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THE UPPER ZONAL BIRDS OF MT. AUYAN-TEPUI, VENEZUELA

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The American Museum's successful exploration of Mt. Duida in southwestern Venezuela and the discovery that its bird-life is closely related to that of Mt. Roraima in southeastern Venezuela gave rise to the theory that both mountains formed part of a once vast tableland occupying the greater part of southern Venezuela. To what extent, we now asked, will this theory be supported or disproved by a study of the birds of the still ornithologically unknown area lying between the two outposts from which we already had specimens. Plans were therefore formed for a biological exploration of this region, but they did not mature and the project was shelved in anticipation of a more favorable period.

At the end of six years Venezuela seemed farther away than ever when, in June 1937, it was unexpectedly brought within our reach. I quote from "Natural History" for December 1937:

"Meanwhile, the growth of Venezuela's oil industry and the development of the airplane as a dependable transport over unknown regions greatly increased our knowledge of before unvisited parts of South America. That portion of Venezuela in which we were interested could now be reached from the Orinoco in two hours instead of two months, if at all. Hence it happened that a prospector by air in this region discovered an uncharted mountain estimated to be twenty miles long and not less than 8000 feet high.

"Knowledge of this discovery reached William H. Phelps of Caracas. Long a student of birds and a friend of the Museum he realized its significance and wrote us a letter such as curators may dream of but few have ever received. In brief, he described the general character of the new-

found mountain in sufficient detail to indicate that it was a large scale Roraima and added an offer to sponsor a Museum expedition to explore it provided due permission was given by the Venezuela Government."

Needless to say this generous offer was promptly accepted, and in the latter part of the succeeding November a fully manned and equipped expedition assembled at Ciudad Bolívar. In addition to Mr. Phelps and his son William H., Junior, it included as representatives of the Museum, Dr. G. H. H. Tate,¹ leader of our Roraima and Duida expeditions, with his assistant in mammals, Mr. James A. Dillon, and, for the Bird Department, Mr. E. T. Gilliard and Mr. W. F. Coultas.

Practically inaccessible by land, camp on Mt. Auyan-tepui was reached by plane from Ciudad Bolívar in 90 minutes! A landing was made at 450 meters on November 30 and two days later base camp was established at 1100 meters. Later the mountain was ascended and camps made at 1850 and 2200 meters. March 3 a return was made to the 450-meter level and on March 15 the expedition flew to Ciudad Bolívar on the first stage of the homeward journey.

The present report treats only of the upper zonal species and is designed to supplement my paper on the "Upper Zonal Bird-Life of Mts. Roraima and Duida."² A report on the tropical birds secured is in course of preparation by Mr. E. T. Gilliard who, as a member of the expedition, familiar with all its stations, is qualified to describe local conditions and

¹ See Dr. Tate's amply illustrated, descriptive article on the expedition and the country visited, "Natural History," September 1933; also his more formal treatment of the results obtained in the "Geographical Review," XXVIII, July 1938, pp. 452-474.

² 1931, Bull. Amer. Mus. Nat. Hist., LXIII, pp. 1-135.

discuss their influence on the distribution of birds. The accompanying diagram shows the relative positions of the various collecting stations. It will be observed that the 1850-m. camp, although at a lower elevation than the 2200-m. camp, is farther within the summit of the mountain.

Mr. Gilliard¹ describes the surroundings of these two stations as follows:

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 accu-

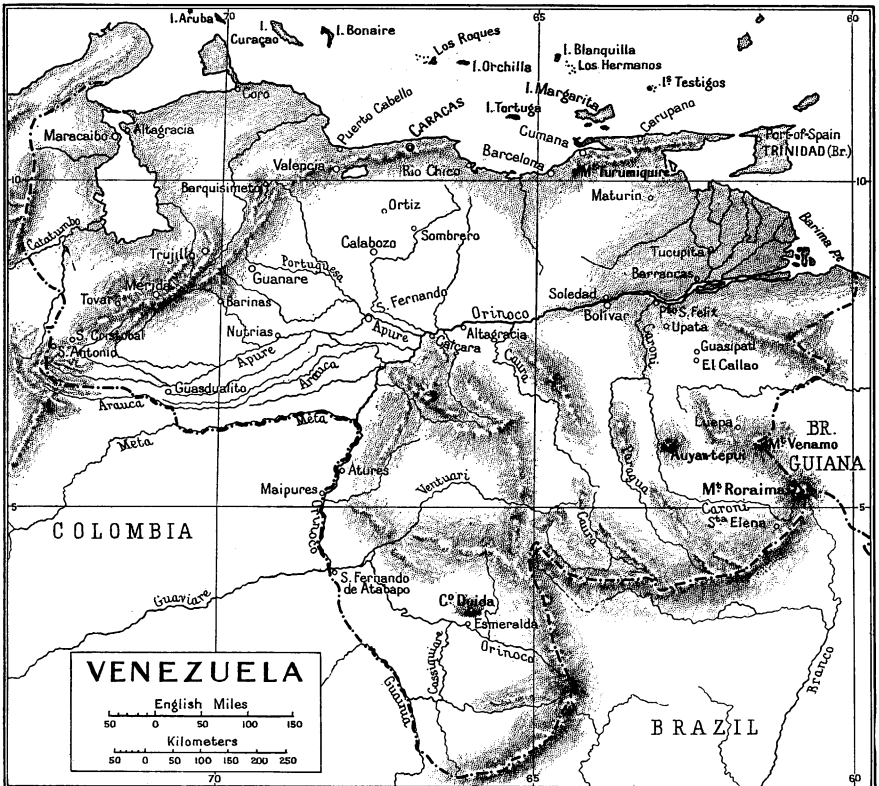


Fig. 1. Map showing location of Mts. Auyan-tepui, Roraima and Duida.

"The 2200-meter camp (= 2226 meters) 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 southern cliffs which overlook the base camp. Like practically all of the plateau which we were able to inspect, the place was mostly made

mulated 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 were more arid joint cracks which literally spider-webbed the region. *Bonnetia crassa*, *Crepinella*,

¹ In this connection particular attention is called to that part of Mr. Tate's "Geographical Review" paper relating to the flora of Mt. Auyan-tepui, pp. 467-471.

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 likened to that which exists between a patch of abandoned hedges and a "stand" of big oak trees.

"The second camp was located only 448 meters below the first plateau collecting

ters 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

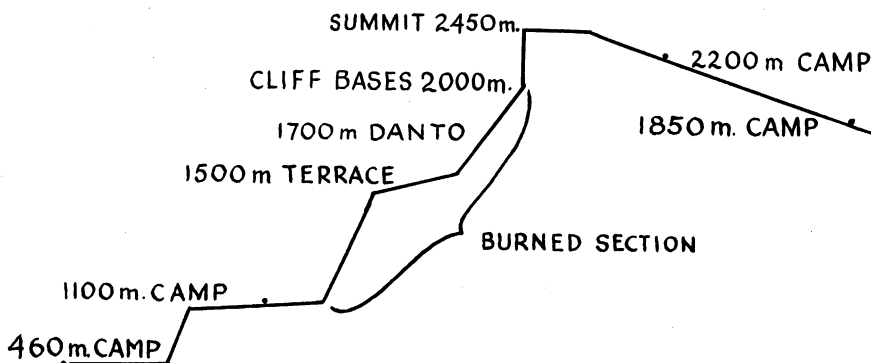


Fig. 2. Diagram showing relative position of collecting stations.

station. It was situated about four miles from the southern cliffs which overlook the base camp and was placed at a point almost as near the center of the tableland as we succeeded in reaching. 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 not a single tree of *Bonnetia roraimae*, which comprised ninety-five percent of the growth in the fifty-acre forest only 448 me-

ters 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

"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 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 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 magnificent tropical rain forest standing on the 1100-meter plain and the few patches of stunted forest on the 2200-meter plateau were left unmarred by the conflagration but in the intervening area, the talus, practically every living thing above the surface of the ground was burned to death. For example, the charred bones of a large mammal, perhaps a deer, were found at the 2000-meter base of the Sanjon cliffs at a point where no doubt vast numbers of talus-dwelling animals perished."

Compare this description with Tate's photographs in my Roraima-Duida paper of the forests at Rondon Camp (7000 ft.) and on the plateau of Duida (6500 ft.) and it seems evident that Auyan-tepui offers a less favorable habitat for the development of upper zonal life than is found on the other two mountains. It is not surprising, therefore, that of Subtropical and Temperate birds Roraima possesses 60 species, Duida, 52, while Auyan-tepui has thus far yielded only 40. However, an analysis of the affinities of these 40 species gives us, as far as birds are concerned, a clear concept of the place Auyan-tepui holds in the Roraima-Duida faunal complex.

A local analysis of altitudinal distribution on Auyan-tepui is first presented. The first table reveals the limited Subtropical element at an elevation of 1100 m. The second includes the species that range throughout the Subtropical Zone. The remaining three tables, combined, show the further development, with increasing altitude, in Subtropical bird-life together with a slight trace of Temperate Zone life. Considered separately, we have an expression of the pronounced differences in

the 2200 and 1850-m. stations as they affect the distribution of birds.

LOCAL DISTRIBUTION OF UPPER ZONAL SPECIES

1.—Found only at 1100 m.

*Glaucidium brasilianum olivaceum*¹
*Aëronautus montivagus tatei*²
Trogonurus personatus roraimae
Aulacorhynchus derbianus whitelyanus
Piculus rubiginosus guianae
Chamaeza brevicauda fulvescens
Oxyruncus cristatus phelpsi
Pygochelidon cyanoleuca
Cichlopsis gularis
Turdus ignobilis murinus
Platycichla flavipes polionota

2.—Found from 1100 to 2200 m.

Columba albilinea roraimae
Pheugopedius coraya ridgwayi
Coereba guianensis guianae
Zenotrichia capensis roraimae

3.—Upper zonal birds found at both 1850 and 2200 m.

Campylopterus hyperythrus
Colibri germanus
Waldronia milleri
*Piculus rubiginosus viridissimus*¹
Thamnophilus insignis
Automolus roraimae roraimae
Mecocerculus leucophrys roraimae
Elaenia dayi dayi
Troglodytes rufulus
Turdus roraimae roraimae
*Atlapetes personatus collaris*¹
*Diglossa major gilliardi*¹

4.—Upper zonal birds found only at 2200 m.

Systellura ruficervix roraimae
Idiospiza homochroa duncani

5.—Upper zonal birds found only at 1850 m.

Colymbus dominicus
Cranioleuca demissa
Roraimia adusta
Lochmias naematura castanonota
Euscarthmornis russatus
Elaenia olivina
Chloropipo uniformis uniformis
Pachysylvia sclateri
Tangara whiteleyi
Tachyphonus phoeniceus
Macroagelaius subalaris imthurni

¹ Described beyond.

² Doubtless upper zone also.

The differences exhibited by these lists in part are occasioned by the environmental conditions above described but in some instances doubtless represent also actual variation in the altitudinal range of the species named. *Diglossa major* and *Idiospiza homochroa*, for example, are always found at the higher altitudes and may represent the remains of a Temperate Zone. *Piculus rubiginosus viridissimus*, at 1850 and 2000 meters, is a well-differentiated race of *Piculus rubiginosus guianae* at 1100 m. The ranges of the two birds may meet somewhere between these altitudes but the extremes exert sufficient climatic control to segregate them. Our series of 17 specimens shows no intergrades. Both doubtless have essentially similar habits, but in other cases the differences in distribution shown by our lists may be due to habitat requirements or to the exigencies of collecting.

We proceed now to an analysis of general distribution with the following results:

GENERAL DISTRIBUTION OF UPPER ZONAL BIRDS

Common to all three mountains as the same or representative forms.....	26.
Common to Auyan-tepui and Roraima.....	11.
Common to Auyan-tepui and Duida.....	3.
Species restricted to Auyan-tepui.....	None.
Subspecies restricted to Auyan-tepui.....	4.

The fact that slightly over three-fifths of Auyan-tepui zonal birds are common to all three mountains at once shows the close faunal affinity of these widely separated areas. Eleven of these 26 birds have developed into races confined to one mountain or the other, but always their specific identity with their representatives is clear.

Proceeding, we see, as might be expected, that Auyan-tepui is faunally nearer to Roraima than to Duida, the relative relationship being represented by the figures eleven and three.

No species, and but four subspecies, were found restricted to Auyan-tepui. They represent both Roraima and Duida forms and the fact that they have developed on Auyan-tepui is evidence that there has been no recent interchange of life between the three mountains. Duida is too distant

to render such an interchange probable, but it is conceivable that there might be an active faunal connection between Auyan-tepui and Roraima, distant only 150 miles. The occurrence on both, however, of forms so closely related that they would readily interbreed if brought together, is evidence of their biologically effective separation.

Diglossa major is a case in point. This species, hitherto known only from Roraima, is one of the most distinct species inhabiting that mountain. Its discovery by the Phelps Expedition on Auyan-tepui emphasizes the close faunal relations of the two mountains that constitute its known range while the slight but constant characters that separate the form of one mountain from that of the other emphasizes their faunal differences.

The fact that the species is known only from these two races indicates either that one has descended from the other or that both have their origin in a common ancestor. Such an ancestor, we may imagine, inhabited the area which, we believe, once connected the mountains themselves. With their subsequent segregation the birds surviving on each received the isolation essential to the development of their distinctive characters.

Atlaptes personatus collaris is a very slightly differentiated form of the Roraima *A. p. personatus*. But in this case we find a related, but to my mind specifically distinct, member of this group on Duida.

Oxyruncus presents, in some respects, a somewhat similar case to *Diglossa*. A race differing slightly from the Roraima form was discovered on Auyan-tepui and at the time of its collection was known only from that mountain. It has since, however, been found by Mr. E. R. Blake, of the Field Museum, on the British Guiana-Brazil boundary where, if either, we should have expected to find the Roraima rather than the Auyan-tepui race. This species, it should be observed, is a bird of the lower rather than upper Subtropical Zone. Note that on Auyan-tepui all our nine specimens were taken at 1100 meters. Its range requirements are more easily found than

those of *Diglossa major*, for example, and we find it is distributed at widely separated stations from Costa Rica to Paraguay.¹

Glaucidium brasilianum olivaceum, the fourth of the distinctive Auyan-tepui races, apparently represents the strongly marked *G. b. duidae* rather than *G. b. brasilianum* of the tropics. In other words, its relations are with the race of its own zone, rather than with those of the Tropical Zone immediately below it. Possibly other forms of this species occupy subtropical areas between the two mountains which constitute its known range.

Finally, we conclude that as far as the distribution and relationships of its zonal birds are concerned the avifauna of Auyan-tepui fully confirms our expressed belief that in the region between Roraima and Duida we should find mountains whose upper zonal birds would show them to be parts of the elevated area of which we assume Roraima and Duida formed a part.

DESCRIBED AS NEW IN THIS PAPER

Glaucidium brasilianum olivaceum
Piculus rubiginosus viridissimus
Roraima adusta duidae
Automolus roraimae duidae
Diglossa major gilliardi
Zonotrichia capensis venezuelae
Atlapetes personatus collaris

COLYMBIDAE

GREBES

Colymbus dominicus subspecies?

Mt. Auyan-tepui, 1850 m., 1 ♂, Jan. 23, 1 ♀, Jan. 11.

Assuming that this grebe is resident in Mt. Auyan-tepui's upper life-zone, both latitude and altitude of this locality would lead one to expect specimens of it to be intermediate between the northern² and southern³ continental forms. The Auyan-tepui birds are notably darker than other specimens in our large series of the species

and the male has a number of concealed white feathers in the back of the crown. But the significance, if any, of these characters cannot be determined from two specimens. They measure: male, wing (molted), exposed culmen, 22, depth at nostril, 7 mm.; female, wing 95, exposed culmen, 18, depth at nostril, 6.5 mm.

This species doubtless occurs in the Tropical Zone of Venezuela and cannot therefore be considered distinctively upper zonal.

COLUMBIDAE

PIGEONS AND DOVES

Columba albilinea roraimae Chapman

Columba albilinea roraimae CHAPMAN, 1931, Bull. Amer. Mus. Nat. Hist., LXIII, p. 63 (Mts. Roraima and Duida).

Mt. Auyan-tepui, 2100 m., 1.

Typical.

BUBONIDAE

OWLS

Glaucidium brasilianum olivaceum, new subspecies

SUBSPECIFIC CHARACTERS (brown phase).—Resembling *Glaucidium brasilianum duidae* Chapman, but averaging smaller, the upper parts darker, more olivaceous, the white tail-markings more ovate, the markings of the under parts constantly darker, more olivaceous.

TYPE.—No. 305,637, Amer. Mus. Nat. Hist.; ♂ ad.; Mt. Auyan-tepui, 1100 m.; Jan. 22, 1938; William H. Phelps.

Mt. Auyan-tepui, 1100 m., 5 ♂, brown phase, 1 ♂, rufous phase.

Measurements

	SEX	WING	TAIL
Auyan-tepui	5 ♂	93–98 (95 mm.)	53–57 (56 mm.)
Duida	4 ♂	95–101 (98 mm.)	55–62 (59 mm.)

This very distinct zonal form of *Glaucidium brasilianum* has been known hitherto only from the upper life-zone of Mt. Duida. For the second time, therefore, we find a Duidan zonal form on Auyan-tepui but not on Roraima (cf. *Waldronia milleri*).

For a list of specimens examined and a discussion of the characters and relationships of this zonal representative of *brasilianum*, I refer to my description of *duidae* (Amer. Mus. Novit., No. 380, 1929, p. 8).

¹ See "The Riddle of *Ozyruncus*," Amer. Mus. Novit., No. 1047, 1939, pp. 1–4.

² *Colymbus dominicus brachypterus* Chapman, 1899, Bull. Amer. Mus. Nat. Hist., XII, p. 256 (Lomita, lower Rio Grande, Texas).

³ *Colymbus dominicus brachyrhynchus*, ibid., p. 255 (Chapada, Matto Grosso, Brazil). Concerning the applicability of the name *speciosus* (Arribalsaga) to this southern form see Wetmore, 1926, Bull. 133, U. S. Nat. Mus., p. 43.

One of our six specimens from Auyan-tepui represents the first example of the rufous phase of this *duidae-olivaceum* group that I have seen. In general coloration it is not unlike some specimens of the brown phase of *b. brasiliannum*, for example, a male with white-spotted tail from Savana Grande, Trinidad, but the tail is barred with rufous as in the rufous phase of *b. brasiliannum*.

CAPRIMULGIDAE

GOATSUCKERS

Systellura ruficervix roraimae Chapman

Systellura ruficervix roraimae CHAPMAN, 1931, Bull. Amer. Mus. Nat. Hist., LXIII, p. 68 (Roraima and Duida).

Auyan-tepui, 2200 m., 1 ♂.
Typical.

CYPSELIDAE

SWIFTS

Aëronautes montivagus tatei (Chapman)

Aëronautes montivagus tatei CHAPMAN, 1931, Bull. Amer. Mus. Nat. Hist., LXIII, p. 68 (Mt. Duida, 7100 ft., 1).

Mt. Auyan-tepui, 1100 m., 2 ♂.

These birds are essentially similar to the type. In Venezuela this mountain-inhabiting species has hitherto been known only from the summit of Duida and the higher altitudes of the coastal Andes. Its occurrence on Auyan-tepui therefore extends its known range while the altitude at which our specimens were taken is considerably lower than any at which it has been previously collected.

TROCHILIDAE

HUMMINGBIRDS

Campylopterus hyperythrus Cabanis

Campylopterus hyperythrus, CHAPMAN, 1931, Bull. Amer. Mus. Nat. Hist., LXIII, p. 71 (Mt. Roraima).

Mt. Auyan-tepui, 1850 m., 1 ♂, 2 ♀; 2200 m., 2 ♂, 1 (?).

These specimens agree with a series from Mt. Roraima which, heretofore, has constituted the known range of this species. In this case, therefore, Auyan-tepui's faunal relationships are with Roraima, whereas, with *Waldronia*, they are with Duida.

Colibri germanus (Salvin and Godman)

Colibri germanus, CHAPMAN, 1931, Bull. Amer. Mus. Nat. Hist., LXIII, p. 74 (Roraima, Duida).

Mt. Auyan-tepui, 1850 m., 1 ♂; 2400 m., 1 (?).

Agree with a series from Roraima and Duida. Representing *C. iolotus*.

Waldronia milleri Chapman

Waldronia milleri CHAPMAN, 1931, Bull. Amer. Mus. Nat. Hist., LXIII, p. 76 (Mt. Duida).

Mt. Auyan-tepui, 1850 m., 2 ♀; 2200 m., 6 ♂, 1 (?).

The discovery of this species on Auyan-tepui extends its known range from Duida. It is noteworthy that in this instance the faunal affinities of Auyan-tepui are with Duida rather than with Roraima.

TROGONIDAE

TROGONS

Trogonurus personatus roraimae Chapman

Trogonurus personatus roraimae CHAPMAN, 1931, Bull. Amer. Mus. Nat. Hist., LXIII, p. 77 (Roraima).

Mt. Auyan-tepui, 1100 m., 1 ♂, 1 ♀.

The male agrees with the type of *roraimae* but has the lower parts more brilliantly colored. It would require a series to determine whether this difference is individual or due to slight fading in the coloration of the type.

RAMPHASTIDAE

TOUCANS

Aulacorhynchus derbianus whitelyanus (Salvin and Godman)

Aulacorhynchus derbianus whitelyanus, CHAPMAN, 1931, Bull. Amer. Mus. Nat. Hist., LXIII, p. 79 (Roraima).

Mt. Auyan-tepui, 1100 m., 1 ♂, 1 ♀.

Agree with Roraima specimens.

PICIDAE

WOODPECKERS

Piculus rubiginosus guianae (Hellmayr)

Chloronerpes rubiginosus guianae, CHAPMAN, 1931, Bull. Amer. Mus. Nat. Hist., LXIII, p. 81 (Roraima, Duida).

Mt. Auyan-tepui, 1100 m., 3 ♂, 8 ♀.

These specimens are essentially topo-

typical of Hellmayr's *guianae*¹ described from an altitude of 2700 ft., on the Yuruani River west of Roraima. The status of this race is discussed in my paper above referred to. In view of the apparent stability of this bird from the Guiana border to Duida it is unexpected to find that in the upper life-zone of Auyan-tepui it should have developed into a strongly differentiated form which I describe as

***Piculus rubiginosus viridissimus*, new subspecies**

SUBSPECIFIC CHARACTERS.—Resembling *Piculus rubiginosus guianae* (Hellmayr), but upper parts, including wings, externally, and their coverts much greener, between warbler green and citrine, rather than orange-citrine; yellow of the under parts, including wing linings, paler, the black markings averaging blacker. 2 ♂, wing, 113, 118; tail, 65, 66 mm.; 4 ♀, wing, 115–119; tail, 67–71 mm.

TYPE.—No. 323,500, Amer. Mus. Nat. Hist.; ♂ ad.; Mt. Auyan-tepui plateau, 2200 m.; Dec. 18, 1937; E. T. Gilliard.

Mt. Auyan-tepui, 1850 m., 4 ♀; 2200 m., 2 ♂.

This well-marked race is apparently restricted to the upper life-zone of Mt. Auyan-tepui where it obviously represents *Piculus rubiginosus guianae* of the adjoining zone.

In my Roraima–Duida paper I have presented measurements of specimens of this species from Venezuela, Trinidad and Tobago and commented on their characters. I review them briefly here:

The race from the Mérida region, *P. r. meridensis* (Ridgway), is definitely distinguished from the other Venezuelan forms by its larger size (4 ♂, wing, 120–122; tail, 71–74 mm.; 3 ♀, wing, 122–125; tail, 69–73 mm.), frequent red wash on the back, increased amount of red on the nape; under parts generally yellower with the bars greener.

The Valencia to Caracas form, *P. r. rubiginosus*, is smaller than *meridensis* (wing, 113–119; tail, 67–69 mm.), is darker, less yellow below and has the throat-patch smaller.

Specimens from northeast Venezuela are smaller than true *rubiginosus*, have the under parts less yellow, the bars on the

breast darker and broader and thus approach *P. r. trinitatis* (Ridgway) to which, for the present, I refer them.

It may be added that the Roraima, Auyan-tepui, Duida birds may be distinguished from all other Venezuelan races chiefly by having the throat black, generally white-spotted, instead of whitish or yellowish, generally black-streaked.

FORMICARIIDAE

ANTBIRDS

***Thamnophilus insignis* Salvin and Godman**

Thamnophilus insignis, CHAPMAN, 1931, Bull. Amer. Mus. Nat. Hist., LXIII, p. 84 (Roraima and Duida).

Auyan-tepui, 1850 m., 1 ♂; 2200 m., 2 ♂, 1 ♀.

These specimens agree with Roraima birds in size and are slightly smaller than those from Duida. All are alike in color.

Three males, wing, 74–75; tail, 66–68 mm.

***Chamaeza brevicauda fulvescens* Salvin and Godman**

Chamaeza brevicauda fulvescens, CHAPMAN, 1931, Bull. Amer. Mus. Nat. Hist., LXIII, p. 86 (Merumé Mts.)

Mt. Auyan-tepui, 1100 m., 2.

These two birds are more olivaceous above, are more definitely marked with black below than the single Whitely topotype from the Merumé mountains, but in default of more satisfactory material I refer them to that race.

FURNARIIDAE

OVENBIRDS, ETC.

***Cranioleuca demissa* (Salvin and Godman)**

Cranioleuca demissa, CHAPMAN, 1931, Bull. Amer. Mus. Nat. Hist., LXIII, p. 88 (Roraima and Duida).

Mt. Auyan-tepui, 1850 m., 4 ads.

Agree with Roraima and Duida specimens.

***Roraimia adusta adusta* (Salvin and Godman)**

Roraimia adusta, CHAPMAN, 1931, Bull. Amer. Mus. Nat. Hist., LXIII, p. 93 (Roraima only).

¹ Hellmayr, Verh. Orn. Ges. Bayern, XIII, 3, p. 314.

Mt. Auyan-tepui, 1850 m., 1 ad. ♂, 1 ad. ♀ (Jan. 22).

Taken two months later than our 6 Roraima specimens, these two birds from Auyan-tepui agree with them closely. They are obviously fully adult and show therefore that the differences between them and Duida birds, to which I have called attention (*l. c.*, page 93), are clearly racial and not due either to age or season. I have therefore no longer any hesitation in describing the Duida bird as a new form under the name

Roraimia adusta duidae, new subspecies

SUBSPECIFIC CHARACTERS.—Similar to *Roraimia adusta adusta* (Salvin and Godman) but somewhat brighter above; the post-ocular stripe and nuchal area chestnut rather than bay, and more extensive; in some specimens the supraloral stripe reaches forward and extends from the nuchal patch over the eye to the base of the bill.

TYPE.—No. 271,140, Amer. Mus. Nat. Hist.; ♂ ad.; alt. 5000 ft., Mt. Duida, Venezuela; Jan. 13, 1929; Olalla Bros.; Tyler-Duida Expedition.

SPECIMENS EXAMINED

Roraimia adusta adusta.—Roraima, 6; Auyan-tepui, 2.

Roraimia adusta duidae.—Duida, 22.

Automolus roraimae roraimae Hellmayr

Automolus roraimae, CHAPMAN, 1931, Bull. Amer. Mus. Nat. Hist., LXIII, p. 93 (Roraima only).

Mt. Auyan-tepui, 1850 m., 2; 2200 m., 6.

These eight specimens agree with two topotypes from Roraima and, in connection with them, show conclusively that the Duida bird, which for lack of adequate material I have heretofore referred to true *roraimae*, is quite distinct. I therefore describe it here as:

Automolus roraimae duidae, new subspecies

SUBSPECIFIC CHARACTERS.—Similar to *Automolus roraimae roraimae* Hellmayr but more tawny above, especially on the crown; the lower parts, posterior to the throat, particularly the abdominal region, much brighter, buckthorn brown rather than Dresden brown. 3 ♂, wing, 83–84; tail, 75–75. 3 ♀, wing, 80–82; tail, 70–73 mm.

TYPE.—No. 271,083, Amer. Mus. Nat. Hist.; ♂; Mt. Duida, Venezuela, alt. 4200 ft.; Feb. 24, 1929; Olalla Bros.; Tyler-Duida Expedition.

SPECIMENS EXAMINED

Automolus roraimae roraimae.—Roraima, 2; Auyan-tepui, 8.

Automolus roraimae duidae.—Duida, 19.

Lochmias nematura castanonota Chubb

Lochmias nematura castanonota CHUBB, 1918, Bull. Brit. Orn. Cl., XXXVIII, p. 87 (Kukenam Mt., 5000 ft., Venezuela).

Auyan-tepui, 1850 m., 3 ♂, 1 ♀.

This form has heretofore been known only from the type. Our three specimens are very near an excellent series of *Lochmias nematura* from southeastern Brazil. The upper parts, indeed, are essentially alike in both series but the Venezuela form has the blackish margins to the feathers of the under parts slightly more developed, particularly on the chin, while the superciliary is less pronounced. In general coloration *castanonota* is therefore between *nematura* and *obscurata*. The latter form, however, lacks the superciliary line and in this respect agrees with *sororia*, the other Andean form.

Since the above was written, Mr. W. H. Phelps has secured a specimen of this species, collected by A. S. Pincus, at 7400 feet on Roraima, which we may regard as essentially topotypical of Chubb's type from Mt. Kukenam. It has the crown very slightly darker than the Auyan-tepui birds but in other respects agrees with them and thus confirms our identification.

TYRANNIDAE

FLYCATCHERS

Mecocerculus leucophrys roraimae
Hellmayr

Mecocerculus leucophrys roraimae, CHAPMAN, 1931, Bull. Amer. Mus. Nat. Hist., LXIII, p. 94 (Mts. Roraima and Duida).

Mt. Auyan-tepui, 1850 m., 2; 2200 m., 8.

These birds agree with series from Roraima and Duida.

Euscarthmornis russatus (Salvin and Godman)

Euscarthmornis russatus, CHAPMAN, 1931, Bull. Amer. Mus. Nat. Hist., LXIII, p. 96 (Mt. Roraima).

Mt. Auyan-tepui, 1850 m., 4.

Agrees with a small series from Roraima.

Elaenia olivina Salvin and Godman

Elaenia olivina, CHAPMAN, 1931, Bull. Amer. Mus. Nat. Hist., LXIII, p. 97 (Roraima and Duida).

Mt. Auyan-tepui, 1850 m., 1 ♂.

The extremes in a series of 6 specimens from Roraima vary below from greenish to yellowish. The Auyan-tepui bird is nearer the latter. Two Duida specimens are intermediate. The wide variation presented by the series is apparently to be attributed to sex and season.

Elaenia dayi dayi Chapman

Elaenia dayi, CHAPMAN, 1931, Bull. Amer. Mus. Nat. Hist., LXIII, p. 97 (Roraima).

Auyan-tepui, 1850 m., 4; 2200 m., 5.

These specimens, in connection with a specimen from the Phelps Collection recently taken at 7400 feet on Roraima by A. S. Pincus, have given us a somewhat new conception of the color of *dayi*. The type, and heretofore only known specimen of that form, proves to be slightly discolored and distorted in make-up. The Pincus specimen, however, is obviously normal and agrees closely with the Auyan-tepui series. Compared with these ten specimens the type of *dayi* is slightly darker above, and materially darker below, a twist in the neck of the skin giving the false impression of a dark breast band, while in reality the breast and sides are uniformly grayish olive. These "corrections" in the characters of *dayi* in part bridge the differences between it and *tyleri* of Duida, bringing the two so near together that they obviously should be ranked as racially, rather than specifically, distinct. The Duida bird, however, is easily distinguishable by its paler, more yellowish lower parts and slightly more olivaceous upper parts. The measurements given for the type of *dayi*, particularly the longer tail, are confirmed by these additional specimens. The Duida bird is larger than *dayi*.

OXYRUNCIDAE**SHARPBILLS****Oxyruncus cristatus phelpsi** Chapman

Oxyruncus cristatus phelpsi CHAPMAN, 1939, Amer. Mus. Novit. No. 1047, p. 1.

Mt. Auyan-tepui, 1100 m., 7 ♂, 2 ♀.

Closely related to the Roraima form and collected on the British Guiana-Brazil boundary by Mr. E. R. Blake.

The distribution and relationships of the six known forms of *Oxyruncus* are discussed in the paper above mentioned.

PIPRIDAE**MANAKINS****Chloropipo uniformis uniformis** Salvin and Godman

Chloropipo uniformis uniformis, CHAPMAN, 1931, Bull. Amer. Mus. Nat. Hist., LXIII, p. 102 (Roraima).

Mt. Auyan-tepui, 1850 m., 3.

Agrees with the Roraima bird, an exceedingly close representative of *C. u. duidae*.

HIRUNDINIDAE**SWALLOWS****Pygochelidon cyanoleuca** (Vieillot)

Pygochelidon cyanoleuca, CHAPMAN, 1931, Bull. Amer. Mus. Nat. Hist., LXIII, p. 105 (Roraima, Duida).

Mt. Auyan-tepui, 1100 m., 7 ♂, 3 ♀.

Ten apparently typical specimens of this widely distributed subtropical swallow.

TROGLODYTIDAE**WRENS****Pheugopedius coraya ridgwayi** (Berlepsch)

Pheugopedius coraya ridgwayi, CHAPMAN, 1931, Bull. Amer. Mus. Nat. Hist., LXIII, p. 106 (Roraima).

Mt. Auyan-tepui, 1800-2000 m., 1 ♂; 1100 m., 4 ♂, 1 ♀, 3 ?.

This species ranges from the tropical to the upper life-zone. The 1100-m. specimens agree with a small Roraima series. The specimen from the 1800-2000-m. level resembles one from Paulo (4000 ft.), Roraima, but has somewhat more black on the throat.

Troglodytes rufulus Cabanis

Troglodytes rufulus, CHAPMAN, 1931, Bull. Amer. Mus. Nat. Hist., LXIII, p. 108 (Roraima).

Mt. Auyan-tepui, 1850 m., 3; 2200 m., 6.

The breast in these nine specimens aver-

ages somewhat more rufescent than in a large series of *rufulus* from Roraima; in other respects they are alike.

TURDIDAE

THRUSHES

Cichlopsis gularis Salvin and Godman

Cichlopsis gularis, CHAPMAN, 1931, Bull. Amer. Nat. Hist., LXIII, p. 109 (Merumé Mts., Roraima).

Mt. Auyan-tepui, 1100 m., 3 ♂, 4 ♀, 2 nestlings (Feb. 22).

With only two Whitely birds, one from Roraima and one from Merumé, for comparison, I am not in a position to comment on the relationships of these Auyan-tepui birds to *gularis*.

Turdus ignobilis murinus Salvin

Turdus ignobilis murinus, CHAPMAN, 1931, Bull. Amer. Mus. Nat. Hist., LXIII, p. 110 (Roraima, Duida).

Mt. Auyan-tepui, 1100 m., 13 ♂, 9 ♀.

These birds agree in color and, essentially, in size with specimens from the Subtropical Zone of Mts. Roraima and Duida. Six specimens collected by Whitely at from 3500 to 5000 ft. on Roraima, from 1882 to 1884, are distinctly paler (brownier) both above and below than more recently collected Roraima birds. The difference is apparently due to fading of the older skins.

Five males and five females from Auyan-tepui average: wing, 114, tail, 90 mm. There appears to be no sexual difference in size.

Turdus roraimae roraimae Salvin and Godman

Turdus roraimae roraimae, CHAPMAN, 1931, Bull. Amer. Mus. Nat. Hist., LXIII, p. 112 (Roraima).

Mt. Auyan-tepui, 1850 m., 3 ♂, 1 ♀; 2200 m., 1 ♀; 1100 m., 1 ♂, testes much enlarged.

These specimens agree in size with specimens from Mt. Roraima and hence are referable to *roraimae*. The males from 1850 m. measure, wing, 121, 122, 126; tail, 95, 99, 100 mm. In the adult, the bill appears to be yellow in the male, blackish in the female.

Platycichla flavipes polionota (Sharpe)

Mt. Auyan-tepui, 1100 m., 7 ♂ ad. (6 black, 1 gray), 1 ♂ imm., molt from ochraceous nestling to black adult plumage nearly completed, 1 ? nestling, 1 ♀ ad.

Singularly enough we have not met with this race before and I have no material for comparison. I therefore accept the name of the Roraiman birds as probably applicable to our specimens and refer to Hellmayr (Field Mus. Pub. 330, p. 428) for a discussion of the problems presented by this group. The wing in five of our specimens agrees in size with Hellmayr's measurements of Roraima specimens; the tail is notably shorter. Two of our males are so much smaller than the rest of the series that it is possible their black color may conceal other differences.

Measurements

	WING	TAIL
Black ♂	107	78 mm.
" ♂	108	77 mm.
" ♂	118	84 mm.
" ♂	115	83 mm.
" ♂	117	80 mm.
Gray ♂	115	89 mm.
Olive ♀	114	86 mm.

VIREONIDAE

VIREOS

Pachysylvia sclateri (Salvin and Godman)

Pachysylvia sclateri, CHAPMAN, 1931, Bull. Amer. Mus. Nat. Hist., LXIII, p. 113 (Roraima and Duida).

Mt. Auyan-tepui, 1500-1800 m., 1.

Resembles series from Roraima and Duida.

COEREBOIDAE

HONEY CREEPERS

Diglossa major gilliardi, new subspecies

SUBSPECIFIC CHARACTERS.—Resembling *Diglossa major major* Cabanis of Mt. Roraima, but darker, especially below, the black of the throat and sides of the head more pronounced, the under parts with whitish shaft streaks similar to, but slightly finer than, those on the back.

TYPE.—No. 323,595; ♂ testes slightly enlarged; Dec. 20, 1937; plateau of Mt. Auyan-tepui, 2200 m., Venezuela, E. T. Gilliard.

RANGE.—Known only from Mt. Auyan-tepui, Venezuela, at an altitude of 1800 m. to the summit at 2200 m.

SPECIMENS EXAMINED

Mt. Auyan-tepui, 20 ♂, 21 ♀; Mt. Roraima, 10 ♂, 7 ♀.

Diglossa major has heretofore been known only from Roraima where it was discovered by Richard Schomburgk in 1842. Its discovery on Auyan-tepui, therefore, not only extends our knowledge of its range but emphasizes the close faunal relationships of these two mountains.

Diglossa duidae, the form of this genus found on Mt. Duida, in my belief, differs too widely from *Diglossa major* to be considered as even a representative of it.

It gives me pleasure to name this interesting new race in honor of Mr. E. T. Gilliard, of the Museum's department of birds, who, from his camp on the plateau of Mt. Auyan-tepui, collected most of the specimens in our large series.

Measurements

	SEX	WING	TAIL
<i>Diglossa m. major</i>	5 ♂	87-90 (90)	78-81 (80)
" "	5 ♀	80-85 (83)	72-79 (75)
<i>Diglossa m. gilliardi</i>	5 ♂	81-88 (85.6)	75-78 (77)
<i>Diglossa m. gilliardi</i>	5 ♀	80-84 (81.4)	71-76 (74)

Coereba guianensis roraimae Chapman

Coereba guianensis roraimae CHAPMAN, 1931, Bull. Amer. Mus. Nat. Hist., LXIII, p. 124 (Roraima, Duida).

Mt. Auyan-tepui, 1850 m., 1 ♂; 1100 m., 8 ♂, 2 ♀, 2 (?).

Resemble the type. Occur at both the 1100 and 1850-m. levels. Hellmayr ranks all the birds of this group, including *bahamensis* and *caboti*, as subspecifically related.

COMPSOTHTYPIDAE

WOOD WARBLERS

Setophaga ruticilla (Linnaeus)

Setophaga ruticilla, CHAPMAN, 1931, Bull. Amer. Mus. Nat. Hist., LXIII, p. 114 (Roraima and Duida).

Mt. Auyan-tepui, 1500-1800 m., 1 ♀, Feb. 18, 1938; 1100 m., 3 ♂, 2 ♀, Dec. 6-23, 1938.

Myioborus castaneicapillus (Cabanis)

Myioborus castaneicapillus, CHAPMAN, 1931, Bull. Amer. Mus. Nat. Hist., LXIII, p. 116 (Roraima).

Auyan-tepui, 1800-2000 m., 5; 2200 m., 4.

These specimens average slightly deeper in color below than 25 Roraima birds, but the difference is too frequently bridged by individual variation to be of diagnostic value.

FRINGILLIDAE

FINCHES, SPARROWS, ETC.

Zonotrichia capensis roraimae

(Chapman)

Brachyspiza capensis roraimae CHAPMAN, 1929, Amer. Mus. Novit., No. 341, p. 5 (Mt. Roraima, 6000 ft.).

Zonotrichia capensis roraimae, CHAPMAN, 1931, Bull. Amer. Mus. LXIII, p. 120, Mt. Roraima, Ven., Uacará, Rio Negro, Brazil (one specimen). Auyan-tepui, 1100 m., 13 ad., 1 juv.; 1500 m., 2 ad., 1 juv.; 1800 m., 6 ad., 1 juv.; 2200 m., 15 ad.

On Auyan-tepui this bird ranges from 1100 to 2200 meters. Specimens from 1100 meters are inseparable from the lower zone birds on Roraima and hence are referable to *roraimae*. The birds from the upper zone on Auyan-tepui are darker than those of the lower zone and thus show an approach toward *macconnelli* of the summit of Roraima. They are, however, intermediate between *roraimae* and *macconnelli*, nearer the former, and I hence refer all the birds from Auyan-tepui to *roraimae*. This form, together with *macconnelli*, is distinguished from all other known races of *capensis* by its grayer sides, flanks and rump.

Amer. Mus. No. 518,939 (♀, Rio Carimang, B. G., Nov. 21, 1885, H. Whitely) has the entire sides unusually gray and a minimum amount of black on the throat. It is the only specimen we have from British Guiana and may represent an undescribed form.

This species was not found by us on Duida but the capture by Olalla of a single adult at Uacará, on the Rio Negro, near Santa Isabel, September 29, 1928, indicates its occurrence in the region, possibly in the mountains to the east.

Zonotrichia capensis in Venezuela

In continental Venezuela *Zonotrichia capensis* is characteristic of the Subtropical

Zone, but it also occurs on the Caribbean islands of Curaçao and Aruba. Excepting the two Roraima-Auyan-tepui forms, our 60 specimens from this area I refer to the following three races:

(1) *Zonotrichia capensis costaricensis* (Allen). Thirteen specimens from the Mérida region appear to be inseparable from a large series from Colombia, western Panama and Costa Rica. With them they differ from an adequate topotypical series of *peruviensis* in being smaller, in having more rufous on the breast, sides and flanks, and more black in the pectoral band, which is sometimes complete, a condition rarely found in *peruviensis*.

(2) *Zonotrichia capensis insularis* (Ridgway). A pale sea-level form from the islands of Curaçao (8 specimens) and Aruba (2 specimens).

(3) *Zonotrichia capensis venezuelae*, new subspecies.

***Zonotrichia capensis venezuelae*, new subspecies**

SUBSPECIFIC CHARACTERS.—Similar to *Zonotrichia capensis capensis* (P. L. S. Müller) of French Guiana but with more black on the throat and with the ventral region and lower tail-coverts slightly paler; resembling *Zonotrichia capensis costaricensis* (Allen) but with the sides and flanks grayer and less heavily washed, the ventral region and lower tail-coverts whiter.

TYPE.—No. 188,519, Amer. Mus. Nat. Hist.; ♂ ad.; Carapas, 5600 ft., Mt. Turumiquire, N.E. Venezuela; March 29, 1925; Tate and Clement.

This proposed new form inhabits the Subtropical Zone of the Valencia-Caracas and Sucre region. Our 37 specimens are from the following localities: Cumbre de Valencia, 2 ad.; Las Cienegas del Aguilon, 1 ad.; Junquito on Colonia Tovar Road, 1900 m., 5 ad., 2 juv.; Galipan Cerro de Avila, 2000 m., 6 ad.; Los Palmales, Cumaná, 450 m., 4 ad.; Guacharo, Bermudez, 4 ad., 1 juv.; Carapas, 5600 ft., Turumiquire, 7 ad., 1 juv.; Cocallar, N.E. Venezuela, 2600 ft., 2 ad.; Quiribana de Caicara, 2 ad.

The two birds from Caicara, on the middle Orinoco, are now contained in our collection. They were collected by George Cherrie on April 6, 1898, and recorded by him (Bull. Brooklyn Inst., II, 1916, p. 195) as the only ones observed by him during

three years on the Orinoco. They are as wholly typical of *venezuelae* as the specimen of this species from the Rio Negro is typical of *roraimae*. One asks if the occurrence of these two subtropical birds in the Tropical Zone is accidental or an evidence of a migratory habit present or past.

In 1912¹ Hellmayr referred the bird I have here described to the Cayenne form *capensis capensis* and in 1925² I followed him. In his recent monograph of American Fringillidae,³ still handicapped by lack of topotypical specimens, of which he had only a single worn trade skin (No. 41,470 American Mus. Nat. Hist., "Cayenne"), he presented the same provisional identification. Thanks, however, to Mr. W. E. Clyde Todd, I have had the use of three topotypical specimens of *capensis capensis* collected for the Carnegie Museum in 1917 at Oyapock, French Guiana (Nos. 64,861, 65,053, 65,189). These supply the material, heretofore lacking, essential to the determination of the Venezuelan birds.

***Idiospiza homochroa duncani* (Chubb)**

Idiospiza homochroa duncani, CHAPMAN, 1931. Bull. Amer. Mus. Nat. Hist., LXIII, p. 119 (Mts. Roraima and Duida).

Auyan-tepui, 2200 m., 3 ♂ ad., 1 ♂ im. 1 ♀ ad.

These specimens agree with others from Roraima and Duida and help to confirm the validity of this race. Hellmayr considers *Idiospiza* Todd inseparable from *Catamenia*.⁴ To avoid changing the name used in my Roraima-Duida paper, I continue to recognize Todd's proposed genus.

***Atlapetes personatus collaris*, new subspecies**

SUBSPECIFIC CHARACTERS.—Closely related to *Atlapetes personatus personatus* (Cabanis) of Mt. Roraima but with the chestnut of the head averaging deeper, the breast usually flecked with this color. Wing, 5 ♂, 76–81; 4 ♀, 73–77 mm. Tail, 4 ♀, 73–77 mm.

TYPE.—No. 323,656, Amer. Mus. Nat. Hist.; ♂ ad., testes enlarged; Auyan-tepui, Venezuela, alt. 1850 m.; Jan. 7, 1938; Phelps Venezuela Expedition.

¹ Abhandl. Math.-Phys. Kl. Bayr. Akad. Wiss., XXVI, No. 2, p. 88.

² Amer. Mus. Novit., No. 191, p. 11.

³ 1938, Cat. Bds. Amer., part 11, p. 584.

⁴ Cat. Bds. Amer., Field Mus. Pub., No. 430, p. 277.

The slightly developed characters of this proposed race indicate an approach from *Atlapetes personatus personatus* of Roraima to *Atlapetes duidae* of Duida and are therefore of apparent significance. I name this poorly marked race to give form to the fact that there is an average difference between specimens of *Atlapetes personatus* from Mts. Roraima and Auyan-tepui.

SPECIMENS EXAMINED

Atlapetes personatus collaris.—Mt. Auyan-tepui, Venezuela, 1450 m., 1; 1500–1850 m., 11; 2000–2200 m., 5.

Atlapetes personatus personatus.—Mt. Roraima, Venezuela, Philipp Camp, 11; Rondon Camp, 7.

THRAUPIDAE

TANAGERS

Tangara whitelyi (Salvin and Godman)

Tangara whitelyi, CHAPMAN, 1931, Bull. Amer. Mus. Nat. Hist., LXIII, p. 130 (Roraima, Tweek-quey and Duida).

Mt. Auyan-tepui, 1850 m., 4 ♂, 4 ♀.

Since specimens of this species from Roraima and Duida agree, as might be expected, Auyan-tepui specimens are also typical.

Tachyphonus phoeniceus Swainson

Tachyphonus phoeniceus, CHAPMAN, 1931, Bull. Amer. Mus. Nat. Hist., LXIII, p. 132 (Mt. Duida).

Mt. Auyan-tepui, 1850 m., 1 ♂.

Agrees with specimens from Roraima and Duida.

ICTERIDAE

ORIOLES, CASSIQUES, ETC.

Macroagelaius subalaris imthurni
(Selater)

Macroagelaius imthurni, CHAPMAN, 1931, Bull. Amer. Mus. Nat. Hist., LXIII, p. 135 (Roraima; Duida).

Mt. Auyan-tepui, 1850 m., 4 ♀; 1980 m., 1 ♂.

Agree with series from Roraima and Duida. I now follow Hellmayr in ranking this form as subspecifically related to the Bogotá *M. s. subalaris* of the Bogotá region. While the two forms obviously do not intergrade by contact, as sole members of their genus they appear to be representative and their relationships, both physical and geographic, seem best expressed by a trinomial.

DISTRIBUTIONAL SUMMARY

	Roraima	Auyan-tepui	Duida		Roraima	Auyan-tepui	Duida
Columbidae				Oxyruncidae			
<i>Columba albilinea roraimae</i>	1	1	1	<i>Oxyruncus cristatus phelpsi</i>	S	1	
Bubonidae				Pipridae			
<i>Glaucidium brasilianum olivaceum</i>		1	S ¹	<i>Chloropipo uniformis uniformis</i>	1	1	S
Caprimulgidae				Hirundinidae			
<i>Systellura ruficervix roraimae</i>	1	1	1	<i>Pygochelidon cyanoleuca</i>	1	1	1
Cypselidae				Troglodytidae			
<i>Aëronautes montivagus tatei</i>		1	1	<i>Pheugopedius coraya ridgwayi</i>	1	1	
Trochilidae				<i>Troglodytes rufulus</i>	1	1	S
<i>Campylopterus hyperythrus</i>	1	1	R ²	Turdidae			
<i>Colibri germanus</i>	1	1	1	<i>Cichlopsis gularis</i>	1	1	
<i>Waldronia milleri</i>		1	1	<i>Turdus ignobilis murinus</i>	1	1	1
Trogonidae				<i>Turdus roraimae roraimae</i>	1	1	S
<i>Trogonurus personatus roraimae</i>	1	1	S	<i>Platycichla flavipes polionota</i>	1	1	
Ramphastidae				Vireonidae			
<i>Aulacorhynchus derbianus whitelyanus</i>	1	1	S	<i>Pachysylvia sclateri</i>	1	1	1
Picidae				Compsothlypidae			
<i>Piculus rubiginosus guianae</i>	1	1	1	<i>Myioborus castaneicapillus</i>	1	1	
<i>Piculus rubiginosus viridissimus</i>		1		Fringillidae			
Formicariidae				<i>Zonotrichia capensis roraimae</i>	1	1	
<i>Thamnophilus insignis</i>	1	1	1	<i>Idiospiza homochroa duncani</i>	1	1	1
<i>Chamaeza brevicauda fulvescens</i>	1	1		<i>Atlapetes personatus collaris</i>	S	1	R
Furnariidae				Coerebidae			
<i>Cranioleuca demissa</i>	1	1	1	<i>Diglossa major gilliardi</i>	S	1	
<i>Roraimia adusta adusta</i>	1	1	S	<i>Coereba guianensis roraimae</i>	1	1	1
<i>Automolus roraimae roraimae</i>	1	1	S	Thraupidae			
<i>Lochmias nematura castanonota</i>	1	1		<i>Tangara whitelyi</i>	1	1	1
Tyrannidae				<i>Tachyphonus phoeniceus</i>	1	1	1
<i>Mecocerculus leucophrys roraimae</i>	1	1	1	Icteridae			
<i>Euscarthmornis russatus</i>	1	1		<i>Macroagelaius subalaris imthurni</i>	1	1	1
<i>Elaenia olivina</i>	1	1	1				
<i>Elaenia dayi dayi</i>	1	1	S				

¹ Represented by subspecies.
² Represented by species.

