (Mts. Auyan-tepui and Roraima).

We have found no valid British Guiana records for this race. That range given by Chubb and Hellmayr is based on Mt. Roraima specimens.

FIELD NOTES.—January 16, 1938: "Today I found what appear to be two nests of *Troglodytes rufulus rufulus* in a water eroded crevasse of a subterranean watercourse which empties into the giant 1850-m. canyon. The first, which appeared to be several years old, was discovered under an overhang about 20 feet below the surface

¹ In the Phelps Ornith. Coll., Caracas.

of the plateau. The many feathers which were woven into it all belonged to the 'rufous rock wren.' The second nest was found about 60 feet down in a chimney-like crack which allowed a shaft of light to enter the enlarged stream bed. It was about 14 inches high and, seemingly the product of several successive nestings, also was infiltrated with brown wren feathers."

Henicorhina leucosticta leucosticta
(Cabanis)

Cyphorhinus leucostictus CABANIS, 1847, Arch. Naturg., 13, (1), p. 206 (Guiana).

1 ♀, 460 m.; 3 ♂, 4 ♀, 3 (?), 1100 m.

Southern Venezuela (Caura Valley; Mts. Auyan-tepui and Roraima¹), British Guiana and northwestern Brazil.

Microcerculus bambla bambla
(Boddaert)

Formicarius bambla BODDAERT, 1783, Tabl. Pl. enl., p. 44 (Cayenne).

1 ♂, 1100 m.

Southern Venezuela (Mt. Auyan-tepui) and the Guianas.

Extension of range to Venezuela.

Our skin differs from *caurensis* by being darker rufous brown above and by having prominent dusky edgings on crown, back and abdomen. It differs slightly from *bambla* by having fewer dusky edgings on upperparts, on breast and on flanks. This difference is not pronounced and, since the 3 skins of *bambla* at hand are of partially young birds, while ours is adult, it may be of no significance at all. We call ours *bambla* unconditionally.

SPECIMENS EXAMINED

M. b. caurensis.—VENEZUELA: Nicare, 1 ♀ (type); foot of Mt. Duida, 2 ♀.

M. b. bambla.—BRITISH GUIANA: Potaro Landing, 1 ♂. FRENCH GUIANA: Tamanoir, Mana River, 2 ♂.

MIMIDAE

MOCKINGBIRDS

Mimus gilvus melanopterus Lawrence

Mimus melanopterus LAWRENCE, 1849, Ann. Lyc. Nat. Hist. N. Y., 5, No. 1, p. 35, pl. 2 (Venezuela).

¹ Coll. by A. S. Pinkus. In the Phelps Ornith. Coll., Caracas.

3 ♂, 1100 m.

Northern Colombia, Venezuela (Mts. Auyan-tepui and Roraima, etc.), British Guiana and extreme northern Brazil.

Our skins show a tendency to be gray above but certain of the Museum *melanopterus* are precisely similar.

TURDIDAE

THRUSHES

Turdus albicollis phaeopygus Cabanis

Turdus phaeopygus CABANIS, "1848" [= early in 1849], in Schomburgk, Reis. Brit. Guiana, 3, p. 666 (British Guiana).

2 ♂, 2 ♀, 1 (?), 1100 m.

Southern Venezuela (Caura Valley: Suapure, La Prisión; Mts. Auyan-tepui and Roraima), the Guianas and north-eastern Brazil.

Turdus ignobilis murinus Salvin

Turdus murinus SALVIN, 1885, Ibis, (5), 3, p. 197 (Mt. Roraima, Venezuela and the Merumé Mts. of British Guiana).—CHAPMAN, 1939, Amer. Mus. Novit., No. 1051, p. 11 ("The Upper Zonal Birds of Mt. Auyan-tepui").

12 ♂, 7 ♀, 1 (?), 1100 m.; 1 ♀, 1500 m.

Subtropical Zone of southern Venezuela (Mts. Duida, Auyan-tepui and Roraima) and of British Guiana.

Turdus leucomelas ephippialis Sclater

Turdus ephippialis SCLATER, 1862, Proc. Zool. Soc. London, p. 109 (Bogotá, Colombia).

1 ♂, 460 m.

Eastern Colombia, Venezuela (Caracas,² Paraguaná Peninsula,² Cumarebo,² Ciudad Bolívar,² Mts. Auyan-tepui and Roraima, etc.), the Guianas, northern Brazil, etc.

In this identification we follow Hellmayr³ and Chapman⁴ who maintain that *ephippialis* is distinct from *albiventer*. Their views are not shared by Todd⁵ and Wetmore.⁶

Hellmayr, after study of Todd's claims that "all the alleged characters [separating the races] break down in the light of this series [106 specimens from Colombia,

² In the Phelps Ornith. Coll., Caracas.

³ 1934, Field Mus. Nat. Hist., Zool. Ser., XIII, p. 401.

⁴ 1931, Bull. Amer. Mus. Nat. Hist., LXIII, Art. 1, p. 111.

⁵ 1931, Proc. Biol. Soc. Wash., 44, p. 52.

⁶ 1939, Proc. U. S. Nat. Mus., 87, p. 241.

Venezuela, French Guiana and Brazil]," continues to recognize *ephippialis*. His examination of 70 specimens, including 9 topotypical *ephippialis*, revealed that this race differed from *albiventer* by having "breast and sides grayish with very little, if any, brownish tone, and pileum purer mouse-gray, not tinged with brownish anteriorly."

Chapman points out that in certain plumages no apparent difference exists between *ephippialis* and *albiventer* because "like many inhabitants of arid regions its plumage becomes excessively worn, and the characters which at best separate the slightly differentiated races then disappear or are obscured." Hellmayr corroborates this as follows in writing of the characters distinguishing the two races: "These differences, while noticeable in series of freshly moulted birds, are hardly apparent, when worn examples of *T. l. albiventer* are compared [with *ephippialis*]."

Wetmore, the authority most recently concerned with this problem, has chosen to follow Todd in naming the specimen he shot near Sombrero, Venezuela, on Nov. 17, 1937, because "... with only limited material at hand for comparison, it appears to me that Todd is correct in calling it *albiventer*."

Hellmayr¹ with Mt. Roraima skins at hand observed that "Birds from Mt. Roraima incline to larger size, but do not seem to differ in coloration" from *ephippialis*. Our specimen agrees with Mt. Roraima specimens and accordingly we follow Dr. Hellmayr's identification.

***Turdus olivater roraimae* Salvin and Godman**

Turdus roraimae SALVIN AND GODMAN, 1884, Ibis, (5), 2, p. 443 (Mt. Roraima).—CHAPMAN, 1931, Bull. Amer. Mus. Nat. Hist., LXIII, p. 112; 1939, Amer. Mus. Novit., No. 1051, p. 11 ("The Upper Zonal Birds of Mt. Auyan-tepui").

1 ♂, 1100 m.; 3 ♂, 1 ♀, 1850 m.; 1 ♀, 2200 m.

Subtropical Zone of southern Venezuela (Mts. Auyan-tepui and Roraima) and British Guiana (Twek-quay).

¹ 1934, Field Mus. Nat. Hist., Zool. Ser., XIII, p. 401.

***Platycichla flavipes polionota* (Sharpe)**

Merula polionota SHARPE, 1900, in Seebohm, Monog. Turd., 2, p. 85, pl. 103, fig. 1 (Mt. Roraima, Venezuela).—CHAPMAN, 1939, Amer. Mus. Novit., No. 1051, p. 11 ("The Upper Zonal Birds of Mt. Auyan-tepui").

7 ♂ (6 black, 1 gray), 1 ♂ imm., 1 (?) nestling, 1 ♀ (?), 1100 m.

Subtropical Zone of southern Venezuela (Mts. Auyan-tepui and Roraima) and of British Guiana.

***Cichlopsis leucogenys gularis* Salvin and Godman**

Cichlopsis gularis SALVIN AND GODMAN, 1882, Ibis, (4), 6, p. 76 (Merumé Mts., British Guiana).—CHAPMAN, 1939, Amer. Mus. Novit., No. 1051, p. 11 ("The Upper Zonal Birds of Mt. Auyan-tepui").

2 ♂, 5 ♀, 2 nestlings (and nest), 1100 m.

Subtropical and occasionally Tropical Zone of southern Venezuela (Mts. Auyan-tepui and Roraima) and British Guiana.

FIELD NOTES.—February 21, 1938: "Thrush nest found in deep forest, 10 feet above ground on a large limb near trunk of tree. Built of thin rootlets and covered with living moss similar to that which covered the trunk both above and below the nest. Female and two young about 6 days old collected."

***Hylocichla minima aliciae* (Baird)**

Turdus aliciae BAIRD, 1858, Rep. Pac. R. R. Surv., 9, p. 217 (West Northfield, Illinois).

1 ♂, March 5, 460 m.; 1 ♀, Jan. 31, 1938, 1100 m.

Breeds in northern North America, wintering as far south as Peru and Venezuela.

New Venezuela records: Mérida²; Osipino²; Barinitas, Barinas¹; Mt. Auyan-tepui.

SYLVIIDAE

OLD WORLD WARBLERS

***Ramphocaenus melanurus albiventris* Sclater**

Ramphocaenus albiventris SCLATER, 1883, Ibis, (5), 1, p. 95 (Surinam).

3 ♂, 1 juv. ♂, 2 ♀, 460 m.

² In the Phelps Ornith. Coll., Caracas.

Southern Venezuela (Mt. Auyan-tepui), the Guianas and northern Brazil.

Extension of range to Venezuela.

MOTACILLIDAE

WAGTAILS AND PIPITS

Anthus lutescens lutescens Pucheran

Anthus lutescens PUCHERAN, 1855, Arch. Mus. Hist. Nat. Paris, 7, p. 343 ("Brésil" = vicinity of Río de Janeiro).

1 ♂, 460 m.; 2 ♂, 1 ♀, 1100 m.

Eastern Colombia, Venezuela (Palmarito; Cd. Bolivar; Uracoa; San Felix; Piacoa; Mts. Auyan-tepui and Roraima), the Guianas, most of Brazil, etc.

VIREONIDAE

VIREOS

Vireo virescens virescens Vieillot

Vireo virescens VIEILLOT, 1808, Hist. Nat. Ois. Amér. Sept., 1 (1807), p. 84, pl. 53 (no locality given).

2 ♂ (?), March 1 and 8, 2 ♀, March 8 and Feb. 25, 1 (?), March 11, 460 m.; 1 ♂, Feb. 21, 1938, 1100 m.

Breeds as far north as Canada and winters south to Bolivia.

This migrant has been recorded from the following localities in Venezuela: Boca de Sina, Río Cunucunuma, upper Orinoco; Mérida; Mts. Auyan-tepui and Roraima.

Hylophilus sclateri Salvin and Godman

Hylophilus sclateri SALVIN AND GODMAN, 1883, Ibis, (5), 1, p. 205 (Mt. Roraima, Venezuela).—CHAPMAN, 1939, Amer. Mus. Novit., No. 1051, p. 11 ("The Upper Zonal Birds of Mt. Auyan-tepui").

5 ♂, 1 (?), 1100 m.; 1 (?), 1500–1800 m.

Upper Tropical and Subtropical Zones of southern Venezuela (Mts. Duida, Auyan-tepui and Roraima) and British Guiana.

Hylophilus muscicapinus muscicapinus

Sclater and Salvin

Hylophilus muscicapinus SCLATER AND SALVIN, 1873, Nomencl. Av. Neotrop., p. 156 (St. Louis d'Oyapock, French Guiana).

3 ♂, 1 ♀, 1 (?), 460 m.; 1 ♂, 1 ♀, 1100 m.

¹ In the Phelps Ornith. Coll., Caracas.

Southern Venezuela (foot of Mt. Duida; Caura Valley: Suapure, La Unión, Nicare; Mt. Auyan-tepui), the Guianas and northern Brazil.

Hylophilus ochraceiceps ferrugineifrons Sclater

Hylophilus ferrugineifrons SCLATER, 1862, Proc. Zool. Soc. London, p. 110 (Bogotá, Colombia).

3 ♂, 1 ♀, 1 (?), 1100 m.

Eastern Colombia, eastern Ecuador, southern Venezuela (Mt. Duida region; middle Orinoco River; Caura River; Mt. Auyan-tepui) to the Guianan frontier (Río Yuruán) and to northwestern Brazil.

VIREOLANIIDAE

SHRIKE-VIREOS

Smaragdolanus leucotis leucotis (Swainson)

Malaconotus leucotis SWAINSON, 1837, Anim. Menag., p. 341 ("Africa (?)," error).

1 ♀, 1100 m.

Southern Venezuela (Caura Valley: Suapure. Mt. Auyan-tepui), the Guianas and northwestern Brazil to eastern Ecuador.

CYCLARHIDAE

PEPPER SHRIKES

Cyclarhis gujanensis gujanensis (Gmelin)

Tanagra gujanensis GMELIN, 1789, Syst. Nat., 1, pt. 2, p. 893 (based on "Verderoux," Buffon, Hist. Nat. Ois. [Impr. Roy.], 5, p. 27); ("Guyane" = French Guiana).

1 ♀, 460 m.; 1 (?), 1100 m.

Southern Venezuela, Mts. Auyan-tepui and Roraima), the Guianas and northern Brazil.

COEREVIDAE

HONEY CREEPERS

Diglossa major gilliardi Chapman

Diglossa major gilliardi CHAPMAN, 1939, Amer. Mus. Novit., No. 1051, p. 11 (Mt. Auyan-tepui) ("The Upper Zonal Birds of Mt. Auyan-tepui").

1 ♂ (?), 1500–1800 m.; 2 ♂, 7 ♀, 1 (?), 1850 m.; 13 ♂, 3 ♀ (?), 13 ♀, 1 (?), 2200 m.

Subtropical Zone of Mt. Auyan-tepui, southern Venezuela.

FIELD NOTES.—January 5, 1938: "One of a number of abandoned nests, all similar in construction, was found to contain several *Diglossa major* feathers and consequently we presume that the following description of nest and habitat applies to this species. Nest of grasses and small sticks, about the size of a catbird's nest, placed among rocks, usually under an overhanging shelf, generally from six to twelve feet above ground."

Chlorophanes spiza spiza (Linné)

Motacilla spiza LINNÉ, 1758, Syst. Nat., 10th Ed., 1, p. 188 (based on "The Green Black-cap Flycatcher," Edwards, Nat. Hist. Bds., 1, p. 25, pl. 25, left fig., Surinam [descr. male]).

1 ♂, 2 ♀, 460 m.; 15 ♂, 7 ♀, 3 (?), 1100 m.

Trinidad, Venezuela (north coast from the Paria Peninsula west to Carabobo; Orinoco Delta; Caura Valley; Mts. Auyan-tepui and Roraima, etc.), the Guianas, northern Brazil, etc.

Cyanerpes cyaneus cyaneus (Linné)

Certhia cyanea LINNÉ, 1766, Syst. Nat., 12th Ed., 1, p. 188 (based on "The Black and Blue Creeper," Edwards, Glean. Nat. Hist., 2, p. 114, pl. 264, Surinam).

8 ♂, 3 ♀, 460 m.; 3 ♂, 1 ♀, 1100 m.

Trinidad, southern Venezuela (Guanoco; Mts. Auyan-tepui and Roraima), the Guianas, Brazil, etc.

Cyanerpes caeruleus caeruleus (Linné)

Certhia caerulea LINNÉ, 1758, Syst. Nat., 10th Ed., 1, p. 118 (based on "Blue Creeper," Edwards, Nat. Hist. Bds., 1, p. 21, pl. 21 [= male] Surinam).

3 ♂, 4 ♀, 1 ♀ (?), 1100 m.

Northern Colombia, Venezuela (Orinoco Delta and north coast, from the Paria Peninsula westward; Mts. Auyan-tepui and Roraima, etc.), the Guianas, northern Brazil, etc.

Dacnis lineata (Gmelin)

Motacilla lineata GMELIN, 1789, Syst. Nat., 1, pt. 2, p. 990 (based on "Le Pitpit à coiffe bleue," Buffon, 1783, Hist. Nat. Ois. [éd. Impr. Roy.], 6, p. 211; Cayenne).

1 ♂, 1 ♀, 1100 m.

Southeastern Colombia, southern Venezuela (Mts. Auyan-tepui and Roraima¹), the Guianas, Amazonia, etc.

Extension of range to Venezuela.

Dacnis cayana cayana (Linné)

Motacilla cayana LINNÉ, 1766, Syst. Nat., 12th Ed., 1, p. 336 (based on "*Sylvia cayanaensis coerulea*," Brisson, Orn., 3, p. 534, pl. 28, fig. 1; Cayenne).

5 ♂, 4 ♀, 460 m.; 1 ♂, 2 ♀, 1100 m.

Northern South America from the foot of the eastern Andes in Colombia, through Venezuela (Barinas²; Mts. Auyan-tepui and Roraima, etc.), the Guianas, Brazil, etc.

Coereba flaveola roraimae Chapman

Coereba guianensis roraimae CHAPMAN, 1929, Amer. Mus. Novit., No. 341, p. 6 (Arabupu, Mt. Roraima, Venezuela); 1939, Amer. Mus. Novit., No. 1051, p. 12 ("The Upper Zonal Birds of Mt. Auyan-tepui").

1 ♂, 1 ♀, 460 m.; 8 ♂, 2 ♀, 2 (?), 1100 m.; 1 ♂, 1850 m.

Upper Tropical Zone of southern Venezuela (Mts. Duida, Auyan-tepui and Roraima).

FIELD NOTES.—January 31, 1938: "Today Mr. Phelps found a nest of this Bannanaquit. It is a small 'retort-shaped' structure placed about five feet above ground. As he approached the nest a young bird jumped out."

COMPSOTHTYPIDAE

WOOD WARBLERS

Dendroica aestiva aestiva (Gmelin)

Motacilla canadensis BODDAERT, 1783, Tabl. Pl. enl., p. 4 (based on "Figuier de Canada," Daubenton, Pl. enl., pl. 58, fig. 2).

2 ♂, Feb. 18 and March 1, 1938, 460 m.

Breeds in North America, wintering south to northern Brazil.

Dendroica brevilinguis (Spix)

Muscicapa striata FORSTER, 1772, Philos. Trans., 62, Art. 29, pp. 406, 428 (Severn River = Fort Severn, west coast of Hudson Bay).

1 (?), March 7, 460 m.; 1 ♂, Feb. 8, 1938, 1100 m.

¹ Coll. by A. S. Pinkus. In the Phelps Ornith. Coll., Caracas.

² In the Phelps Ornith. Coll., Caracas.

Breeds in North America, wintering south to Ecuador and northern Brazil.

Seiurus noveboracensis noveboracensis
(Vieillot)

Motacilla naevia BODDAERT, 1783, Tabl. Pl. enl., p. 47 (based on "Fauvette tachetée, de la Louisiane," Daubenton, Pl. enl., pl. 752, fig. 1).

3 ♂, March 8, Feb. 14 and 18, 1 ♀, Feb. 25, 1938, 460 m.

Breeds in North America, wintering south to Ecuador, Venezuela and the Guianas.

***Setophaga ruticilla* (Linné)**

Motacilla ruticilla LINNÉ, 1758, Syst. Nat., 10th Ed., 1, p. 186 (based on "The Redstart," Catesby [Nat. Hist. Carolina, 1, p. 67, pl. 67], "Serino affinis avicula . . ." Virginia accepted as type locality).—CHAPMAN, 1939, Amer. Mus. Novit., No. 1051, p. 12 ("The Upper Zonal Birds of Mt. Ayuan-tepui").

1 ♀, Feb. 14, 1938, 460 m.; 3 ♂, Dec. 6, 9 and 26, 1937, 1 ♀, Dec. 23, 1 (?), Dec. 19, 1100 m.; 1 ♀, 1 (?), Feb. 12, 1500–1800 m.

Breeds in northern North America, wintering south to Ecuador, Venezuela and the Guianas.

Myioborus bruniceps castaneocapillus
(Cabanis)

Setophaga castaneocapilla CABANIS, "1848" [= 1840], in Schomburgk, Reis. Brit. Guiana, 3, p. 667 (Mt. Roraima, Venezuela).—CHAPMAN, 1931, Bull. Amer. Nat. Hist., LXIII, p. 116; 1939, Amer. Mus. Novit., No. 1051, p. 12 ("The Upper Zonal Birds of Mt. Ayuan-tepui").

2 ♂, 1 ♂ (?), 1 ♀, 1850 m.; 1 (?), 1800–2000 m.; 1 ♂, 2 ♀, 1 ♀ (?), 2200.

Subtropical Zone of southern Venezuela (Mts. Ayuan-tepui and Roraima) and British Guiana.

***Basileuterus bivittatus roraimae* Sharpe**

Basileuterus roraimae SHARPE, 1885, Cat. Bds. Brit. Mus., X, p. 392 (Mt. Roraima, Venezuela, and the Merumé Mts. of British Guiana).

1 ♂, 1 ♀, 3 (?), 1100 m.

Subtropical Zone of southern Venezuela (Mts. Duida, Ayuan-tepui and Roraima) and British Guiana (Mts. Merumé and Twék-qey).

***Basileuterus rivularis mesoleucus* Sclater**

Basileuterus mesoleucus SCLATER, 1865, Proc. Zool. Soc. London, p. 286, pl. 9, fig. 1 (Demerara, British Guiana).

1 ♂, 1 ♀, 460 m.; 2 ♂, 1 ♀, 1100 m.

Southern Venezuela (from the Orinoco Delta [Manamo River] to the Caura River [Suapure], south to Mts. Ayuan-tepui and Roraima), British and French Guiana, northeastern Brazil, etc.

ICTERIDAE

BLACKBIRDS, TROUPIALS

***Xanthornus viridis viridis* (P. L. S. Müller)**

Oriolus viridis P. L. S. MÜLLER, 1776, Natur-syst., Suppl., p. 87 ("Cassique vert, de Cayenne").

2 ♀, 460 m.; 4 ♂, 2 ♀, 1 (?), 1100 m.

Southern Venezuela (Orinoco Delta: Vagré River and Isla Morocitico, Manamo River; Caura River: Nicare; Mts. Ayuan-tepui and Roraima), the Guianas, northern Brazil, etc.

Macroagelaius subalaris imthurni
(Sclater)

Agelaius imthurni SCLATER, 1881, Proc. Zool. Soc. London, p. 213 (Kaieteur Falls, Potaro River, British Guiana).—CHAPMAN, 1931, Bull. Amer. Mus. Nat. Hist., LXIII, Art. 1, p. 135; 1939, Amer. Mus. Novit., No. 1051, p. 14 ("The Upper Zonal Birds of Mt. Ayuan-tepui").

4 ♂, 1 ♀, 1100 m.; 4 ♀, 1850 m.; 1 ♂, 1980 m.

Subtropical and occasionally Tropical Zone of southern Venezuela (Mts. Duida, Ayuan-tepui and Roraima) and British Guiana.

FIELD NOTES.—January 6, 1938: "These gregarious birds are represented at the 1850-m. camp by one or more flocks of approximately nine individuals. All day long they can be heard squeaking and rasping as, in 'Ani fashion,' they fly from tree to tree, along the river bank."

***Icterus chryscephalus* (Linné)**

Oriolus chryscephalus LINNÉ, 1766, Syst. Nat., 12th Ed., 1, p. 164 (based on "Le Carouge à teste jaune d'Amérique," Brisson, Orn., 6, Suppl., p. 38, Pl. 2, fig. 2; "Amérique" = Cayenne).

3 ♂, 460 m.

Eastern Colombia, eastern Ecuador, Venezuela ("Cumaná"¹); La Brea; Gua-

¹ 1937, Field Mus. Nat. Hist., Zool. Ser., XIII (10), p. 114.

nipa River; Orinoco River: Perico, Maipures; Caura River: Suapure; Mts. Auyan-tepui and Roraima), the Guianas, northern Brazil, etc.

***Sturnella magna monticola* Chubb**

Sturnella magna monticola CHUBB, 1892, Ann. Mag. Nat. Hist., (9), 8, p. 444, (Mt. Roraima, Venezuela).

4 ♂, 3 ♀, 460 m.; 2 ♂, 1 ♀, 1100 m.

Southern Venezuela (Mts. Auyan-tepui and Roraima) and adjacent districts of Brazil.

We have found no valid British Guiana record for this race. That range given by Chubb is based on Mt. Roraima specimens.

THRAUPIDAE

TANAGERS

***Chlorophonia cyanea roraimae* Salvin and Godman**

Chlorophonia roraimae SALVIN AND GODMAN, 1884, Ibis, (5), 2, p. 444 (Mt. Roraima, Venezuela).

1 ♀, 1100 m.

Subtropical and rarely Tropical Zones of southern Venezuela (Mts. Duida, Auyan-tepui and Roraima) and western British Guiana.

***Tanagra xanthogaster brevirostris* (Bonaparte)**

Euphonia brevirostris BONAPARTE, 1851, Rev. Mag. Zool., (2), 3, p. 136 ("Columbia" = Bogotá collections).—CHAPMAN, 1931, Bull. Amer. Mus. Nat. Hist., LXIII, p. 126.

6 ♂, 3 ♀, 1100 m.

Tropical and Subtropical Zones of eastern Colombia, southern Venezuela (Mts. Duida and Auyan-tepui), British Guiana, eastern Ecuador, eastern Peru, etc.

***Tanagra violacea violacea* (Linné)**

Fringilla violacea LINNÉ, 1758, Syst. Nat., 10th Ed., 1, p. 182 ("in calidis rigionibus"; Surinam designated as type locality).

3 ♂, 3 ♀, 460 m.; 1 ♂, 1100 m.

Trinidad, Venezuela (Paria Peninsula; Guanoco; Manoa; Caura Valley: Suapure, La Prisión, La Unión; Mts. Auyan-tepui and Roraima), the Guianas, northern Brazil, etc.

***Tanagra rufiventris rufiventris* Vieillot**

Tanagra rufiventris VIEILLOT, 1819, Nouv. Dict. Hist. Nat., nouv. éd., 32, p. 426 (no locality indicated).

1 ♂, 460 m.

Southeastern Colombia, southern Venezuela (Orinoco River: Munduapo; Caura River: Nicare, La Prisión; Mt. Auyan-tepui), western Brazil, Peru, etc.

***Tanagra cayennensis* Gmelin**

Tanagra cayana LINNÉ, 1766, Syst. Nat., 12th Ed., 1, p. 316 (Cayenne).

3 ♂, 3 ♀, 460 m.; 4 ♂, 3 ♀, 1 ♀ (?), 1100 m.

Southern Venezuela (Mts. Auyan-tepui and Roraima¹), the Guianas, northern Brazil, etc.

Extension of range to Venezuela.

***Tanagra plumbea* (Du Bus)**

Euphonia plumbea DU BUS, 1855, Bull. Acad. Roy. Sci., Lettr. et Beaux-Arts Belgique, 22, (1), p. 156 ("La Nouvelle Grenade").

1 ♀, 460 m.

Southern Venezuela (Mts. Auyan-tepui and Roraima), British Guiana and northern Brazil.

Venezuela has not been included in the range of this species. Previous Venezuelan records from Mt. Roraima were credited to British Guiana.

***Tanagrella velia iridina* (Hartlaub)**

Tanagra iridina HARTLAUB, 1841, Rev. Zool., 4, p. 305 (Moyobamba, Dept. San. Martín, Peru).

4 ♂, 1 ♀, 1100 m.

Eastern foot of the Colombian Andes, southern Venezuela (Caura Valley: Suapure, La Unión; Mts. Auyan-tepui and Roraima), northwestern Brazil, Ecuador, etc.

T. v. iridina differs from *T. v. velia* by having front and sides of head and neck, humeral area, and margins to wing and tail-feathers (in adult males) violet-blue instead of greenish blue. Hellmayr² calls Mt. Roraima birds "intermediate between the greenish blue of *velia* and the violet-blue of *iridina*, being of a pure prussian

¹ Coll. by A. S. Pinkus. In the Phelps Ornith. Coll., Caracas.

² Hellmayr, 1936, Birds of Americas, XIII, p. 71.

blue," and he tentatively includes them with *velia* in opposition to the identification made by Count Berlepsch,¹ because he prefers "to keep the inhabitants of the whole of British Guiana under *velia*." Our studies of Mt. Auyan-tepui specimens agree with Hellmayr's observations of the Roraima specimens on the whole but 1 Auyan-tepui skin is similar to 1 Suapure, Caura River, skin. Since both Auyan-tepui and Roraima skins are intermediate between *velia* and *iridina* but closer to *iridina*, we follow Count Berlepsch in allocating birds from both Roraima and Auyan-tepui, Venezuela, to *iridina*. Hellmayr's desire of maintaining all "British Guiana specimens under *velia*" is not disturbed because, as shown in the introduction of this paper, all Roraima collecting localities to date have been on Venezuelan soil.

SPECIMENS EXAMINED

T. v. iridina.—VENEZUELA: Mt. Roraima, 1 ♂, Suapure, Caura River, 3 ♂. COLOMBIA: "Bogotá," 1 ♂. ECUADOR: Sarayacu, 3 (?); Napo, 1 (?).

T. v. velia.—BRITISH GUIANA: "Interior of British Guiana," 2 (?); Rockstone, Essequibo River, 1 ♂, 1 ♀; Tumatumari, Potaro River, 1 ♂, 1 ♀; Wisner, Demerara River, 2 ♂, 1 ♀.

***Tangara chilensis coelicolor* (Sclater)**

Calliste coelicolor SCLATER, 1851, Contrib. Orn., p. 51 ("Anolaima," Colombia).

9 ♂, 3 ♀, 1 (?), 1100 m.

Base of the eastern Andes of Colombia, southern Venezuela (Caura River: Suapure, Nicare. Mts. Duida, Auyan-tepui and Roraima), western British Guiana and adjoining parts of Brazil.

***Tangara punctata punctata* (Linné)**

Tangara punctata LINNÉ, 1766, Syst. Nat., 12th Ed., 1, p. 316 (based on "Le Tangara verd piqueté des Indes," Brisson [Surinam]).

2 ♂, 460 m.; 2 ♂, 4 ♀, 2 (?), 1100 m.

Southern Venezuela (Mts. Duida, Auyan-tepui and Roraima), the Guianas and northern Brazil.

***Tangara chrysophrys guttata* (Cabanis)**

Callispiza guttata CABANIS, 1851, Mus. Hein., 1, p. 26 (Mt. Roraima, Venezuela).—CHAPMAN, 1931, Bull. Amer. Mus. Nat. Hist., LXIII, p. 129.

¹ 1912, Verh. 5th Intern. Orn. Kongr. Berlin, pp. 1022, 1129.

2 ♀, 1100 m.

Subtropical Zone of southern Venezuela (Mts. Duida, Auyan-tepui and Roraima).

***Tangara xanthogastra* (Sclater)**

Calliste xanthogastra SCLATER, 1851, Contrib. Orn., part 1, 23 ("Rio Negro," Brazil).

1 ♂, 1 ♀, 460 m.; 5 ♂, 1 ♀, 1 (?), 1100 m.

Eastern Colombia, south through Ecuador and Peru to northern Bolivia, east to southern Venezuela (Caura River: Nicare; Mts. Auyan-tepui, Roraima and Kukenam) and extreme western Brazil.

We have found no valid British Guiana records for this species. The range given by Chubb, Salvin, Sclater and Hellmayr is based on Mt. Roraima and Mt. Kukenam records.

***Tangara nigro-cincta nigro-cincta* (Bonaparte)**

Aglaia nigro-cincta BONAPARTE, 1838, Proc. Zool. Soc. London, 5 ("1837"), p. 121 ("that portion of Brazil bordering on Peru").

1 ♂, 1 ♀, 460 m.; 1 ♂, 1 ♀, 1100 m.

Base of the eastern Andes of Colombia, southern Venezuela (Caura River: Suapure, Nicare. Mts. Auyan-tepui and Roraima), British Guiana, western Brazil, etc.

***Tangara gyrola gyrola* (Linné)**

Fringilla gyrola LINNÉ, 1758, Syst. Nat., 10th Ed., 1, p. 181 (Surinam).

1 ♀, 460 m.; 8 ♂, 3 ♀, 2 (?), 1100 m.

Southern Venezuela (Mts. Auyan-tepui and Roraima) and the Guianas.

Venezuela has not been included in the range of this race. Previous Venezuelan records from Mt. Roraima were credited to British Guiana.

***Tangara cyanopectera whitelyi* (Salvin and Godman)**

Calliste whitelyi SALVIN AND GODMAN, 1884, Ibis, (5), 2, p. 445, pl. 13 (Mt. Roraima, Venezuela).—CHAPMAN, 1931, Bull. Amer. Mus. Nat. Hist., LXIII, p. 130; 1939, Amer. Mus. Novit., No. 1051, p. 14 ("The Upper Zonal Birds of Mt. Auyan-tepui").

4 ♂, 3 ♀, 1 [♀], 1850 m.

Subtropical Zone of southern Venezuela

(Mts. Duida, Auyan-tepui and Roraima) and British Guiana (Mt. Twék-quey).

***Thraupis episcopus episcopus* (Linné)**

Tanagra Episcopus LINNÉ, 1766, Syst. Nat., 12th Ed., 1, p. 316 ("Brésil").

3 ♂, 2 ♀, 460 m.; 3 ♂, 1 ♀, 1100 m.

Southern Venezuela (Mts. Auyan-tepui and Roraima), the Guianas and northern Brazil.

Venezuela has not been included in the range of this race. Previous Venezuelan records from Mt. Roraima were credited to British Guiana.

***Thraupis palmarum melanoptera*
(Sclater)**

Tanagra melanoptera (Hartlaub Ms.) SCLATER, 1857, Proc. Zool. Soc. London, 24 ("1856"), p. 235 (East Peru and "Bogotá").

3 ♂, 460 m.; 7 ♂, 5 ♀, 1100 m.

Base of the eastern Andes of Colombia, Trinidad, Venezuela (San Esteban; Orinoco River: Altgracia, Caicara, Ciudad Bolívar; Guanoco; Caura River: La Prisión, Maripa; Mts. Auyan-tepui and Roraima), the Guianas, Brazil, Ecuador, Peru, etc.

***Ramphocelus carbo carbo* (Pallas)**

Lanius (Carbo) PALLAS, 1764, in Vroeg's Cat. Rais. d'Ois., Adumbr., p. 2 (Surinam).

4 ♂, 5 ♀, 460 m.

Southern Venezuela (Orinoco Valley: Perico; Maipures; Munduapo; Caicara; Manoa; Orocoima and El Raudal, Río Toro; Piacoa; Caura River: Suapure, La Prisión. Mts. Auyan-tepui and Roraima), the Guianas, northern Brazil, etc.

***Piranga rubra rubra* (Linné)**

Fringilla rubra LINNÉ, 1758, Syst. Nat., 10th Ed., 1, p. 181 (based on "The Summer Red-Bird," Catesby, Nat. Hist. Carolina, 1, p. 56, pl. 56).

1 ♂, 1 ♀, Jan. 15, 1938, 1100 m.

Breeds in the United States, wintering south to Peru and Brazil.

***Piranga flava haemalea* (Salvin and Godman)**

Piranga haemalea SALVIN AND GODMAN, 1883, Ibis, (5), 1, p. 205 (Mt. Roraima, Venezuela).

1 (?), 800 m.; 2 ♂, 3 ♀, 2 (?), 1100 m.

Subtropical Zone of southern Venezuela (Mts. Duida, Auyan-tepui and Roraima) and British Guiana.

There are no males of *haemalea* in the American Museum but there is available an extensive series of *desidiosa* which is closely related to it. Hellmayr¹ in his diagnosis of *haemalea* and *desidiosa* writes that these races are "very similar," and he lists in detail the slight differences existing between them. Our males in comparisons with 4 males of *desidiosa* show precisely the differences Hellmayr notes for *haemalea* and consequently we consider our series to be *P. f. haemalea*.

***Lanio fulvus* (Boddaert)**

Tangara fulva BODDAERT, 1783, Tabl. Pl. enl., p. 50, (Cayenne).

8 ♂, 8 ♀, 3 (?), 1100 m.

Eastern base of the eastern Andes in Colombia and Ecuador, southern Venezuela (Mt. Auyan-tepui), the Guianas and northern Brazil.

Extension of range to Venezuela.

***Tachyphonus cristatus cristatus*
(Linné)**

Tanagra cristata LINNÉ, 1766, Syst. Nat., 12th Ed., 1, p. 317 (based on "Le Tanagra noir hupé de Cayenne," Brisson, Orn., 6, Suppl., p. 65, pl. 4, fig. 3 [= ♂ ad.]).

3 ♂, 1 ♂ (?), 1 ♀, 1 (?), 460 m.; 1 ♂, 1100 m.

Eastern base of the eastern Andes of Colombia, southern Venezuela (Caura River: Suapure, Nicare, La Prisión; Mts. Auyan-tepui and Roraima) French Guiana, northern Brazil, eastern Ecuador to northern Peru, etc.

***Tachyphonus surinamus surinamus*
(Linné)**

Turdus surinamus LINNÉ, 1766, Syst. Nat., 12th Ed., 1, p. 297 (Surinam).

6 ♂, 5 ♀, 1100 m.

Southern Venezuela (Orinoco Delta: Guanoco, Vagré River; Caura River: Nicare, Suapure; Mt. Auyan-tepui), the Guianas, northern Brazil, etc.

¹ 1936, Field Mus. Nat. Hist., Zool. Ser., XIII, p. 279.

Tachyphonus phoenicius Swainson

Tachyphonus phoenicius SWAINSON, 1837, Anim. Menag., p. 311 (believed to be from "Fernando Po, on the African coast."¹). CHAPMAN, 1939, Amer. Mus. Novit., No. 1051, p. 14 ("The Upper Zonal Birds of Mt. Auyan-tepui").

1 ♂, 460 m.; 8 ♂, 7 ♀, 1 (?), 1100 m.; 1 ♂, 1500–1800 m.

Tropical and Subtropical Zones in southern Venezuela (Mts. Duida, Auyan-tepui and Roraima; San Carlos, Río Negro), the Guianas, northern Brazil, etc.

Schistochlamys melanopsis melanopsis (Latham)

Tanagra atra GMELIN, 1789, Syst. Nat., 1, pt. 2, p. 898 (Cayenne).

3 ♂, 3 ♀, 460 m.; 3 ♂, 2 ♀, 1100 m.

Eastern Colombia, Venezuela (Altamira, Barinas¹; Mts. Auyan-tepui and Roraima, etc.), the Guianas and northern Brazil.

FRINGILLIDAE**SPARROWS, FINCHES****Saltator maximus maximus** (P. L. S. Müller)

Tanagra maxima P. L. S. MÜLLER, 1776, Natursyst., Suppl., p. 159 (based on "Tangara, des grands bois de Cayenne," Daubenton, Pl. enl., pl. 205; Cayenne).

2 ♂, 2 ♀, 1 (?), 460 m.

Colombia, Venezuela (Oropé, Zulia; Maracay, Aragua; Altamira,² La Veguita² and Barinitas, Barinas²; Maipures; Caura River: Suapure, La Prisión and Nicare. Mts. Auyan-tepui and Roraima), the Guianas, Brazil, Paraguay, etc.

Pitylus grossus grossus (Linné)

Loxia grossa LINNÉ, 1766, Syst. Nat., 12th Ed., 1, p. 307 (based on "Le Gros-bec-bleu d'Amérique," Brisson, Orn., 6, Suppl., p. 89, p. 5, fig. 1; "America" = Cayenne).

5 ♂, 2 ♀, 1 (?), 460 m.

Southern Venezuela (Caura River: Suapure, Nicare, La Prisión, La Unión. Mt. Auyan-tepui), the Guianas, northern Brazil, etc.

¹ Berlepsch (1908, Nov. Zool., 15, p. 116) at first suggested eastern Peru, but several years later (1912, Verh. 5th Intern. Orn. Kongr. Berlin, p. 1075) proposed "Cayenne" as an appropriate type locality.

² In the Phelps Ornith. Coll., Caracas.

Cyanocompsa cyanoides rothschildii (Bartlett)

Guiraca rothschildii BARTLETT, 1890, Ann. Mag. Nat. Hist., (6), 6, p. 168 (River Karamang, British Guiana).

3 ♂, 1 ♀, 460 m.; 1 ♂ (?), 1 ♀, 1100 m.

Eastern base of the Colombian Andes, southern Venezuela (Caura River: La Prisión, Nicare. Munduapo; Mt. Auyan-tepui), the Guianas, Brazil, Ecuador, Peru, etc.

Sporophila plumbea whiteleyana (Sharpe)

Spermophila plumbea subsp. *Spermophila whiteleyana* SHARPE, 1888, Cat. Bds. Brit. Mus., XII, p. 98 (Mt. Roraima, Venezuela).

3 ♂, 1 ♂ (?), 1 ♀, 3 (?), 460 m.

From the eastern base of the eastern Andes of Colombia through southern Venezuela (Orinoco River: Quiribana de Caicara, Altagracia. Mts. Auyan-tepui and Roraima), the Guianas, northeastern Brazil, etc.

Sporophila minuta minuta (Linné)

Loxia minuta LINNÉ, 1758, Syst. Nat., 10th Ed., 1, p. 176 (Surinam [♂]).

1 ♂, 2 ♀, 460 m.

Colombia, Venezuela (including Mts. Auyan-tepui and Roraima), Trinidad, the Guianas, northwestern Brazil, etc.

Catamenia homochroa duncani (Chubb)

Duncanula duncani CHUBB, 1921, Ann. Mag. Nat. Hist., (9), 7, p. 193 (Mt. Roraima).—CHAPMAN, 1931, Bull. Amer. Mus. Nat. Hist., LXIII, p. 119; 1939, Amer. Mus. Novit., No. 1051, p. 13 ("The Upper Zonal Birds of Mt. Auyan-tepui").

3 ♂, 1 ♂ imm., 1 ♂ (?), 1 ♀, 2200 m.

Subtropical Zone of southern Venezuela (Mts. Duida, Auyan-tepui and Roraima).

We have found no valid British Guiana records for this race. That range, given by Chubb and Hellmayr, is based on Mt. Roraima specimens.

Volatinia jacarina splendens (Vieillot)

Fringilla splendens VIEILLOT, 1817, Nouv. Dict. Hist. Nat., nouv. éd., 12, p. 173 (Cayenne).

2 ♂, 1 ♀, 2 (?), 460 m.

From Mexico southward through Pan-

ama, Colombia, Venezuela (including Mts. Auyan-tepui and Roraima), Trinidad, the Guianas, etc.

***Sicalis citrina browni* Bangs**

Sycalis browni BANGS, 1898, Proc. Biol. Soc. Wash., 12, p. 139 ("Santa Marta," Colombia [5000 ft.]).

3 ♂, 1 ♀, 1100 m.

Tropical and Subtropical Zones of Colombia, Venezuela (Caracas; Cumbre de Valencia; Mt. Duida region; Mts. Roraima and Auyan-tepui, etc.) and British Guiana.

***Arremon taciturnus taciturnus*
(Hermann)**

Tanagra taciturna HERMANN, 1783, Tabl. Aff. Anim., p. 214 (based upon "L'Oiseau Silentieux," Buffon, Hist. Nat. Ois., 4, p. 304, and Daubenton, Pl. enl., pl. 742, Cayenne).

1 ♂, 460 m.; 3 ♂, 5 ♂ (?), 3 ♀, 2 (?), 1100 m.

Southern Venezuela (Orinoco River: Maipures, Munduapo. Caura River: Suapure, Nicare, La Prisión, La Unión. Mts. Auyan-tepui and Roraima), the Guianas, northern and eastern Brazil, etc.

***Myospiza humeralis humeralis* (Bosc.)**

Tanagra humeralis BOSC., 1792, Journ. d'Hist. Nat. (Choix de Mémoires), 2, No. 17, p. 179, pl. 34, fig. 4 (Cayenne).

2 ♂, 2 ♀, 1 (?), 460 m.; 5 ♂, 6 ♀, 7 (?), 1100 m.

Eastern and southern Venezuela (savannas of the Orinoco Basin, northeast to the interior of Cumaná and south to Mts.

Auyan-tepui and Roraima), the Guianas, eastern Brazil, etc.

***Atlappetes personatus collaris* Chapman**

Atlappetes personatus collaris CHAPMAN, 1939, Amer. Mus. Novit., No. 1051, p. 13 (Mt. Auyan-tepui, Venezuela).

1 (?), 1450 m.; 3 ♂, 1 ♂ (?), 1 ♀, 1 ♀ (?), 1500–1800 m.; 3 ♂ (type), 1 ♂ (?), 1 ♀, 1 ♀ (?), 1850 m.; 2 ♂, 2 ♀, 2200 m.

Subtropical Zone of Mt. Auyan-tepui, southern Venezuela.

***Zonotrichia capensis roraimae*
(Chapman)**

Brachyspiza capensis roraimae CHAPMAN, 1929, Amer. Mus. Novit., No. 341, p. 5 (Mt. Roraima, Venezuela, 6000 ft.); 1939, Amer. Mus. Novit., No. 1051, p. 12 ("The Upper Zonal Birds of Mt. Auyan-tepui").

9 ♂, 4 ♀, 1 (?), 1100 m.; 1 ♂, 1500 m.; 1 ♂, 1500–1800 m.; 1 ♂, 1800–2000 m.; 2 ♂, 1 ♂ (?), 2 ♀ (?), 1850 m.; 5 ♂, 5 ♀, 1 ♀ (?), 3 (?), 2200 m.

Subtropical Zone of southern Venezuela (Mt. Auyan-tepui and slopes of Mt. Roraima) and British Guiana (Merumé Mts.).

***Emberizoides herbicola sphenurus*
(Vieillot)**

Fringilla macroura GMELIN, 1789, Syst. Nat., 1, pt. 2, p. 918 (based on "Long-tailed Finch," Latham, Gen. Syn. Bds., 2, (1), p. 310; Cayenne).

2 ♂, 1 ♀, 460 m.; 9 ♂, 4 ♀, 1 ♀ (?), 1 (?), 1100 m.

Tropical and Subtropical Zones of Colombia, Venezuela (including Mts. Roraima, Auyan-tepui and Duida, etc.) and the Guianas.

DISTRIBUTIONAL TABLE

The following table includes the 301 species and subspecies which were collected, as well as the 4 positive sight records [in brackets]. The six columns show the altitudes and camps where our birds were collected at Mt. Auyan-tepui, and their range as regards Mt. Roraima, the Duida Region (from San Fernando de Atabapo, up to the Orinoco, past Esmeralda, through the Cassiquiare Canal and down the Rio Negro to San Carlos near the Brazilian frontier), the middle and lower Orinoco River

(Maipures down to the Delta) and including the Caura River.

- []—indicates sight record.
- X—signifies that the race has not changed from that of Mt. Auyan-tepui.
- S—signifies that the subspecies has changed from that of Mt. Auyan-tepui.
- *—signifies Subtropical Zone form.

The figures in parentheses following the names of the species refer to the page of the annotated list.

MT. AUYAN-TEPUI BIRDS

	Mt. Auyan-tepui					
	460 meters	1100 meters	Summit (1500-2200 meters)	Mt. Roraima	Mt. Duida Region	Middle and lower Orinoco (Maipures to Delta) and Caura River
	A	B	C	D	E	F
<i>Tinamus major major</i> (455)	X	X		X		
<i>Crypturellus soui soui</i> (455)	X	X		X	X	X
<i>Crypturellus variegatus variegatus</i> (455)	X	X		X		X
<i>Colymbus dominicus</i> subsp. (?) (456)			X			
<i>Phalacrocorax olivaceus olivaceus</i> (456)	X					X
<i>Ardea cocoi</i> (456)	X	X				X
<i>Casmerodius albus egretta</i> (456)	X	X				X
<i>Agamia agami</i> (456)	X					X
<i>Tigrisoma lineatum lineatum</i> (456)	X					X
<i>Botaurus pinnatus</i> (456)	X					
<i>Euxemura galeata</i> (456)	X ¹	X				X
<i>Mesembrinibis cayennensis</i> (457)	X					X
[<i>Sarcoramphus papa</i>] (457)	X ¹					
[<i>Coragyps atratus foetens</i>] (457)		X ¹				X
<i>Cathartes aura ruficollis</i> (457)	X	X				X
[<i>Elanoides forficatus yetapa</i>] (457)		X ¹				X
<i>Accipiter pectoralis</i> (457)		X				
<i>Buteo albicaudatus colonus</i> (458)	X	X		X		X
<i>Buteo magnirostris magnirostris</i> (458)	X	X		X		X
<i>Leucopternis melanops</i> (458)		X				
<i>Micrastur ruficollis gilvicollis</i> (459)	X	X				
<i>Daptrius americanus americanus</i> (459)	X					X
<i>Milvago chimachima cordatus</i> (459)	X					X
[<i>Polyborus cheriway cheriway</i>] (459)		X ¹				X
<i>Gampsonyx swainsonii leonae</i> (459)	X					X
<i>Falco albicularis albicularis</i> (459)	X	X		X		X
<i>Odontriorchis palliatus</i> (459)	X			X	X	X
<i>Harpagus bidentatus bidentatus</i> (460)	X					
<i>Crax nigra</i> (460)	X	X		X		
<i>Penelope granti</i> (460)	X	X		X	X	
<i>Ortalis motmot motmot</i> (460)	X	X		X	X	X
<i>Odontophorus gujanensis gujanensis</i> (460)	X	X		X	S	X
<i>Psophia crepitans crepitans</i> (461)	X				X	X

¹ Sight record.

	A	B	C	D	E	F
<i>Aramides cajanea cajanea</i> (461)	X					X
<i>Porzana albicollis typhoea</i> (461)	X			X		X
<i>Laterallus viridis viridis</i> (461)	X			X		
<i>Micropygia schomburgkii schomburgkii</i> (461)	X	X		X	X	
<i>Eurypyga helias helias</i> (461)	X					X
<i>Actitis macularia</i> (461)	X					X
<i>Capella paraguayae paraguayae</i> (462)		X	X	X		X
<i>Capella undulata undulata</i> (462)		X		X		
<i>Columba rufina andersoni</i> (462)	X			X		X
<i>Columba albilinea roraimae</i> (462)		X	X	X	X	
<i>Columba speciosa</i> (463)	X			X		X
<i>Columba purpureotincta</i> (463)	X	X		X		X ¹
<i>Columbigallina minuta minuta</i> (463)	X	X		X	X	X
<i>Claravis pretiosa</i> (463)	X					X
<i>Leptotila rufaxilla rufaxilla</i> (463)	X			X		X
<i>Oreopeleia montana</i> (463)				X		X
<i>Ara chloroptera</i> (463)	X	X				X
<i>Ara manilata</i> (464)	X			X		X
<i>Ara nobilis nobilis</i> (464)	X			X		X
<i>Pyrrhura egregia</i> (464)		X		X		
<i>Nannopsittaca panychlora</i> (464)		X	X	X	X	
<i>Touit purpurata purpurata</i> (464)	X			X		S
<i>Pionites melanocephala melanocephala</i> (464)	X	X				X
<i>Pionus menstruus</i> (465)	X	X		X		X
<i>Amazona amazonica amazonica</i> (465)	X	X		X		X
<i>Piaya cayana cayana</i> (465)	X	X		X	X	X
<i>Crotophaga ani</i> (465)	X	X		X		X
<i>Neomorphus rufipennis nigrogularis</i> (465)	X				X	S
<i>Tyto alba hellmayri</i> (465)	X			X		
<i>Otus choliba crucigerus</i> (465)	X			X	XS	X
<i>Pulsatrix perspicillata perspicillata</i> (466)	X			X		X
<i>Glauclidium brasilianum oliaceum</i> (466)		X		S ^a	S ^b	S ^c
<i>Ciccaba virgata macconnelli</i> (466)		X		X		
<i>Rhinopteryx clamator clamator</i> (466)	X					X
<i>Nyctibius griseus griseus</i> (466)	X	X		X		
<i>Podager nacunda minor</i> (466)	X					X
<i>*Caprimulgus longirostris roraimae</i> (466)			X	X	X	
<i>Caprimulgus cayennensis cayennensis</i> (466)	X	X		X		X
<i>Caprimulgus nigrescens nigrescens</i> (467)	X			XS	S	X
<i>Streptoprocne zonaris albicincta</i> (467)	X	X		X		
<i>Chaetura cinereiventris guianensis</i> (467)		X		X		
<i>Chaetura rutila rutila</i> (467)	X	X				
<i>Cypseloides fumigatus</i> (468)		X				
<i>Aëronautus montivagus tatei</i> (468)		X	X ²		X	
<i>Reinarda squamata squamata</i> (468)	X				S	X
<i>Doryfera johannae guianensis</i> (469)		X		X	X	
<i>Threnetes leucurus leucurus</i> (469)	X					
<i>Phaethornis superciliosus superciliosus</i> (469)	X	X				X
<i>*Phaethornis augusti incanescens</i> (470)	X			X		S
<i>Phaethornis ruber episcopus</i> (470)	X			X		X
<i>Campylopterus largipennis</i> (470)	X	X				X
<i>*Campylopterus hyperythrus</i> (470)			X	X		
<i>Florisuga mellivora mellivora</i> (471)	X					X
<i>Agrytrina lactea zimmeri</i> n. subsp. (471)		X				
<i>Saucerotia tobaci caurensis</i> (471)	X	X		X		X
<i>Hylocharis sapphirina sapphirina</i> (472)		X		X		X
<i>Hylocharis cyanus viridiventris</i> (472)	X	X		X		X
<i>Chlorostilbon prasinus subfurcatus</i> (472)		X		X	X	
<i>Thalurania furcata fissilis</i> (472)	X	X		X	S	X
<i>*Colibri germanus</i> (472)			X	X	X	
<i>Polytmus thaumantias chrysobronchus</i> (472)	X	X		X		

¹ Maipures.² Sight record.

	A	B	C	D	E	F
* <i>Waldronia milleri</i> (473)			X		X	
<i>Polyplancta aurescens</i> (473)		X				
<i>Anthoscenus longirostris longirostris</i> (473)	X	X		X		X
<i>Calliphlox amethystina</i> (473)		X		X	X	X
<i>Lophornis ornatus</i> (473)	X			X		X
* <i>Trogonurus personatus roraimae</i> (474)		X		X	S	
<i>Trogonurus curucui curucui</i> (474)	X					
<i>Chrysogron violaceus</i> (474)	X	X		X		X
<i>Trogon strigilatus strigilatus</i> (474)	X			X		X
<i>Streptoceryle torquata torquata</i> (474)	X					X
<i>Chloroceryle amazona</i> (474)	X	X				X
<i>Chloroceryle americana americana</i> (474)	X					X
<i>Momotus momota momota</i> (474)	X	X		X		X
<i>Psilopornis albirostris albirostris</i> (474)		X		X		X
<i>Bucco capensis</i> (475)		X		X		
<i>Notharchus hyperrhynchus hyperrhynchus</i> (475)	X					
<i>Monasa niger</i> (475)	X					X
<i>Chelidoptera tenebrosa tenebrosa</i> (475)	X	X		X		X
<i>Capito auratus aurantiicinctus</i> (475)	X					X
<i>Ramphastos tucanus tucanus</i> (475)	X	X		X	S	X
<i>Ramphastos vitellinus</i> (475)	X	X				X
<i>Pteroglossus aracari atricollis</i> (475)	X			X		X
<i>Pteroglossus viridis</i> (475)	X					X
* <i>Aulacorhynchus derbianus whitelyanus</i> (475)		X		X	S	
<i>Tripsurus rubrifrons</i> (476)	X	X				X
<i>Tripsurus cruentatus</i> (476)	X	X				X
<i>Piculus flavigula flavigula</i> (476)		X			X	X
* <i>Piculus rubiginosus guianae</i> (476)		X		X	X	
* <i>Piculus rubiginosus viridissimus</i> (476)			X			
<i>Celeus jumana</i> (476)	X	X				X
<i>Celeus grammicus</i> (476)	X					X
<i>Ceophloeus lineatus lineatus</i> (477)	X	X		X		X
<i>Scapanus melanoleucos melanoleucos</i> (477)	X					X
<i>Scapanus rubricollis</i> (477)	X	X		X		X
<i>Veniliornis cassini</i> (477)	X	X		X		X
<i>Picumnus undulatus</i> (477)	X	X		X	X	X
<i>Dendrocolaptes certhia certhia</i> (477)	X	X		X	X	X
<i>Xiphorhynchus pardalotus</i> (477)	X	X		X	X	X
<i>Glyphorynchus spirurus spirurus</i> (477)	X			X	S	S
<i>Sittasomus griseicapillus azillaris</i> (477)	X	X		X		
<i>Dendrocincia fuliginosa fuliginosa</i> (478)	X	X		X	S	S
* <i>Cranioleuca demissa</i> (478)			X	X	X	
<i>Synallaxis albescent josephinae</i> (478)	X	X		X	X	S
* <i>Roraimia adusta adusta</i> (478)			X	X	S	
<i>Philydor ruficaudatus</i> (478)	X				X	
<i>Automolus infuscatus cervicalis</i> (478)	X	X			S	X
<i>Automolus rubiginosus obscurus</i> (478)	X					
* <i>Automolus roraimae roraimae</i> (479)		X	X	X	S	
<i>Automolus ochrolaemus turdinus</i> (479)	X				X	X
<i>Xenops minutus ruficaudus</i> (479)	X	X		X	X	X
<i>Sclerurus rufigularis fulvigularis</i> (479)		X			X	X
<i>Sclerurus caudatus insignis</i> (479)	X					
* <i>Lochmias nematura castanonota</i> (479)			X	X		
<i>Thamnophilus murinus murinus</i> (479)	X	X			X	X
<i>Thamnophilus punctatus punctatus</i> (480)	X			X		X
* <i>Thamnophilus insignis</i> (480)			X	X	X	
<i>Dysithamnus mentalis spodiopnotus</i> (480)		X		X	X	S
<i>Dysithamnus ardesiacus obidensis</i> (480)	X	X		X	X	X
<i>Myrmotherula haematonota pyrrhonota</i> (480)		X			X	X
<i>Myrmotherula azillaris azillaris</i> (480)	X				S	X
<i>Myrmotherula longipennis longipennis</i> (480)		X		X	X	X
<i>Myrmotherula menetriesii cinereiventris</i> (480)	X			X	S	S
<i>Herpsilochmus sticturus nigrescens</i> (480)	X	X		X	S	X
<i>Terenura spodioptila spodioptila</i> (?) (481)		X			X	X

	A	B	C	D	E	F
<i>Cercomacra cinerascens</i> (481)	X				X	X
<i>Schistocichla leucostigma saturata</i> (481)		X		X		
<i>Myrmeciza atrothorax atrothorax</i> (482)	X	X			X	X
<i>Formicarius colma colma</i> (482)	X				X	X
* <i>Chamaeza brevicauda fulvescens</i> (482)		X		X		
<i>Pithys albifrons albifrons</i> (482)	X	X		X	X	X
<i>Hylophylax naevia</i> subspecies (?) (482)		X			S(?)	S(?)
<i>Hylophylax poecilonota poecilonota</i> (482)	X	X		X	X	X
* <i>Myrmothera simplex simplex</i> (482)			X	X	S	
<i>Corythopsis torquata anthoides</i> (483)	X	X		X		S
<i>Cotinga cotinga</i> (483)	X	X				
<i>Xipholena punicea</i> (483)		X				
<i>Attila spadiceus spadiceus</i> (483)	X					X
<i>Laniocera hypopyrrha</i> (483)	X			X	X	X
<i>Rhytipterna simplex frederici</i> (483)	X	X			X	X
<i>Lipaugus cineraceus</i> (483)	X	X		X		X
<i>Tityra cayana cayana</i> (483)	X	X		X		X
<i>Perissocephalus tricolor</i> (483)		X		X		
<i>Procnias alba</i> (484)		X		X		
<i>Rupicola rupicola</i> (484)		X		X		X
<i>Ceratopipra cornuta</i> (484)		X		X	X	X
<i>Piprites chloris chlorion</i> (484)		X		X	X	
<i>Pipra serena suavissima</i> (485)		X		X	X	
<i>Pipra erythrocephala erythrocephala</i> (485)	X	X		X		X
<i>Pipra pipra pipra</i> (485)	X			X	X	X
* <i>Chloropipo uniformis uniformis</i> (485)			X	X	S	
<i>Tyrannneutes virescens</i> (485)	X					
<i>Corapipo gutturalis</i> (485)		X		X		
<i>Schiffornis turdinus olivaceus</i> (485)		X		X		X
<i>Muscivora tyrannus monachus</i> (485)	X	X		S	S	SX
<i>Tyrannus melancholicus melancholicus</i> (486)	X	X		X	X	S
<i>Legatus leucophaeus leucophaeus</i> (486)	X					X
<i>Myiodynastes maculatus difficilis</i> (486)	X	X				X
<i>Coryphocircus parvus parvus</i> (486)	X	X				
<i>Myiozetetes cayanensis cayanensis</i> (486)	X			X		X ¹ S
<i>Tyrannopsis sulphurea</i> (486)	X					X
<i>Myiarchus tyrannulus tyrannulus</i> (486)	X			X		X
<i>Myiarchus swainsoni phaeonotus</i> (486)	X	X			XS	S
<i>Myiarchus tuberculifer tuberculifer</i> (487)	X	X		X	X	X
<i>Terenotriccus erythrurus erythrurus</i> (487)	X				S	S
<i>Myiobius barbatus barbatus</i> (487)	X	X		X	X	X
* <i>Myiophobus roraimae</i> (487)				X	X	
<i>Hirundinea ferruginea ferruginea</i> (487)		X	X ²	X	X	
<i>Platyrinchus coronatus gumia</i> (488)		X		X	S	
<i>Tolmomyias flavotectus examinatus</i> (488)		X			S	S
<i>Tolmomyias poliocephalus poliocephalus</i> (488)	X	X			X	X
<i>Rhynchocyclus olivaceus guianensis</i> (488)	X	X		X	X	X
<i>Todirostrum cinereum cinereum</i> (488)	X			X		X
* <i>Euscarthmornis russatus</i> (488)			X	X		
<i>Euscarthmornis margaritaceiventris auyantepui</i> n. subsp. (489)		X				
<i>Colaptes galeatus</i> (489)	X	X				X
* <i>Mecocerculus leucophrys roraimae</i> (489)		X	X	X	X	
<i>Elaenia flavogaster flavogaster</i> (489)	X			X		X
<i>Elaenia cristata</i> (490)	X	X		X		X
<i>Elaenia chiriquensis albivertex</i> (490)	X	X		X		X
<i>Elaenia ruficeps</i> (490)		X		X		
* <i>Elaenia olivina</i> (490)			X	X	X	
<i>Elaenia gaimardii gaimardii</i> (490)	X			S		X
* <i>Elaenia dayi dayi</i> (490)			X	X	S	
<i>Phyllomyias griseiceps</i> (490)	X			X		
<i>Tyranniscus gracilipes gracilipes</i> (490)		X		X		X
<i>Tyrannulus elatus elatus</i> (490)	X			X		X

¹ Wm. Beebe's record.² Sight record.

	A	B	C	D	E	F
<i>Leptopogon amaurocephalus peruvianus</i> (491)		X		X		
<i>Pipromorpha macconnelli roraimae</i> (491)	X	X		X	X	
* <i>Oxyruncus cristatus phelpsi</i> (491)		X		S		
<i>Stelgidopteryx ruficollis cacabatus</i> (491)	X			X		S
<i>Neochelidon tibialis griseiventris</i> (491)	X					
<i>Pygochelidon cyanoleuca cyanoleuca</i> (492)		X		X	X	
<i>Hirundo rustica erythrogaster</i> (492)	X			X		X
<i>Iridoprocne albiventer</i> (492)	X					X
<i>Cyanocorax cayanus</i> (492)	X	X				X
<i>Thryothorus coraya ridgwayi</i> (492)		X		X		
<i>Troglodytes musculus clarus</i> (492)	X			X		X
* <i>Troglodytes rufulus rufulus</i> (492)			X	X	S	
<i>Henicorhina leucosticta leucosticta</i> (493)	X	X		X		X
<i>Microcerculus bambla bambla</i> (493)		X			S	S
<i>Mimus gilvus melanopterus</i> (493)		X		X		X
<i>Turdus albicollis phaeopygus</i> (493)		X		X		SX
* <i>Turdus ignobilis murinus</i> (493)		X	X	X	XS	
<i>Turdus leucomelas ephippialis</i> (493)	X			X		X
<i>Turdus olivater roraimae</i> (494)		X	X	X	S	
* <i>Platycichla flavipes polionota</i> (494)		X		X		
* <i>Cichlopsis leucogenys gularis</i> (494)		X		X		
<i>Hylocichla minima aliciae</i> (494)	X	X				X
<i>Ramphocaenus melanurus albiventer</i> (494)	X				S	S
<i>Anthus lutescens lutescens</i> (495)	X	X		X		X
<i>Vireo virescens virescens</i> (495)	X	X		X		
* <i>Hylophilus sclateri</i> (495)		X	X	X	X	
<i>Hylophilus muscicapinus muscicapinus</i> (495)	X	X			X	X
<i>Hylophilus ochraceiceps ferrugineifrons</i> (495)		X		XS	X	X
<i>Smaragdolanus leucotis leucotis</i> (495)	X	X		X		S
<i>Cyclarhis gujanensis gujanensis</i> (495)		X				X
* <i>Diglossa major gilliardi</i> (495)			X	S		
<i>Chlorophanes spiza spiza</i> (496)	X	X		X		X
<i>Cyanerpes cyaneus cyaneus</i> (496)	X	X		X		X
<i>Cyanerpes caeruleus caeruleus</i> (496)		X		X	S	X
<i>Dacnis lineata</i> (496)		X		X		
<i>Dacnis cayana cayana</i> (496)	X	X		X		X
* <i>Coereba flaveola roraimae</i> (496)	X	X	X	X	X	SS
<i>Dendroica aestiva aestiva</i> (496)	X					X
<i>Dendroica breviunguis</i> (496)	X	X		X	X	X
<i>Seiurus noveboracensis noveboracensis</i> (497)	X			X		X
<i>Setophaga ruticilla</i> (497)	X	X		X	X	X
* <i>Myioborus bruniceps castaneocapillus</i> (497)			X	X	S	
* <i>Basileuterus bivittatus roraimae</i> (497)		X		X	X	
<i>Basileuterus rivularis mesoleucus</i> (497)	X	X		X		X
<i>Xanthornus viridis viridis</i> (497)	X	X		X		X
* <i>Macroagelaius subalaris imthurni</i> (497)		X	X	X	X	
<i>Icterus chryscephalus</i> (497)	X			X		X
<i>Sturnella magna monticola</i> (498)	X	X		X		S
* <i>Chlorophonia cyanea roraimae</i> (498)		X		X	X	
* <i>Tanagra xanthogaster brevirostris</i> (498)		X			X	
<i>Tanagra violacea violacea</i> (498)	X	X		X		X
<i>Tanagra rufiventris rufiventris</i> (498)	X					X
<i>Tanagra cayennensis</i> (498)	X	X		X		
<i>Tanagra plumbea</i> (498)	X			X		
<i>Tanagrella velia iridina</i> (498)		X		X		X
<i>Tangara chilensis coelicolor</i> (499)		X		X		X
<i>Tangara punctata punctata</i> (499)	X	X		X	X	
* <i>Tangara chrysophrys guttata</i> (499)		X		X	X	
<i>Tangara xanthogastra</i> (499)	X	X		X		X
<i>Tangara nigro-cincta nigro-cincta</i> (499)	X	X		X		X
<i>Tangara gyrola gyrola</i> (499)	X	X		X		
* <i>Tangara cyanoptera whitelyi</i> (499)			X	X	X	
<i>Thraupis episcopus episcopus</i> (500)	X	X		X		S
<i>Thraupis palmarum melanoptera</i> (500)	X	X		X		X

	A	B	C	D	E	F
<i>Ramphocelus carbo carbo</i> (500)	X			X		XS
<i>Piranga rubra rubra</i> (500)		X		X		
* <i>Piranga flava haemalea</i> (500)		X		X	X	S
<i>Lanio fulvus</i> (500)		X				
<i>Tachyphonus cristatus cristatus</i> (500)	X	X		X		X
<i>Tachyphonus surinamus surinamus</i> (500)		X				X
<i>Tachyphonus phoenicius</i> (501)		X	X	X	X	
<i>Schistochlamys melanopis melanopis</i> (501)	X	X		X		X
<i>Saltator maximus maximus</i> (501)	X			X		X
<i>Pitylus grossus grossus</i> (501)	X					X
<i>Cyanocompsa cyanooides rothschildii</i> (501)	X	X				X
<i>Sporophila plumbea whitleyana</i> (501)	X			X		X
<i>Sporophila minuta minuta</i> (501)	X			X		X
* <i>Catamenia homochroa duncani</i>			X	X	X	
<i>Volatinia jacarina splendens</i> (501)	X			X		X
<i>Sicalis citrina browni</i> (502)		X		X	X	
<i>Arremon taciturnus taciturnus</i> (502)	X	X		X		X
<i>Myospiza humeralis humeralis</i> (502)	X	X		X		X
* <i>Atlapetes personatus collaris</i> (502)			X	S ^a	S ^b	
* <i>Zonotrichia capensis roraimae</i> (502)		X	X	XS		S
<i>Emberizoïdes herbicola sphenurus</i> (502)	X	X		X	XS	X

