

THE BIRDS OF THE REPUBLIC OF COLOMBIA

Their Distribution, and Keys for their Identification

by

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Part I

INTRODUCTION

In the autumn of the year 1938 the Academy of Natural Sciences of Philadelphia received in the post a section of bamboo inside of which was the skin of a flycatcher. It had been sent by Mr. Kjell von Sneider, of Popayán, Colombia, as a sample of his work. As a result a trial lot of one hundred skins was ordered, and then another hundred, and from these small beginnings the Academy established long and very happy relations with Mr. von Sneider, which resulted, during the following nine years, in the acquisition of 12,500 specimens from various regions in Colombia.

Mr. von Sneider cannot be too highly commended for his work. His birds are accurately sexed, carefully labelled, and well prepared. He has an uncanny ability for searching out rare and interesting birds, and one need but mention as proof his rediscovery of *Bolborhynchus ferrugineifrons*, *Dacnis viguieri*, and *Gymnostinops cassini*, all known from single specimens collected between 1857 and 1876.

In addition to Mr. von Sneider's collections the Academy also possesses many skins of the so-called "Bogotá" make in the Rivoli

Collection acquired by T. B. Wilson for the Academy in 1846, and in the Wilson Collection itself presented to the Academy in 1860.

There are also many specimens secured by the Michler Expedition to the Atrato Valley in 1857. The next collection received by the Academy was a small one made by Dr. J. W. Detwiler including 77 species from the environs of Bogotá and the "Plains of Tolima", these last secured mostly near Honda, Ambalema, and Ibagué. Dr. Witmer Stone reported on this collection in 1899 (Proc. Acad. Nat. Sci., pp. 302-313).

A large collection of Colombian birds was purchased from M. A. Carriker, Jr. in lots between 1913 and 1918. This was formed by that excellent and well known collector in the Santa Marta region, from Norte de Santander to Boyacá, the Cauca Valley and the Chocó. The collection contained about 2600 specimens, and although never reported upon, the localities at which birds were secured are included in this paper.

The present check list is based, for the most part, on Mr. von Sneider's collections aided by the supplementary collections mentioned above, and of course, on records in literature. An important number of locality records has been contributed by Professor Armando Dugand, Director of the Instituto de Ciencias Naturales, Bogotá, who especially revised the bird collection of that institution for this purpose.

All the birds which are known from Colombia are included, and it is the first time a complete list has been published. The number of birds now known to inhabit Colombia totals the astounding figure of 2327 species and subspecies. These belong to 83 families, 655 genera and 1474 species. Certainly, when comprehensive collections are made on the Amazon, the Vaupés, the río Negro, and along the Orinoco and Meta Rivers, a conservative estimate would add 200 forms to the Colombian avifauna, raising the total to 2500 species and subspecies from that republic. Surely, no other country in the world can boast of such ornithological wealth.

The Academy's collection of Colombian birds, probably the best in the world, contains 1672 forms or 72% of the known avifauna of the country.

The most striking way to point out the tremendous richness of the Colombian avifauna is to compare it with that of Brazil. Although the latter country is nearly seven and a half times larger, Oliveira-Pinto (1938-1944) records 2299 species and subspecies from within

its boundaries. This is approximately the same number of bird forms known from Colombia.

THE GEOGRAPHY OF COLOMBIA

The land area of Colombia extends over approximately 1,138,205 square kilometers (439,400 square miles) reaching from 12°30' north to 4°14' south of the equator, and from 66°51' W. to 79°01' W. The country occupies the northwestern corner of South America and is bounded on the north by the Caribbean Sea, on the northwest by Panama, on the west by the Pacific Ocean, on the south by Ecuador and Peru, on the southeast by Brazil, and on the east by Venezuela.

In the ornithological literature the country is often referred to as "New Granada", which was its official name during part of the nineteenth century, before the name Colombia was definitively adopted.

The capital of the republic is Bogotá, known formerly as Santa Fe de Bogotá. The city was founded by the Spanish *conquistador* Gonzalo Ximénez de Quesada in 1538. Bogotá lies at an altitude of 2620 meters (8600 feet) on a level tableland of the Eastern Andes known as the Sabana de Bogotá.

Colombia enjoys certain geographical features singular among South American countries, and which are the cause of its immense avifauna. Unique in South America is the fact that Colombia has a coast line upon both oceans, its northern shores being washed by the Caribbean Sea, its western shores by the Pacific Ocean. Each of the coastlines is over 1400 kilometers long. Colombia is the only country in South America which stretches from the Amazon River in a northerly direction to the Caribbean Sea, and westerly from the Orinoco River to the Pacific Ocean. Alone among the South American countries, it is directly connected with Central America through the Isthmus of Panama.

The western half of Colombia is very rugged, the country broken up by three large mountain chains, the Eastern, Central, and Western Andes, which unite in the south into a massive knot, the Andes of Pasto, near the border of Ecuador. In the northern corner, on the Caribbean coast, rise the isolated Santa Marta Mountains, among which is found the highest peak in Colombia, the Chúndua or Pico Cristóbal Colón, 5800 meters in altitude. In the Colombian Andes proper, the loftiest summit is the Nevado del Huila, rising to 5750

meters in the Central range, followed by the Nevado de Ritacuva in the Sierra Nevada de Cocuy, Eastern Andes, 5493 meters in height. The Western Andes reach a lesser altitude, the highest peak in that range being Cerro Tamaná, 4200 meters. In the Andes of Pasto, quite near the border of Ecuador, the Cumbal rises to 4764 meters.

A low range, known as the Baudó Mountains, borders the Pacific littoral north of Buenaventura, separating the coastal lowlands from the Atrato basin. Its highest summit, Alto del Buey, scarcely exceeds 1800 meters in height.

The eastern part of the country, east of the Andes (over 600,000 square kilometers) is flat, broken only by a few isolated ridges and hills, the highest of which do not exceed 800 m. above the average 250-meter level of the plain, except in the Macarena range (1300 m. above sea level). North of the río Guaviare are the Eastern Llanos, a broad plain stretching eastward to the Orinoco and exhibiting a variable vegetation, mostly of the open savanna type or a combination of forest and savanna, while south of the Guaviare, dense primeval forest extends eastward again to the Orinoco and the río Negro, and southward to the Amazon.

Regarding the climate and vegetation of Colombia, Professor Dugand has sent me the following sketch:

"Being a country of extreme variation in topography, with altitudes extending from sea level to 5800 meters, Colombia has a great diversity of climate, and consequently of forest growth, with a corresponding variety in the environmental conditions of bird life. Different belts of vegetation, each characterized by an assemblage of species peculiar to it, and sometimes by distinctive types of plant life, correspond to altitudinal zones bounded primarily by isothermal lines of mean annual temperature (*). However,

(*) The gradient of the mean annual temperature on the slopes of the Colombian mountains varies from 0.56 to 0.60° C. every 100 meters of elevation, or approximately 1° C. every 165-175 meters (= 1° Fahrenheit every 300-320 feet). The mean annual temperature at sea level is 28.5° C. on the Caribbean coast, and 26.5° C. on the Pacific littoral. It is higher (28 to 31° C.) in certain valleys of the interior below an altitude of 500 meters, and comparatively lower (27° C.) in the Eastern Llanos below 300 meters.

The temperature of any given locality in Colombia shows small fluctuations throughout the year, rarely exceeding 8° C. above and below the mean except in certain arid districts and on the páramos.

the same isothermal lines are not located at the same level on the sides of the three Andean ranges in the same latitude. The influence of altitude from the lowlands to the eternal snows of the Andean peaks is greatly modified by local topographic conditions, especially those which exercise a determining influence on the rainfall. The most important from a broad regional standpoint is the relation of slope exposure to prevailing air currents, and, more locally, the relative height of contiguous ranges in the same mountain chain. Both are the cause of wide variations in the total precipitation and humidity throughout the country. The amount of variation in annual rainfall at localities separated by only a few kilometers exceeds in many instances a ratio of 5 to 1. Thus, the vegetation will be very different from one valley to the neighboring one on the same slope when a ridge high enough to intercept the prevailing moisture-laden winds rises between the two. It is not surprising therefore that the upper and lower limits of vegetation belts on the three Andean chains and on the isolated Santa Marta Mountains often differ by several hundred meters from one slope to the other. It should be pointed out, however, that natural sharp breaks between vegetation types are generally found only where effective humidity is the determining factor. Under normal conditions the "boundaries" are usually more or less ill-defined transitions. In fact, the overlapping of vegetation types and the interdigitation of zones are often confusing.

Nature of the soil, and the action of man through widespread deforestation, agriculture, or the turning of land into pastures are also powerful modifying factors of plant distribution and hence of bird habitat.

Glaciers and snow fields cover the high mountain peaks above 4600-4700 meters. During the rainy season the snow line may drop to 4500 meters, but during the latter part of the dry season it ascends to a height of 4800 meters or more. The belt lying just below the snow line, to the upper limit of trees (3200-3800 meters in humid districts, lower in arid ones) is characteristic of the *Páramo* type of country, consisting mostly of rolling plateaus and open

valleys, with high ridges and deep ravines here and there, small lagoons, pools and sphagnum bogs in the depressions. These inhospitable highlands bear the influence of a low mean temperature and they are generally subject to heavy fogs or swept by rain, sleet, and strong chill winds. Such severe weather alternates with clear days of intense sunlight. The upper páramo is predominantly herbaceous and meadow-like, the higher reaches of it (above 4200 meters) being often bleak and rocky barrens. In some sheltered places, however, a few plants — usually stiff bunch grasses and sedges — ascend to the snow line. The lower páramo is largely shrubby, with coarse grasses, mosses, mat-forming cushion plants, and spectacular rosette-crowned Compositae (*Espeletia*) covering the ground between the low shrubbery. There is seldom a sharp line of demarcation between the Páramo and the upper Temperate forest. Usually there is a transitional belt, a "subpáramo" as it is called, supporting a mixture of páramo vegetation with stunted moss-covered trees of the lower belt, and abundant closely-branched, bright-flowered shrubs. Below the subpáramo lies the "subandine" belt, where a temperate climate prevails. The country is either semi-arid, bushy or sparsely wooded, or very humid, frequently overspread with mist, and thickly timbered. The humid Temperate forest is composed of sturdy, small to fairly tall trees set rather close together over a thickly-branched, tangled underbrush. The trunks and limbs are usually clothed with a profusion of mosses and epiphytes. Glade-like openings, often bush-grown or marshy are frequent. The lower half of the Temperate belt is characterized by an abundance of oaks, cinchona trees, "pines" (*Podocarpus*), climbing bamboos, and tree ferns, with occasional masses of stately wax-palms (*Ceroxylon*), especially in the Central Andes. It gradually merges at an elevation of 2500-2800 meters with the Subtropical belt, which is essentially a zone of extremely rank and luxuriant rain forests with much moss and many epiphytes. On slopes where the precipitation is insufficient, there is to be found an upward extension of the arid Tropical, and downward extension of the arid Temperate

Zone. According to humidity the lower margin of the Subtropical belt may vary from 800 to 1800 meters.

Below the average 1500-meter level at which lies the lower limit of the Subtropical, the hot Tropical Zone embraces three-fifths of Colombia's territory and presents such contrasts as thorny scrub, cactus-covered wastes, and much bare ground in the arid Guajira Peninsula, where the rainy season is very short and the annual precipitation scarcely averages 500 millimeters, and dense rain forest on the Pacific coast and the adjacent Atrato basin, which are subject to one of the heaviest rainfalls in the world, exceeding 7000 millimeters in many places and not equalled elsewhere in the western hemisphere. Humid tropical forests are also found in northwestern and northern Antioquia, the Caribbean coast west of the río Sinú to the Panama border, the upper Sinú valley and southeastern Bolívar, the lower Cauca and Nechí valleys south to about 7° N., the middle Magdalena basin south to 5°30' N., north to about 9° N., and eastward to the west slope of the first ridge of the Eastern Andes in the Departments of Boyacá and Santander, the foothills of the Perijá Mountains along the eastern border of the Department of Magdalena northward to their very end, the lower eastern slopes and foothills of the Eastern Andes from the Catatumbo basin (except the Cúcuta lowlands) on the Venezuelan border, southward to the border of Ecuador, and, of course, in the vast territory drained by the Guainia (upper río Negro), Vaupés, Apaporis, Caquetá, and Putumayo, tributaries to the Amazon. They reappear isolated in a relatively narrow strip facing the Caribbean Sea on the northern slopes of the Santa Marta Mountains.

The Eastern Llanos, north of the río Guaviare and across the extensive plain (280,000 square kilometers) drained by tributaries to the Orinoco, are characterized by wide expanses of grassy savannas. Many of these are quite treeless over large stretches, but for the most part they are dotted with high bushes and scattered thickets of small to medium-sized trees. Islands of dense jungle and groves of tall palms grow in humid bottomlands. The savannas are much interrupted by rank gallery forest and

swamp vegetation fringing the innumerable streams which traverse them. During the rainy season the rivers overflow the lower lands.

The Caribbean coastal region, from the lower rio Sinú to the upper Cesare valley and the southern reaches of the Guajira territory is generally flat, or moderately hilly and rolling, and exhibits a variable vegetation, mostly of the semi-arid type. Except for the northern side of the Santa Marta Mountains where humid forest extends right down to the sea, it is covered to a large extent by deciduous forest and low brush thickets presenting a parched and leafless aspect during the dry season. Stretches of savanna, most of them bush-grown and interspersed with rather short-boled trees are frequent. Only on sheltered hillsides and in humid bottomlands along watercourses are found patches of fairly heavy subhumid forest in which at least two-thirds of the trees — and a larger proportion of the undergrowth — retain their leaves during the dry period. There are many large open marshes and lagoons in the vicinity of the rivers, which during the rainy season are often overflowed for several miles inland.

Semi-arid and mingled transitional vegetation, similar to that of the Caribbean coast, prevails in the upper Magdalena valley south of 5°30' N., in the Cúcuta lowlands near the Venezuelan border, in the region about Ocaña, and in the floor of the upper Cauca Valley. It reappears as local pockets in the upper Dagua basin, the upper Patía valley, and the deep Chicamocha valley. Certain isolated hills in the humid Amazonian region are also noted for the scrubby xerophytic growth which covers their top."

THE RIVER SYSTEMS

Four great rivers flow northward into the Caribbean Sea. The largest is the Magdalena, 1538 kilometers long, rising near where the Central and Eastern Andes join, and flowing between these two mountain chains and through the Caribbean coastal plain. The next, both in size and geographic position is the Cauca, 1350 kilometers long, rising south of Popayán and flowing between the Central and Western Andes, eventually joining the Magdalena on the Caribbean

coastal plain. The third is the Atrato, 670 kilometers long, rising in the Western Andes and emptying into the Gulf of Urabá near the Caribbean border of Panama. The fourth is the Sinú, 460 kilometers long, rising near the northern end of the Western Andes and flowing through the western part of the Caribbean lowlands to Cispata Bay.

In the Pacific region are few rivers of importance. The largest is the Patia, 450 kilometers long, rising south of Popayán, flowing southward, then turning westward and emptying into the Pacific north of Tumaco. Flowing northwestward from Ecuador, and then westward into the Pacific south of Tumaco, is the río Mira.

Farther to the north, rising in the Western Andes just over the divide from the sources of one of the main upper branches of the Atrato, is the río San Juan, 276 kilometers long. It flows southward for most of its course, turning westward and emptying into the Pacific just north of Buenaventura.

To the east of the Eastern Andes are many large rivers which fall into two divisions, those forming part of the Orinoco basin, and those pertaining to the huge Amazon drainage. The principal rivers of the Orinoco basin are the Orinoco itself, which forms the boundary between Colombia and Venezuela for 285 kilometers, the Arauca and the Meta which also in part separate Colombia from Venezuela, the Vichada, the Guaviare, and the Inirida. Those belonging to the Amazon drainage are the Amazon itself, which borders the extreme southern tip of Colombia for 116 kilometers along the border of Peru, the Vaupés (Uaupés in Brazil) flowing into the Río Negro, the Caquetá (Japurá in Brazil), and the Putumayo (Içá in Brazil), flowing into the Amazon. The Putumayo forms the border between Colombia and Peru for over 1000 kilometers. The middle course of the Vaupés marks the Colombia-Brazil boundary for about 140 kilometers. The territories of Colombia and Venezuela are also bounded for 238 kilometers by the Río Negro, the upper course of which — above the junction with the Casiquiare — is known as río Guainia.

From the foregoing description it is not surprising that a country less than twice the size of the State of Texas should have twice as many species and subspecies of birds as are found in the entire United States, Alaska, and Canada.

THE ZOOGEOGRAPHY OF COLOMBIA

Dr. Frank M. Chapman's classic work, "The Distribution of Bird Life in Colombia" (Bull. Amer. Mus. Nat. Hist., 36, 1917), was the first really comprehensive study of Colombian birds, and revealed for the first time the true range of many species even up to that time known only from "Bogotá" skins. It presents such an excellent and complete account of the distribution of birds that there is little to be added. The following sketch of the zoogeography of Colombia is necessarily short, first because Dr. Chapman has already described it so well, and second because the list of species and their ranges which follows occupies so much space that a halt has to be called somewhere.

It is often said that Dr. Chapman omitted many species from his Colombian list. These omissions were intentional. With but few exceptions Dr. Chapman only recorded birds collected by the American Museum Expeditions. The total number of species and subspecies listed by him was 1285 or about 55% of today's known total. The others were purposely left out. He had no intention of recording all the species known from Colombia as he did in his later account of the birds of Ecuador.

Due to the fact that Colombia is so much broken up by mountains, a great amount of isolation has taken place, the Eastern Andes forming a formidable barrier between the mountainous area to the west and the flat tropical lowlands to the east of them.

The faunal areas of Colombia, for some of which I use the same names proposed by Chapman in his great work, may be enumerated as follows:

1. *The Colombian-Pacific Region.*

This area, distinguished by an exceptionally heavy rainfall, and the most strongly marked one in Colombia, is separated from the rest of the country by the Western Andes. It is a very humid, densely forested region which commences in eastern Panama and extends southward along the Pacific coastal plain and the western slope of the Western Andes into northwestern Ecuador, terminating in that country at about 1°30' south of the equator where the country becomes arid.

In Colombia it may be subdivided into two sections, a northern one extending from the Panama border southward to the headwaters of the río San Juan, and a southern one extending from the río San Juan southward to the border of Ecuador. Marked endemism is found in the region. Outstanding examples of birds restricted to it are such genera as *Androdon*, *Eugenia*, *Xenornis*, *Sipia*, *Pittasoma*, *Allocopterus*, *Sapayoa*, *Bangsia* (one species in Costa Rica), *Erythrothlypis*, and *Oreothraupis*.

Some few species of the Colombian-Pacific fauna find their way through northwestern and northern Antioquia into the humid, heavily forested lower Cauca and middle Magdalena Valleys, and more collecting in that region will undoubtedly disclose others.

2. The Caribbean Region.

The Caribbean coast of Colombia from the lower Sinú valley eastward across the swampy lower Magdalena Valley and around the base of the Santa Marta Mountains, including the Tropical Zone of this isolated range, to the end of the Guajira Peninsula is for the most part a semi-arid region, becoming arid and almost bare in the Guajira plains. It supports birds more akin to those found in northwestern and northern Venezuela than to the rest of Colombia. Here is the only place where the excessively rare and little known *Tangavius armenti* is found. *Crax annulata* and *Lepidopygia lilliae* are also endemic to the region.

Among birds inhabiting the Caribbean coast and not found elsewhere in Colombia may be mentioned *Crypturellus idoneus*, *Chauna chavaria*, *Forpus passerinus spengeli*, *Picumnus cinnamomeus cinnamomeus*, *Furnarius leucopus longirostris*, *Poecilurus candei candei*, *Campylorhynchus nuchalis pardus*, *Thraupis sayaca glaucocolpa*, and *Nemosia pileata hypoleuca*, to select a few at random. Restricted to the drier eastern portion of the region are *Ortalis ruficrissa ruficrissa*, *Columba corensis*, *Scardafella squammata ridgwayi*, *Icterus icterus ridgwayi*, and *Richmondia phoenicea*. Most of the birds mentioned above range eastward into Venezuela.

3. The Santa Marta Mountain Region.

Rising not far from the eastern end of the Caribbean littoral, like a vast island out of the coastal plain, are the lofty, snow-capped

Santa Marta Mountains (Sierra Nevada de Santa Marta). This range, isolated from the Andean system of Colombia, supports, as might be expected, many species and subspecies peculiar to itself. No genera are confined, however, to the Santa Marta Mountains.

Inexplicable are the facts that whole families are absent from the district, and genera and species abundantly represented in other parts of Colombia are not found at all, or are but scarcely represented.

Among the interesting species found only in the Santa Marta Mountains are *Pyrrhura viridicata*, *Coeligena phalerata*, *Ramphomicron dorsale*, *Chlorostilbon russatus*, *Campylopterus phainopeplus*, *Grallaria bangsi*, *Ochthodiaeta pernix*, *Troglodytes monticola*, and *Basileuterus basilius*. The Santa Marta region evidently is congenial to hummingbirds.

Families which one would expect, but which are quite unaccountably absent are *Heliornithidae*, *Eurypygidae*, *Tytonidae*, *Nyctibiidae*, *Capitonidae*, *Conopophagidae*, and *Motacillidae*.

Among widespread genera which have never been recorded from the Santa Marta region are such common ones as *Leucopternis*, *Speotyto*, *Jacamerops*, *Monasa*, and *Chlorophanes*, while a genus so abundant in species as *Tangara* is represented by but three kinds, as compared to a total for Colombia of no less than 46 species and subspecies. A masterful account of this region is given by Todd and Carriker in the "Birds of the Santa Marta Region" (Ann. Carn. Mus., 14, 1922).

4. The Central Colombian Mountain Region.

This region includes the Central Andes and the western slope of the Eastern Andes. Among outstanding species confined to this area are *Odontophorus strophium*, *Rallus semiplumbeus*, *Zenaida conoveri*, *Bolborhynchus ferrugineifrons*, *Hapalopsittaca fuertesi*, *Capito hypoleucus*, *Synallaxis subpudica*, *Siptornis striaticollis*, *Cistothorus apolinari*, and *Thryothorus nicefori*.

5. The Catatumbo Region.

The region on the eastern slope of the Eastern Andes in Norte de Santander drained by the rio Catatumbo perhaps deserves recognition. Here heavy lowland forest extends unbroken from Lake Maracaibo in Venezuela, and probably, when the region is better

known, birds thought to be confined to the Maracaibo forests will be found to extend to Colombia. Already *Threnetes ruckeri venezuelensis*, *Lepidopyga goudoti zuliae*, *Galbula ruficauda brevirostris*, and *Arremon conirostris umbrinus*, birds heretofore known only from the Catatumbo and Zulia regions of Venezuela, have been collected in this portion of Norte de Santander.

Other Venezuelan birds, *Turdus olivater olivater*, *Carduelis cucullatus*, and *Myospiza aurifrons apurensis*, have been found recently in the semi-arid Táchira Valley, south of Cúcuta.

6. The Eastern Region.

East of the Eastern Andes the avifauna may be split into two sections, a northern or Orinocan (north of the río Guaviare), and a southern or Amazonian (south of the río Guaviare). Along the base of the Andes, however, many Amazonian species follow the heavily forested foothills northward into the western part of the Orinocan region, and are found as far north as Villavicencio and Buenavista, Meta.

The country north of the Guaviare is typical of the llanos, while to the south of the same river it is densely forested. In both regions are found widespread forms inhabiting one or the other type of country and ranging eastward and southward into Venezuela, the Guianas, northwestern Brazil, northern Peru, and eastern Ecuador.

THE FAUNAL ZONES

Most birds in Colombia, as in other mountainous tropical countries, are found within the boundaries of certain altitudinal zones, the limits of which vary according to temperature and humidity, and local topographic conditions. Vegetational and zoological investigations conducted in recent years by the Instituto de Ciencias Naturales, of Bogotá, under the direction of Professor A. Dugand, are in accord with Dr. Frank M. Chapman's conclusions regarding the life zones in Colombia. The table below shows the approximate altitudinal boundaries of each zone according to the recent investigations. But for slight changes affecting some of the lower and upper limit figures, the zones are essentially the same as those given in Dr. Chapman's book (p. 85).

In Colombia four such life zones exist, namely:

		Average limits
Tropical Zone	sea-level to 1200-1800 m.	0-1500 m.
Subtropical Zone	1200-1800 to 2500-2900 m.	1500-2600 m.
Temperate Zone	2500-2900 to 3200-3800 m.	2600-3400 m.
Páramo Zone	3200-3800 to snow-line.	3400-4700 m.

The birds do not invariably adhere to their own particular zone, but may be occasionally met with well above or below their usual habitats. For example, Mr. von Sneidern has taken *Thripadectes flammulatus*, supposedly a Temperate Zone species, at the rio Mechengue in the Tropical Zone as low as 720 meters. *Brachyspiza capensis costaricensis* of the Temperate Zone is not uncommon at Villeta, 800 meters. On the other hand, *Ramphocelus icteronotus*, of the humid Tropical Zone, occasionally wanders as high as Toche, 2100 meters, and Barro Blanco, 2160 meters. *Pyrocephalus rubinus piuræ* and *Thraupis virens cana* as well as many other Tropical Zone birds, principally Herons, Ducks, Rails, and Hawks, are not seldom found on the Bogotá tableland at 2600 meters. The hummingbird, *Campylopterus phainopeplus*, restricted to the Santa Marta Mountains, is at some seasons found as low as 1200 meters and at others nearly at snowline at 4600 meters. Altitudinal and seasonal migration will form an interesting study for Colombian ornithologists.

The three mountain ranges, each separated from the other by a deep river valley descending to the Tropical Zone, often have their own particular subspecies, which are replaced on the other ranges by different forms. In many instances this splitting up of a species into subspecies is refined to such a point that on the western slope of a range one form will be found, only to be replaced on the opposite side by another. Thus, within a short distance from Bogotá three distinct races of *Colinus cristatus* are found: *leucotis* on the west slope, *parvicristatus* on the east slope, and *bogotensis* on the intervening tableland, which is separated from both slopes by high mountains. Mr. Carriker's and Mr. von Sneidern's collecting has revealed the fact that certain birds, hitherto known only from Ecuador and farther south, exist in the Central Andes. The most interesting ones found so far are *Leptosittaca branickii*, hitherto known from southern Ecuador to central Peru; *Atlapetes leucopis*, known from four specimens, previously recorded from southeastern Ecuador;

Tephrophilus wetmorei, recorded before only from east-central Ecuador; and *Tangara chrysotis*, known previously from Bolivia northward to east-central Ecuador.

THE FAMILIES OF BIRDS FOUND IN COLOMBIA

The following list shows the families which inhabit Colombia. In the first column of figures is given the number of species and subspecies found in each family. The second column shows the number of species and subspecies found in the same family in Brazil, according to Oliveira-Pinto's recent "Catalogo das Aves do Brazil", 1938-1944.

This comparison is interesting because Colombia, although seven times smaller than Brazil, is a mountainous country with a relatively large area in a temperate or cool climate due to altitude, while Brazil is devoid of any mountains reaching the height of those found in Colombia and is for the most part a hot and humid country.

Not represented in Colombia are six families found in Brazil (Rheidae, Spheniscidae, Diomedidae, Cariamidae, Rostratulidae, and Oxyruncidae (*)), whereas four families present in Colombia are absent in Brazil (Steatornithidae, Alaudidae, Cinclidae, Catamblyrhynchidae).

The list clearly shows the families which flourish best in one or the other type of climate.

	Colombia	Brazil
Rheidae	0	3
Tinamidae	24	35
Spheniscidae	0	1
Colymbidae	4	5
Diomedidae	0	2
Procellariidae	2	12
Hydrobatidae	3	3
Phaethontidae	2	2
Felcanidae	2	1
Sulidae	5	3
Phalacrocoracidae	2	1
Anhingidae	2	1

(*) This small family is to be expected in Colombia since it has been found both west and east of this country (Panamá and Venezuela).

	Colombia	Brazil
Fregatidae	1	3
Ardeidae	23	18
Cochleariidae	1	1
Ciconiidae	3	3
Threskiornithidae	8	8
Phoenicopteridae	1	2
Anhimidae	2	2
Anatidae	23	24
Cathartidae	6	4
Accipitridae	55	52
Pandionidae	1	1
Falconidae	23	19
Cracidae	28	32
Phasianidae	16	4
Opisthocomidae	1	1
Aramidae	1	2
Psophiidae	2	6
Rallidae	28	28
Heliornithidae	1	1
Eurypygidae	2	1
Cariamidae	0	1
Jacanidae	4	2
Rostratulidae	0	1
Haematopodidae	1	1
Charadriidae	10	11
Scolopacidae	27	23
Recurvirostridae	1	2
Phalaropodidae	1	1
Burhinidae	1	1
Stercorariidae	1	2
Laridae	17	23
Rynchopidae	1	2
Columbidae	46	34
Psittacidae	67	95
Cuculidae	21	27
Tytonidae	2	2
Strigidae	28	26
Steatornithidae	1	0
Nyctibiidae	6	5

	Colombia	Brazil
Caprimulgidae	30	33
Apodidae	13	14
Trochilidae	208 *	105 *
Trogonidae	22	11
Alcedinidae	6	6
Momotidae	13	9
Galbulidae	14	17
Bucconidae	29	37
Capitonidae	16	12
Ramphastidae	29	29
Picidae	59	87
Dendrocolaptidae	56	101
Furnariidae	105	130
Formicariidae	176	281
Conopophagidae	4	16
Rhinocryptidae	12	4
Cotingidae	68	64
Rupicolidae	3	1
Pipridae	42	63
Tyrannidae	253	268
Oxyruncidae	0	2
Alaudidae	1	0
Hirundinidae	19	17
Corvidae	10	9
Cinclidae	2	0
Troglodytidae	74	31
Mimidae	5	8
Turdidae	39	25
Sylviidae	13	15
Motacillidae	2	5
Vireonidae **	32	32
Coerebidae	58	20
Parulidae	54	17
Icteridae	48	49
Tersinidae	2	2

* Including 23 doubtful species from Colombia and 11 from Brazil.

** Including "Cyclarhidae" and "Vireolaniidae".

Thraupidae	185	128
Catamblyrhynchidae	1	0
Fringillidae	117	111
Totals.....	2327	2299

GENERA AND SPECIES OF BIRDS FOUND IN COLOMBIA

The following table shows, in the first column, the number of genera in each family of Colombian birds. The second column shows the number of birds in each family which in this work are regarded as deserving specific rank.

	Genera	Species
Tinamidae	3	13
Colymbidae	3	4
Procellariidae	2	2
Hydrobatidae	3	3
Phaethontidae	1	2
Pelecanidae	1	1
Sulidae	1	4
Phalacrocoracidae	1	2
Anhingidae	1	1
Fregatidae	1	1
Ardeidae	14	18
Cochleariidae	1	1
Ciconiidae	3	3
Threskiornithidae	7	8
Phoenicopteridae	1	1
Anhimidae	2	2
Anatidae	10	21
Cathartidae	4	5
Accipitridae	25	46
Pandionidae	1	1
Falconidae	8	17
Cracidae	9	22
Phasianidae	3	7
Opisthocomidae	1	1
Aramidae	1	1

	Genera	Species
Psophiidae	1	1
Rallidae	12	23
Heliornithidae	1	1
Eurypygidae	1	1
Jacanidae	1	1
Haematopodidae	1	1
Charadriidae	6	9
Scolopacidae	12	20
Recurvirostridae	1	1
Phalaropodidae	1	1
Burhinidae	1	1
Stercorariidae	1	1
Laridae	10	17
Rynchopidae	1	1
Columbidae	8	27
Psittacidae	16	50
Cuculidae	6	17
Tytonidae	1	1
Strigidae	9	18
Steatornithidae	1	1
Nyctibiidae	1	5
Caprimulgidae	9	19
Apodidae	6	10
Trochilidae	54	126
Trogonidae	2	12
Alcedinidae	2	6
Momotidae	4	4
Galbulidae	4	9
Bucconidae	10	21
Capitonidae	2	9
Ramphastidae	6	21
Picidae	10	34
Dendrocolaptidae	12	24
Furnariidae	27	64
Formicariidae	42	107
Conopophagidae	2	3

* Not including presumed hybrids.

	Genera	Species
Rhinocryptidae	3	7
Cotingidae	21	43
Rupicolidae	1	2
Pipridae	14	22
Tyrannidae	77	149
Alaudidae	1	1
Hirundinidae	8	14
Corvidae	3	6
Cinclidae	1	1
Troglodytidae	9	30
Mimidae	3	3
Turdidae	6	21
Sylviidae	3	5
Motacillidae	1	2
Vireonidae	4	16
Coerebidae	8	29
Parulidae	12	40
Icteridae	19	33
Tersinidae	1	1
Thraupidae	41	117
Catamblyrhynchidae	1	1
Fringillidae	27	76
Totals.....	655	1474

SPECIES OF BIRDS FOUND ONLY IN COLOMBIA

The following species of birds, so far as known, are found only within the boundaries of Colombia. They total 73, and include three genera; *Anthocephala*, a hummingbird, of which there are two forms, one in the Santa Marta region, the other in the Central Andes, the little known *Pseudodacnis*, a tanager, and *Hypopyrrhus*, a troupial.

Crypturellus columbianus

Crypturellus kerriae

Crax alberti

Crax annulata

Odontophorus atrifrons

Odontophorus hyperythrus

Odontophorus strophium

Rallus semiplumbeus

<i>Chubbia imperialis</i>	<i>Grallaria alleni</i>
<i>Leptotila conoveri</i>	<i>Grallaria rufo-cinerea</i>
<i>Pyrrhura viridicata</i>	<i>Grallaria milleri</i>
<i>Pyrrhura calliptera</i>	<i>Grallaria bangsi</i>
<i>Bolborhynchus ferrugineifrons</i>	<i>Chloropipo flavicapilla</i>
<i>Hapalopsittaca fuertesi</i>	<i>Manacus coronatus</i>
<i>Trogon</i> sp. (*)	<i>Ochthodiaeta pernix</i>
<i>Campylopterus phainopeplus</i>	<i>Myiarchus apicalis</i>
<i>Chlorostilbon russatus</i>	<i>Todirostrum hypospodium</i>
<i>Chlorostilbon poortmani</i>	<i>Cistothorus apolinari</i>
<i>Lepidopyga lilliae</i>	<i>Thryothorus nicefori</i>
<i>Amazilia castaneiventris</i>	<i>Troglodytes monticola</i>
<i>Anthocephala floriceps</i>	<i>Conirostrum rufum</i>
<i>Coeligena prunellei</i>	<i>Myioborus flaviventer</i>
<i>Coeligena traviesi</i>	<i>Basileuterus basilicus</i>
<i>Coeligena phalerata</i>	<i>Basileuterus cinereicollis</i>
<i>Coeligena bonapartei</i>	<i>Gymnostinops cassini</i>
<i>Coeligena helianthea</i>	<i>Tangavius armenti</i>
<i>Ramphomicon dorsale</i>	<i>Macroagelaius subalaris</i>
<i>Metallura iracunda</i>	<i>Hypopyrrhus pyrohypogaster</i>
<i>Acestrura harterti</i>	<i>Tanagra concinna</i>
<i>Bucco noanamae</i>	<i>Chlorochrysa nitidissima</i>
<i>Capito hypoleucus</i>	<i>Pseudodacnis hartlaubi</i>
<i>Capito quinticolor</i>	<i>Bangsia melanochlamys</i>
<i>Balanosphyra flavigula</i>	<i>Bangsia aureocincta</i>
<i>Veniliornis chocoensis</i>	<i>Ramphocelus flammigerus</i>
<i>Picumnus pumilus</i>	<i>Habia cristata</i>
* <i>Picumnus salvini</i>	<i>Spermophila insulata</i>
<i>Synallaxis subpudica</i>	<i>Catamenia oreophila</i>
<i>Synallaxis fusco-rufa</i>	<i>Atlapetes melanocephalus</i>
<i>Cranioleuca hellmayri</i>	<i>Atlapetes fusco-olivaceus</i>
<i>Thamnophilus multistriatus</i>	<i>Atlapetes flaviceps</i>
<i>Grallaricula cucullata</i>	

(*) A new species to be described soon by Dr. Zimmer.

METHOD OF TREATMENT

The Keys. -- It is hoped that the keys will give the present check-list of Colombian birds a wider use than just a catalogue would have done. All the species and some of their subspecies which occur in Colombia are included in the keys. Both sexes, where they differ in plumage, and in some cases immature plumages, will also be found.

In cases where sexes differ in plumage, young males generally resemble the females, passing gradually into the adult male dress. It has been found impossible to deal with the various intermediate stages in the keys.

In some instances a species, or the same sex of a species, appears more than once in the keys, due to different color phases (seasonal or dependent on age) which take place in the adult stage. Only the common or normal phases are included in the keys.

In making up these keys, birds in fresh plumage have been used. Occasionally certain colors tend to change with wear; thus, olives may turn brownish or greyish, and pale yellows may fade to white. Therefore, I would ask the student's indulgence in using the keys. Suppose, for example, he is trying to identify a bird with a brownish back, and in the keys he finds a choice between "olive" or "brownish". If he fails to find his bird under "brownish", he should then try under "olive". The same may be said for a choice as "below white" and "below tinged yellow". Very dark shades termed black or blackish in the keys may actually be dusky brown in certain lights.

All measurements in the keys are given in millimeters. The wing is measured flat against the ruler to give the maximum length; the tail is measured by pushing the dividers as far back as they will go between the central feathers at their base, to the tip of the longest one; the bill measurement is that of the exposed culmen. It must be understood that measurements are usually average ones and that individual birds may vary more or less above or below the figures given. In small birds the variation will be only a few millimeters. In larger birds it may be greater.

The Check-list. — The check-list includes all the birds which have been recorded from Colombia, including Gorgona Island and Malpelo Island in the Pacific. Those from the Colombian islands of San Andrés and Providencia in the Caribbean will be given in a supple-

ment to this paper. The total number of species and subspecies is 2327.

This list is arranged as follows:

1. **The scientific name (*).** — An asterisk preceding the name denotes that the form is represented in the collection of the Academy of Natural Sciences of Philadelphia.
2. **The original citation.** — In the cases where a bird is still known by the generic name under which it was originally described, the name is not repeated.
3. **Range of the species.** — This includes the entire range of the species and all its subspecies under present taxonomic and distributional understanding.
4. **COLOMBIA.** — Under this heading is given the known range in Colombia. It is followed by all the localities at which the bird has been taken, often with the highest and lowest altitudes given in meters. For migrants it is stated whether they are accidental, transients, or winter residents. Months of the year during which these migrants are found in Colombia are listed with the earliest and latest date of capture given in parentheses after the first and last month.

The Colombian localities will be found grouped between semi-colons, those from the Western Andes placed together, as are those from the Central and Eastern Andes, the Caribbean coast, etc.

Only specimens which have actually been taken are recorded. If the record is a sight one it is so noted.

At the end, in square brackets, is given the extralimital range of the bird under discussion.

5. **Additional Records.** — The localities given under this heading are records hitherto unpublished, based on specimens in the collection of the Instituto de Ciencias Naturales, Bogotá, and contributed for the present paper by Professor A. Dugand.

The sequence of orders and families is that proposed by Alexander Wetmore (Smiths. Misc. Coll., 89, no. 13, 1934).

(*) Original references have not been personally verified, but are taken from Hellmayr, Peters, and other standard authorities.

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Dr. Chapman presents a bibliography of the more important faunal papers on Colombian birds (*), and this is not repeated here.

Since his list was compiled, the most important paper on Colombian ornithology is that on the Santa Marta region by W. E. Clyde Todd and M. A. Carriker, Jr., entitled "The Birds of the Santa Marta Region of Colombia: A Study in Altitudinal Variation"; *Annals of the Carnegie Museum*, 14, pp. 1-611, 1922, map, and many plates, some in color. This splendid publication has been frequently referred to for localities in the Santa Marta region.

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I must not close this list of acknowledgements without expressing my thanks to Miss Jean Funk, who typed the manuscript. With all the necessary additions and corrections this was a most difficult task, and she accomplished it with meticulous care.

LIST OF LOCALITIES

The present list, made in cooperation with Professor Dugand, includes all the major localities at which birds have been collected in Colombia. Over 660 names are listed. Distances between places are the approximate air-line distances in kilometers except when otherwise stated; altitudes are in meters and are taken from modern survey figures whenever possible, or from other reliable sources. In many instances, not the altitude of the town or village, or of any other geographic point referred to as locality is given, but that at which the collection was actually made. Latitudes and longitudes are approximate as shown on modern sectional maps of the Colombian Bureau of Longitudes, the Colombian Geographical and Military Institute, and the Millionth Map of Hispanic America, American Geographical Society of New York.

Names of many localities are followed by two letters in parentheses, denoting the mountain range and slope on which they are situated, as follows:

- | | |
|------|------------------------------|
| (Ee) | Eastern Andes, eastern slope |
| (Ew) | " " , western slope |
| (Ce) | Central Andes, eastern slope |
| (Cw) | " " , western slope |
| (We) | Western Andes, eastern slope |
| (Ww) | " " , western slope. |

The name of the political division in which a locality is situated is given in each instance.

The Republic of Colombia is divided into 15 *Departamentos*, 3 *Intendencias*, and 6 *Comisarias*, the names of which are given below with a brief description of the general geographic area covered by each.

Departments.

Antioquia. — From the lower Atrato valley and the Gulf of Urabá on the Caribbean coast to the middle Magdalena valley across the northern part of the Western and Central Andes. Paramillo Mountains. The larger part of the lower Cauca valley.

Atlántico. — Caribbean coast at the extreme lower end of the Magdalena valley.

Bolívar. — Caribbean coast from the Sinú valley to the lower and part of the middle Magdalena valley. Extreme lower course of the rio Cauca. Northern foothills of the Western and Central Andes.

Boyacá. — From the middle Magdalena valley across the Eastern Andes (central section) and the Casanare region of the Eastern Llanos to the north bank of the middle and lower rio Meta. Upper Carare valley. Upper Sogamoso valley.

Caldas. — From the headwaters of the rio San Juan on the west slope of the Western Andes, across the Western and Central Andes (northern central section) to the middle Magdalena valley. Part of the middle Cauca valley.

Cauca. — From the Pacific littoral across the Western Andes (southern section) to the Central Andes (southern section) and across the junction of the Central and Eastern Andes to the headwaters of the rio Caquetá on the east slope of the Andes. Head of the Cauca Valley. Upper Patía valley.

Chocó. — From the Gulf of Urabá on the Caribbean littoral southward along the Panama border and the Pacific coast to the mouth of the rio San Juan, Rio Atrato valley, Rio San Juan valley (except extreme headwaters which are in Caldas). The Baudó Mountains. The west slope of the Western Andes (northern central section).

Cundinamarca. — From the upper and part of the middle Magdalena valley across the Eastern Andes (central section) to their base at the edge of the Eastern Llanos. Sabana de Bogotá and "Bogotá" region.

Huila. — Upper Magdalena valley to its head. East slope of the Central Andes (southern section). West slope of the Eastern Andes (southern section).

Magdalena. — Caribbean coast, and lower and part of middle Magdalena valley. Santa Marta Mountains. West slope of the Sierra de Perijá and of the Eastern Andes (northern end). Río Cesare valley. Part of the southern plains of the Guajira territory along the lower río Ranchería.

Nariño. — From the Pacific littoral across the Andes of Pasto along the border of Ecuador to the extreme headwaters of the río Putumayo in upper Amazonia.

Norte de Santander. — East slope of the Eastern Andes (northern section) in the Catatumbo and Zulia drainage basin, and small part of the west slope in the Magdalena drainage. Part of the extreme headwaters of the río Arauca which flows eastward to the Orinoco.

Santander. — Middle Magdalena valley and west slope of the Eastern Andes (northern to central section) along the valleys of the Lebrija, lower Sogamoso, and lower Carare.

Tolima. — Upper Magdalena valley. East slope of the Central Andes (central section). Lower western slopes of the Eastern Andes (central section). Plains of Tolima.

Valle. — From the Pacific littoral across the Western Andes (central section) and the Cauca Valley to the west slope of the Central Andes (central section). Cauca Valley as defined further in the list of localities. Dagua Valley.

The territory of the Department of Valle was formerly a part of the Department of Cauca, from which it was segregated in 1910. This explains why the name "Cauca" appears on the labels of many specimens actually collected within the present limits of Valle. Published records of such birds are often referred also to the Department of Cauca.

Intendencias.

Amazonas. — Amazonian region between the Brazilian and Peruvian borders to the extreme southern tip of Colombia on the north bank of the Amazon River. Middle río Caquetá. Middle and part of the lower río Putumayo along the Peruvian border.

Meta. — East slope of the Eastern Andes (central section) and western portion of the Eastern Llanos south of the río Meta and north of the upper río Guaviare.

San Andrés y Providencia (*). — A scattered group of small islands and cays in the Caribbean Sea near the coast of Nicaragua, Central America, about 750 kilometers off the coast of continental Colombia.

Comisarias.

Arauca. — Northern portion of the Eastern Llanos from the east slope of the Eastern Andes (northern section), on the north side of the río Casanare, to the Venezuelan border along the río Arauca. Part of the lower río Meta.

Caquetá. — East slope of the Eastern Andes (southern section) and upper Amazonian region between the upper río Caquetá (north bank) and the río Apaporis.

Guajira. — Extreme northern part of the Caribbean littoral. Macuire Mountains. Extreme northern end of the Perijá Mountains.

Putumayo. — East slope of the Andes of Pasto and upper Amazonian region near the borders of Ecuador and Peru along the upper río Putumayo. Upper río Caquetá (south bank).

Vaupés. — Part of the Orinocan basin along the lower río Guaviare (south side) to the border of Venezuela on the río Atabapo. Part of the Amazonian drainage along the río Guainia (= extreme upper río Negro) to the Venezuelan border on the río Negro. Brazilian border along the upper río Isana and the middle río Vaupés.

Vichada. — Eastern portion of the Eastern Llanos on both sides of the río Vichada, north to the lower río Meta, south to the lower río Guaviare, and east to the Orinoco. Venezuelan border along the Orinoco and the extreme lower Meta.

ACACÍAS (Ee), 517 m., Meta. A small village at the base of the Eastern Andes near the río Guayuriba, 25 km. southwest of Villavicencio.

AGUACHICA, 162 m., Magdalena (8°19' N., 73°38' W.). A village in the Magdalena Valley, 12 km. due east of Gamarra on the road to Ocaña.

ACUADA DE PABLO, 15 m., Atlántico. A small village on the eastern shore of the Laguna de Guájaro, 56 km. southwest of Barranquilla.

AGUADITA (Ew), 1900-2000 m., Cundinamarca. A locality with a few houses above Fusagasugá and not far below the southern end of the Sabana de Bogotá.

(*) The avifauna of these islands is not included in the check list.

- AGUADULCE, 750-1000 m., Magdalena. A plantation in the western foothills of the San Lorenzo Mts., 3 km. south of Minca on the road to the Hacienda Cincinnati.
- AGUAS CLARAS (Ee), 40 m., Norte de Santander. A railroad station about 40 km. north of Cúcuta.
- AIROCA (Ew), 1200-1300 m., Magdalena (about 9°50' N., 73°03' W.). A Mutilon Indian village on the west slope of the Perijá Mts., southeast of Codazzi and above Casacará, quite near the border of Venezuela. Collections were also made by Carriker above Airoca at 2500-3200 m. altitude.
- ALBÁN (Ew), 2280 m., Cundinamarca (4°53' N., 74°27' W.). A small town just below the western end of the Sabana de Bogotá, 13 km. northwest of Fusagasugá and 10 km. south of Sasaima.
- ALGODONAL, 25 m., Bolívar (9°23' N., 74°45' W.). A hamlet on the west bank of the lower Magdalena River, a few kilometers north of the town of Magangué.
- ALMAGUER (Cw), 2312 m., Cauca (1°55' N., 76°50' W.). A town about 65 km. south and a little west of Popayán. The collecting camp, according to Chapman, was situated "2500 feet above the town" = about 3060 m. above sea level. However, a few Almaguer labels indicate 2250 m.
- "ALTO" (E), about 1800 m., Norte de Santander (8°15' N., 73°27' W.). A collecting station of Wyatt on the summit of the ridge about 8 km. northwest of Ocaña, above Pueblo Nuevo on the old mule trail to Gamarra. Probably the same as today's Alto Real.
- ALTO BONITO (Ww), 300-450 m., Antioquia. A farm 16 km. west of and below Dabeiba on the upper río Sucio which flows into the lower Atrato.
- ALTO DE LA PAZ (Ew), 1400 m., Cundinamarca. Northwest of Bogotá. Not located on any of our maps. Chapman (p. 645) places it above "Pena", which is probably the town of La Peña, Cundinamarca, 1280 m., 25 km. west of Pacho.
- ALTO DEL BUEY, 1810 m., Chocó (6°06' N.). The highest point in the Baudó Mts., at the headwaters of the río Baudó, north of Nuquí on the Pacific Coast. Collections were made here at various altitudes from 900 m. to 1550 m.
- AMALFI (Ce), 1600 m., Antioquia (6° 55' N., 75° 04' W.). A town about 93 km. northeast of Medellín, on a small tributary of the upper río Porce which flows into the río Nechí.

AMBALEMA, 290 m. Tolima (4°47' N.). A town on the west bank of the upper río Magdalena about 48 km. south of Honda, at the edge of the plains of Tolima.

ANCHICAYÁ (río) (Ww), Valle. A small river rising in the Western Andes at about 3000 m. and flowing into the Pacific just south of Buenaventura. Collections were made in the humid forest of the Tropical Zone below 1000 m.

ANDAGOYA, 65 m., Chocó (5°06' N., 76°40' W.). A platinum mining center on the upper río San Juan at the junction with the río Condoto.

ANDÁGUEDA (río) (Ww), Chocó. One of the main headwaters of the río Atrato, where Bagadó is situated.

ANDALUCÍA (Ew and Ee), Huila and Caquetá. The use of this name is unfortunate for birds were collected on both slopes of the Eastern Andes (west in Huila, east in Caquetá) often many thousand feet below Andalucía. What is even more unfortunate is that Chapman often fails to state on which slope of the mountains the bird was taken. I have checked on the labels of some of these birds in New York, and no indication is given even on these. Where possible, however, or where apparently necessary, I have put in brackets after Andalucía either west or east slope. Andalucía is a small village situated at 2310 m. on the west slope near the crest of the Eastern Andes and along the road from the upper Magdalena valley to Florencia, Caquetá. Many birds were taken on the west slope (Huila) as low as 900 m. near Guadalupe, and on the east slope (Caquetá) as low as 600 m., below Sucre.

According to Professor Dugand a suitable locality reference for east slope specimens would have been Sucre, 1025 m., above Florencia.

ANDALUCÍA (Puente). See Puente Andalucía.

ANDES WEST OF POPAYÁN (We), 3100-3200 m. Cauca. A collecting station on the crest of the first ridge of the Western Andes west of Popayán and north of Cerro Munchique. Some specimens were taken at 2700 m. altitude.

ANGELÓPOLIS (Cw), 1955 m., Antioquia. A small town about 28 km. southwest of Medellín.

ANOLAIMA (Ew), 1660-1730 m., Cundinamarca. A small town lying just below the western border of the Sabana de Bogotá. It is probably a source of many "Bogotá" trade skins.

ANSERMANUEVO (We), 1035 m., Valle. A village 10 km. west of Cartago in the Cauca Valley, at the foot of the Western Andes.

ANTIOQUIA (Ciudad de), 700 m., Antioquia (6°33' N., 75°50' W.). A colonial town at the eastern base of the Western Andes, a short distance from the west bank of the Cauca River. Salmon collected in the vicinity.

The valley of the río Cauca is here 8 to 15 km. wide, rolling, and arid.

ANTIOQUIA. A Department in northwestern Colombia reaching from the lower Atrato and the Caribbean coast to the middle Magdalena valley. Trade skins from this Department are usually from the vicinity of Medellín. Salmon's birds came from the vicinity of the town of Antioquia (see above).

APIAY, 360 m., Meta (4°03' N. 73°32' W.). A large savanna about 20 km. southeast of Villavicencio, where the military air-field of this town is situated. See also Suria (Caño).

APICALÁ (CARMEN DE), (Ew), 400 m., Tolima. A village in the upper Magdalena valley north of Cunday and close to the border of Cundinamarca.

ARACATACA, 65 m., Magdalena. A small town on the río Aracataca between Tucurín and Fundación, at the western base of the Santa Marta Mts.

ARAUCA, 170 m., Arauca (7°05' N., 70°45' W.). The capital of the Comisaría de Arauca on the río Arauca which forms the border of Colombia and Venezuela. Eastern Llanos. A Venezuelan collecting station (El Amparo) lies just across the river.

ARBELÁEZ (Ew), 1417 m., Cundinamarca. A village 12 km. southwest of Fusagasugá on the road to Girardot.

ARDITA (Punta), 0 m., Chocó (7°09' N., 77°48' W.). A cape in the extreme northern portion of the Pacific coast just northwest of Juradó and quite near the border of Panamá.

AREHUECA. See Orihueca.

ARENOSA, LA (Ee), 100 m. Norte de Santander. A railroad station 23 km. north of Cúcuta.

ARGENTINA VIEJA, LA., 260-280 m., Meta (4°13' N., 72°41' W.). A farm in the Eastern Llanos, about 110 km. east of Villavicencio and near the Caño Yurimena, which flows into the río Meta.

ARIARI (río), Meta. A river rising on the southern slopes of Sumapaz and flowing southeastward through the western portion of the Eastern Llanos into the río Guaviare.

ARIHUECA. See Orihueca.

ARROYO DE ARENAS, 120 m., Magdalena. A small seasonal stream and a ranch at which Carriker collected a few birds in the arid zone of the Caribbean littoral 35 km. south of Riohacha.

ARROYO DE PIEDRAS, 15 m., Atlántico. A small village near the western edge of Laguna de Guájaro and midway between Barranquilla and Cartagena.

ATÁNQUES OR ATÁNQUEZ, 840 m., Magdalena. A village on the southeastern slopes of the Santa Marta Mts., 25 km. northwest of Valledupar. A few birds were taken in a mountain gorge above this locality at 1200 m.

ATRATO (río), Chocó (also in part on the border of Antioquia and Chocó). The largest river of western Colombia flowing through the Chocó plain between the Western Andes and the Pacific Coast. It rises quite near the border of Antioquia on the Citará Mts. of the Western Andes and flows northward into the Gulf of Urabá on the Caribbean coast.

ATUNCELA (Ww), 900 m., Valle. A collecting station on the upper río Dagua.

AYACUCHO (Ew), about 150 m., Magdalena. An air-field visited by Carriker at the west base of the Eastern Andes, 22 km. by road east of La Gloria, near the río Simaña.

EADILLO (río), Magdalena. An affluent of the río Cesare, flowing from the southeastern slopes of the Santa Marta Mts., north of Valledupar.

BAGADÓ (Ww) 180-220 m., Chocó (5°25' N., 76°23' W.). A village visited by Mrs. Kerr on the río Andágueda, one of the main upper branches of the río Atrato.

EANCO, EL, 50 m., Magdalena (9° N., 73°57' W.). A town on the east bank of the Magdalena River at the junction with the río Cesare. It is near the limit between the lower and middle sections of the Magdalena Valley.

BARANOÁ, 95 m., Atlántico. A village 27 km. southwest of Barranquilla.

BARBACOAS, 36 m., Nariño (1°41' N., 78°08' W.). A small town on the río Telembí which flows from the southwest into the lower río Patía on the Pacific coast.

BARRANQUILLA, 4 to 95 m., Atlántico (10°59' N., 74°47' W.). The capital of Atlántico and the main port of Colombia on the Caribbean coast, on the west bank of the río Magdalena, 15 km. southeast of the mouth.

- BARRIGÓN** or **PUERTO BARRIGÓN**, 240 m., Meta. A small village on the río Humea, an affluent of the Meta, near the junction with the río Guatiquía, 68 km. east of Villavicencio.
- BARRO BLANCO** (Ce), 2160 m., Antioquia. About 20 km. east of Santa Elena on the plateau above Medellín. Not shown on maps.
- BAUDÓ** (Serranía de), Chocó. A low coastal range west of the Western Andes on the Pacific coast, separating the Pacific drainage from the Atrato Valley. The mean altitude of the range is about 700-800 m. Highest point: Alto del Buey (1810 m.). It apparently does not support a subtropical avifauna.
- BAUDÓ** (río), 100-1100 m., Chocó. A river rising from Alto del Buey and flowing southward and westward into the Pacific at Pizarro.
- BEDÓN** (río) (C), 3400 m., Cauca or Huila. A small stream on the Páramo de Puracé near Laguna de San Rafael.
- BELÉN** (Ee), 400-450 m., Caquetá (1°25' N., 75°51' W.). A village at the base of the Eastern Andes, 45 km. southwest of Florencia. The altitude of "600 feet" (180 m.) often given for this locality is incorrect.
- BELTRÁN** (Páramo de), Cundinamarca. "Near Bogotá" but not located on the maps of Cundinamarca. The altitude given by Chapman (Auk, 33, p. 414, 1915) is 9750 feet (= 2970 m.), which seems rather low for a Páramo Zone locality.
- BITACO** (Ww), 1500 m., Valle. A valley above Lomitas and southwest of La Cumbre near the headwaters of the Dagua River.
- BOCA DE CHIMÍ**, 50 m., Bolívar (8°56' N., 74°01' W.). An extinct refueling station for river steamers on the lower Magdalena about 1 km. northeast of San Martín de Loba, a short distance west of El Banco.
- BOCA DEL MONTE** (Ee), about 2250 m., Boyacá. A collecting station of Carriker on the trail from Cocuy to the Llanos de Casanare by way of the salt springs of the río Negro, about two hours journey above Chinibaque and five hours from the top of the Eastern Andes.
- BOCAGRANDE** or **BOCA GRANDE**, 3665 m., Cundinamarca (4°18' N., 74°07' W.). The name of a small páramo and several lagoons on the northern edge of the Páramos de Sumapaz, about 31 km. due south of Bogotá. The altitude of 4000 m. given for this locality is incorrect.
- BOCAS DE CENIZA**, 0 m., Atlántico (11°06' N.). The mouth of the Magdalena River, 15 km. northwest of Barranquilla.

BOCHALEMA (Ee), 1700 m., Norte de Santander. A small town 32 km. southwest of Cúcuta in the upper río Pamplonita valley.

BOGOTÁ (Ew), 2620 m., Cundinamarca (4°36' N., 74°05' W.). The capital of Colombia and of the Department of Cundinamarca, situated near the southeastern corner of the tableland known as Sabana de Bogotá. Less than 2 km. east of the outskirts of the city the mountains rise abruptly to 3100-3300 m. and a short distance eastward to 3600-3900 m. Vast comercial collections reached Europe from there and 347 recognized forms were described from "Bogotá" trade skins. As early as 1857 Sclater records no less than 510 different kinds of birds known from "Bogotá" collections (Proc. Zool. Soc. London, 1857, p. 15).

However, a locality to which so many species of birds have been attributed, has, as a matter of fact, a comparatively restricted fauna. By far the greater number of the "Bogotá" trade skins were taken by native collectors at much lower altitudes on either side of the Eastern Andes, in the area lying between the upper Magdalena valley on the west, and the Llanos at the eastern base of the mountains. This area contains four altitudinal zones, of which the Tropical and Subtropical on the Magdalena side are faunally distinct from the corresponding zones on the side facing the Eastern Llanos. Some skins were undoubtedly collected as far west as the Central Andes, and others in the middle Magdalena valley. In fact, only a few of the many forms described from "Bogotá" inhabit the Temperate Zone. The great majority of them are birds of the Tropical and Subtropical Zones.

In view of this, the "Bogotá" records in this paper refer to the skins thus known, and not to Bogotá as a definite locality. Authentic records from Bogotá and immediate vicinity on the tableland are given as Sabana de Bogotá in order to prevent confusion.

BOGOTÁ (SABANA DE) (Ew), Cundinamarca. The name of the tableland, nearly 100 km. long, and 5 to 45 km. wide, on which the city of Bogotá is situated. The Sabana de Bogotá is enclosed by two of the main ridges of the Eastern Andes, the lowest passes of which are nowhere below 2672 m. except at the narrow and precipitous gorge of Alicachin (2540 m.) at the southwestern edge of the tableland, through which the río Bogotá flows out of the plateau a few kilometers before plunging over the Tequendama Falls. On the east side the lowest pass is that of Chipaque,

3150 m. high. The highest peaks to the northwest of the plateau rise to 3805 m.; those east of it to 3950 m. On the south side the mountain mass of Sumapaz reaches 4560 m. The northern end of the Sabana is practically continuous with the tablelands of Boyacá in the headwaters of the río Suárez and the río Sogamoso. The Sabana de Bogotá is a level land composed for the most part of pastures and planted fields, with marshes and lagoons, present chiefly during the rainy season. The mean altitude of the floor of the Sabana is about 2580 m. with but a few hills and low ridges jutting out here and there to 100-350 m. above the level of the plain.

BONDA, 50 m., Magdalena. A village 13 km. east of Santa Marta. Specimens labeled "Bonda" or "Santa Marta" collected by W. W. Brown, Jr., or Herbert H. Smith may have been taken at various elevations along the río Manzanares valley up to 1800 m. or more on the mountain slopes to the southeast.

FORDO, EL, 900-1015 m., Cauca. A village in the upper Patia valley, 60 km. southwest of Popayán.

BOSA, 2573 m., Cundinamarca. A village on the Sabana de Bogotá near the Techo airport, 11 km. west of Bogotá.

BOSQUE, EL, 540 m., Guajira. A locality visited by Carriker in the forested Montes de Oca region, south of Carraipia, at the extreme northern tip of the Perijá Mts. (11°09' N.), near the Venezuelan border.

BUCARAMANGA (Ew), 1018 m., Santander (7°08' N., 73°09' W.). The capital of Santander. An important city above the canyon of the upper río Lebrija.

BUENAVENTURA, 0 m., Valle (3°53' N., 77°05' W.). The principal port of Colombia on the Pacific Coast, at the mouth of the río Dagua. The bay of Buenaventura was formerly known as Bahía del Chocó (Chocó Bay).

BUENAVISTA (Ee), 1230 m., Meta. A posada just above Villavicencio on the road to Bogotá. It is situated on a short, heavily forested spur of the Eastern Andes. Collections were made below and above Buenavista from about 1000 m. to 1400 m. This locality is probably a source of many "Bogotá" trade skins.

BUENAVISTA (Ew), 2300-2600 m., Huila. At the head of the Magdalena Valley, 36 km. east of San Agustín. The altitude of the village is probably lower than 2300 m.

BUENAVISTA, 360 m., Nariño (1°32' N., 78°05' W.). A small settlement on the Pacific slope, 20 km. south of Barbacoas.

BUGA, 965-1010 m., Valle (3°54' N.). A town in the Cauca Valley, 42 km. due north of Palmira and slightly east of the río Cauca.

BURITACA, 0 m., Magdalena. A point on the north coast of the Santa Marta district at the mouth of the río Buritaca, about 48 km. east of Santa Marta.

CABICA (Isla de), 5 m., Atlántico. An island in the Magdalena River just south of Barranquilla.

CABO MARZO, 0 m., Chocó. A cape on the Pacific coast between Bahía de Coredó and Bahía Octavia, 30 km. south of Juradó.

CABUYARO, 200 m., Meta (4°17' N., 72°48' W.). A small village on the left bank of the río Meta near the mouth of the río Upiá, 95 km. east of Villavicencio.

CACAGUALITO, 450 m., Magdalena. A small and now abandoned plantation on the trail from Bonda to Riohacha, about 25 km. east of Santa Marta, near the top of the divide beyond the Matojiró Valley.

"CAÇANARES,, = CASANARE, LLANOS DE, which see.

CACHIPAY (Ew), Santander. On the upper río Opón, 18 km. west and very slightly north of Contratación. Another locality of the same name is situated below Anolaima on the west slope of the Eastern Andes in Cundinamarca. The altitude of the latter is about 1600 m.

CÁCHIRA (Ew), 2015 m., Norte de Santander (7°44' N., 73°04' W.). A town in the headwaters of the río Cáchira, an affluent of the río Lebrija, just west of and below Páramo de Guerrero, along the road from Ocaña to Bucaramanga.

Wyatt's "Portrerras" is situated about 14 km. south of Cáchira, and Carriker's Ramírez and Las Ventanas are between 8 and 12 km. north and northwest of the town.

CACHIRÍ (Ew), 1890 m., Santander (7°28' N., 73°01' W.). A village 45 km. north of Bucaramanga, on a small tributary of the río Lebrija. The name "Páramo de Cachirí" may apply to any of the heights rising north and east of the village to 3000-4000 m. Not to be mistaken for Cáchira, a town in Norte de Santander.

CAIMÁN (Punta, or better Playa), 0 m., Magdalena. A beach lined with mangroves in the eastern half of Isla de Salamanca which separates the Ciénaga Grande from the Caribbean.

- CAJIBÍO, 1700-1800 m., Cauca. A town in the upper Cauca Valley, 23 km. north of Popayán.
- CAJÓN (río), 60-100 m., Chocó. A small affluent of the río Sipi, joining that stream near its junction with the río San Juan.
- CALAMAR, 12 m., Bolívar (10°16' N.). A town on the west bank of the Magdalena River, 81 km. south of Barranquilla.
- CALDAS. The original name of the town of Dagua. The name was changed officially in 1918. In order to prevent confusion with the Department of Caldas the locality is referred to as Dagua in the present paper.
- CALERA, LA (Ew), 2720-2850 m., Cundinamarca. A small valley and village about 13 km. northeast of Bogotá, just above the Sabana de Bogotá.
- CALI (We), 980-1050 m., Valle (3°27' N., 76°31' W.). The capital of Departamento del Valle, in the Cauca Valley at the eastern base of the Western Andes and 5 km. west of the río Cauca.
- CALIMA (Ww), 1500-1900 m., Valle (3°53' N., 76°31' W.). A small village visited by K. von Sneidern on the upper río Calima, an affluent of the lower río San Juan flowing quite near the border of Valle and Choco.
- Other specimens labeled "Calima", "Mouth of Calima", and "Río Calima" were collected by M. G. Palmer on the lower río Calima at various altitudes from 5 m. (at the junction with the río San Juan) to about 200 m. at the west base of the Western Andes.
- CAMELIA, LA (Cw), 1800 m., Antioquia. A coffee plantation visited by Fuhrmann and Mayor on one of the headwater streams of the río Amagá, an affluent of the middle río Cauca, a short distance southwest of Angelópolis.
- CAMPERUCHO, 180 m., Magdalena (10°07' N., 73°40' W.). A small village near the extreme southern foothills of the Santa Marta Mts., on a small tributary of the río Cesare and along the road from Fundación to Valledupar.
- CANDELA, LA (Ce), 1600-2300 m., Huila. A ranch in the giant primeval forest at the head of the Magdalena Valley, a day's journey west of San Agustín.
- CANTA (Ew), 1000 m., Santander. A locality visited by Wyatt about 8 km. due west of Bucaramanga, midway between that city and Naranjo. Known usually as Cantabria.
- CANUTO (Ee), 1500-1800 m., Norte de Santander. Not shown on modern maps. On old ones a locality of this name is shown on the trail

from Ocaña to Cáchira in the headwaters of the río Tarra, about 40 km. southeast of Ocaña, at 7°55' N. and 73°12' W. Wyatt describes it as "a hut".

CÁQUEZA (Ee), 1750 m., Cundinamarca. A small town below Bogotá and 13 km. from Quetame on the road to Villavicencio. Probably a source of many "Bogotá" trade skins.

CARACAS (CERRO DE), 1500-3600 m., Magdalena. A large mountain ridge rising to 3900 m. on the northern side of the Santa Marta Mts., east of the snow peaks, near San Miguel.

CARACOLICITO, 200-250 m., Magdalena. A hamlet at the southwestern base of the Santa Marta Mts. near the río Ariguani, an affluent of the lower río Cesare, about 40 km. southeast of Fundación.

CARARE (río) (Ew). A river rising in northern Cundinamarca near the border of Boyacá, and known there as río Minero. It flows across the narrow western tip of Boyacá near Muzo, and through a large part of southwestern Santander not far to the west of Landázuri, and empties into the Magdalena River at 6°48' N. about midway between Puerto Berrio and Barrancabermeja.

CARDÓN, EL (E), 3300 m., Boyacá. A pass visited by Carriker above Peñablanca, about 6°11' N.

CARMEN, EL (Ew), 2800 m., Cundinamarca. This probably refers to the town known as Carupa or El Carmen de Carupa (2980 m.), 80 km. north of Bogotá.

CARMEN, EL (Ww), 1380 m., Valle. A small town in the headwaters of the río Dagua, between Dagua and Las Cruces.

CARMEN DE APICALÁ. See Apicalá.

CARMEN DE JACOPÍ. See Yacopí.

CARPINTERÍA. See Carpintero.

CARPINTERO, 70 m., Santander. A small village on the east bank of the río Magdalena (8°06' N.), a few kilometers above the mouth of the río Lebrija.

CARRAIPÁ, 90 m., Guajira (11°17' N., 72°20' W.). A village in the southern Guajira plains near the Venezuelan border, about 72 km. southeast of Riohacha, near the northern tip of Montes de Oca, which form the extreme northern end of Sierra de Perijá.

CARTAGENA, 0 m., Bolívar. A historical sea port on the Caribbean coast, and the capital of Bolívar, about 105 km. southwest of Barranquilla. The first birds described from Colombia by Linnaeus were collected in the vicinity.

CARTAGO (Cw), 918 m., Valle (4°45' N., 75°55' W.). A town in the northern part of the Cauca Valley.

CASACARÁ (Ew), Magdalena. A small village about 26 km. southwest of Codazzi, on the rio Casacará, an affluent of the rio Sicarare which flows into the rio Cesare. Carriker collected near the village at the western foot of the Perijá Mts. (200-300 m. alt.) and above it on the west slope of this range up to 1600 m. altitude.

CASANARE (Llanos de), 120-350 m., Boyacá and Arauca. The portion of the Eastern Llanos extending north and south of the rio Casanare between the rio Arauca on the Venezuelan border and the rio Meta.

"CATAMUCHO". See Tacamocho.

CAUCA, EL (Ew), 900 m., Magdalena. A small farm visited by Carriker about 12 km. southeast of Aguachica.

CAUCA, rio. A large river rising quite near the source of the rio Magdalena in the Central Andes and finally joining the main channel of this same river at 8° 55' N., near Pinillos on the Caribbean coastal plain, after flowing between the Western and Central Andes through the Departments of Cauca, Valle, Caldas, Antioquia, and Bolívar.

CAUCA VALLEY. As here defined this name applies to that region traversed by the rio Cauca lying between Popayán and Cartago. It is sometimes misapplied to the region bordering the lower rio Cauca in the Departments of Caldas and Antioquia, which is here referred to as the lower Cauca valley. Salmon's specimens labeled "Cauca" doubtless were taken along the lower rio Cauca in Antioquia.

CAUTILITO, 20 m., Magdalena. A locality without any houses near the mouth of the Quebrada Mojada, about 2 km. east of Mamatoco, along the road to Bonda in the Santa Marta district.

CERRO PINTADO, Magdalena (10°29' N.). A peak in the Perijá Mts. southeast of Villanueva, on the border of Colombia and Venezuela. Carriker collected on its northwestern slope at various altitudes from 2500 m. up to 3200 m. on the summit.

CESAR OR CESARE, rio, Magdalena. An important river flowing between the Santa Marta Mts. and the Sierra de Perijá, southwestward through a level plain to the rio Magdalena which it joins at El Banco. (Wrongly accented César on many maps).

CHAFURRAY, 270 m., Meta (3°08' N., 73°14' W.). An air-field in the

- Eastern Llanos about 115 km. south of Villavicencio, on the río Ariari, an affluent from the northwest of the río Guaviare.
- CHAPINERO, 2620 m., Cundinamarca. A suburb of Bogotá, in the northern section of the city.
- CHARO (Isla), 200 m., Arauca (7°02' N., 71°47' W.). A large forested island in the río Arauca on the border of Colombia and Venezuela, not far from the eastern base of the Eastern Andes.
- CHAYASQUER, 2300-2600 m., Nariño. Exact position uncertain.
- CHICORAL, 450 m., Tolima (4°13' N., 74°59' W.). A village on the río Coello, 18 km. west of the río Magdalena, in the plains of Tolima northwest of Espinal.
- CHILES (Volcán de), Nariño (0°49' N., 77°55' W.). A volcano rising to 4748 m. on the exact boundary of Colombia and Ecuador. The northern side is in Colombia. Collections were made there at 3000-3700 m.
- CHILÍ (Ce), about 2100 m., Tolima (4°08' N., 75°28' W.). A village on the río Chili, 43 km. southwest of Ibagué.
- CHIMÍ. See Boca de Chimí.
- CHINCHICUÁ, 3000-3300 m., Magdalena. A mountain mass on the south side of the Santa Marta range, southeast of San Sebastián de Rábago. The Chinchicuá Valley is at a lower altitude (about 2000 m.) and southwest of San Sebastián.
- CHINGASA OR CHINGAZA (Páramo de) (Ee), 3400-3700 m., Cundinamarca. A large páramo lying on the ridge rising just northeast of Fòmeque, 30 km. due east of Bogotá.
- CHINIBAUQUE (Ee), 1400-1500 m., Boyacá (6°08' N., 72°21' W.). A little village on a small mountain stream of the same name flowing from the northwest into the upper río Casanare near Salina. See also Boca del Monte.
- CHIPAUQUE (Ee), 2500-3000 m., Cundinamarca. A small town lying in the first valley southeast of Bogotá, 20 km. from that city. The altitude given by Chapman shows that the collections were made above Chipaque and just below the Pass (Boquerón de Chipaque: 3150 m.) through which runs the Bogotá-Villavicencio road. The altitude of the town itself is 2470 m.
- CHIRÚA, 600-1200 m., Magdalena. A valley and stream on the north slope of the Santa Marta Mts., south and slightly west of Dibulla. Heights of Chirúa = 1500-2100 m.
- CHIRUCUA OR CHIRUGUA (Páramo de), 3300 m. up to snow-line, Magdalena. A large páramo on the north slope of the Santa Marta

- Mts., at the headwaters of the rio Macotama and just northeast of the snow peaks. "Chiruqua" is a misspelling of this name.
- CHISQUIO** (We), about 2000 m., Cauca (2°29' N.). A small village on the eastern slope of the Western Andes, just northwest of El Tambo.
- CHOACHÍ** (Ee), 1970 m. (1500-2800 m.), Cundinamarca. A village on the eastern slope of the first ridge southeast of Bogotá. A source of many "Bogotá" skins which could have been taken between the altitudes given in parentheses.
- CHOACHÍ** (Páramo de) (Ee), 3200-3600 m., Cundinamarca. Northwest of and above Choachí along the road to Bogotá.
- CHOCÓ BAY**. See Buenaventura.
- CIÉNAGA**, 5 m., Magdalena. A town on the Caribbean coast at the northeastern edge of the Ciénaga Grande, 28 km. south of Santa Marta.
- CIÉNAGA GRANDE** (de Santa Marta), 0 m., Magdalena. A large brackish lake in the delta system of the Magdalena River, bordered with mangrove, swamp forest, and open marshes. It is fed by several narrow branches from the main channel of the Magdalena, and by numerous streams draining the western slope of the Santa Marta Mts. A narrow strip of sandy beach (Isla de Salamanca) separates it from the Caribbean Sea. Its outlet into the sea is a narrow pasageway a short distance from the town of Ciénaga.
- CINCINNATI**, 900-1700 m., Magdalena. A large coffee plantation formerly known as Valparaíso, on the west slope of the San Lorenzo ridge, 23 km. southeast of Santa Marta, at which both H. H. Smith and M. A. Carriker, Jr., have made important collections.
- CINTO** (Ancón de), 0 m., Magdalena. A cove on the Caribbean coast, 20 km. northeast of Santa Marta.
- CISNEROS** (Ww), 300 m., Valle. A village in the humid forest of the rio Dagua at the junction of this river and the rio Pepitas, 55 km. east of Buenaventura by rail. Formerly called Juntas, Yuntas, and Los Mangos. Collections have also been made by von Sneidern above Cisneros at about 1000 m. altitude.
- COCAL** (Ww), 1200-1800 m. Cauca. A settlement northwest of Cerro Munchique on the trail to Mechengue. According to Chapman, several birds labeled "Cocal" were in reality taken near 2100 m. on the trail above the settlement.
- COCONUCO** (Cw), 2480 m., Cauca. A village about 23 km. southeast of Popayán and just west of Volcán de Puracé, along the road to Paletará at the headwaters of the rio Cauca. Collections have

been made from the altitude of the town to about 3100 m. on the neighboring mountains.

"COCUTA SURATÁ" = CÁCOTA DE SURATÁ (Ew), about 1500 m., Santander. The first name (Cácota) is not used today. The town of Suratá is 35 km. northeast of Bucaramanga, south of Cachiri, at 1740 m. Near it flows the rio Suratá which empties into the Lebrija quite near Bucaramanga. Wyatt (map, Ibis, 1871, opposite p. 113) uses the old name, and in addition this map shows another settlement about 8 km. south of "Cocuta" Suratá called "Cocuta Matanza". Matanza (1555 m.) is a town near Suratá.

"COCUTA VALLEY" (Ew), Santander. Refers to the Suratá Valley north of Bucaramanga (see above) and not to the Cúcuta Valley in Norte de Santander.

CODAZZI, 200 m., Magdalena (10°02' N.). Formerly known as Espiritu-santo. A village at the western base of the Sierra de Perijá, 48 km. south and slightly east of Valledupar.

COELLO, rio, about 400 m., Tolima. An affluent of the upper rio Magdalena which it joins at 4°17' N. Chicoral is situated on its south bank.

COGUA, 2665 m., Cundinamarca. A small village about 50 km. north of Bogotá, near the northern end of the Sabana de Bogotá.

COLORADA, LA (Ee), about 600 m., Boyacá (6°04' N., 72°08' W.). A locality visited by Carriker on the Quebrada Colorada, a small mountain stream flowing into the upper rio Casanare about 30 km. west of Palmar.

COMBEIMA, rio (Ce), Tolima. A river rising on the Nevado del Tolima, flowing near Ibagué and into the rio Coello. Detwiler secured specimens in the upper Combeima valley above Ibagué.

CONCEPCIÓN, LA, 900 m. or more, Magdalena. A plantation visited by W. W. Brown, Jr., on the trail from Dibulla to Pueblo Viejo. Birds labeled from this locality were also taken in the Sub-tropical Zone.

CONCHA (ANCÓN DE, OR PLAYA), 0 m., Magdalena. A cove on the Caribbean coast, 7 km. northeast of Santa Marta. A small stream, called Quebrada Concha, flows into it.

CONCORDIA (We), 1740-2030 m., Antioquia (6°04' N., 75°55' W.). A town near which Salmon collected, about 45 km. southwest of Medellín.

CONDOTO, 70 m., Chocó (5°06' N., 76°37' W.). A village on the rio Condoto, a few km. east of its junction with the rio San Juan, east of Andagoya.

- CONEJO, about 180 m., Magdalena. A small village 8 km. southeast of Fonseca, in the level country of the upper río Ranchería valley, between the Santa Marta Mts. and the Perijá Mts., near the foothills of the latter.
- CONSUELO, EL (Ew), 960-1350 m., Cundinamarca. An extinct posada just below Alto del Sargento (1420 m.), the first ridge of the Eastern Andes east of Honda, on the road from Honda to Bogotá. The locality is about 18 km. southeast of Honda, but much nearer to and just west of the town of Guaduas.
- CONTRATACIÓN (Ew), 1690 m., Santander (6°18' N., 73°29' W.). A town 50 km. southwest of San Gil in the upper valley of the río Suárez, an affluent of the Sogamoso.
- CÓRDOBA, 37 m., Valle. A small town 18 km. east of Buenaventura in the forested lowlands of the lower río Dagua valley.
- COSTA, LA (Ww), 700-1100 m., Cauca. A region on the Pacific slope of the Western Andes below Cerro Munchique.
- COYAIMA, 440 m., Tolima (3°48' N., 75°12' W.). A village on the río Saldaña in the plains of Tolima, near the eastern base of the Central Andes.
- CRUCERO, about 1800 m., Cauca. A locality in the vicinity of Popayán.
- CRUCES, LAS (We), 2100 m., Valle. The name of the divide and of a wayside posada near the pass above San Antonio, on the old mule trail from Cali to Buenaventura. American Museum specimens from this locality are labeled "San Antonio", the nearest settlement.
- CRUZ, LA (Ee), about 1400 m., Norte de Santander. A small town now known as Abrego. It is situated in a large savanna 25 km. southeast of Ocaña.
- CUCUNGACA OR CUNGUCACA. See Cuncugaca.
- CUCUNUBÁ (LAGUNA DE) (Ew), 2585 m., Cundinamarca (5°17' N., 73°48' W.). A small lagoon 75 km. northeast of Bogotá, just south of Laguna de Fúquene.
- CÚCUTA (Ee), 215 m., Norte de Santander (7°54' N., 72°31' W.). The capital of Norte de Santander, on the río Pamplonita (an affluent of the río Zulia), quite near the Venezuelan border.
- CUDUYARÍ, 150 m., Vaupés. A small forest stream flowing into the north side of the río Vaupés near Mitú.
- CUEMBI, río, about 260 m., Putumayo. Also spelled Cuhembi and Cuhimbé. A small river flowing from the west into the río Putumayo at 0°22' N., and 76°25' W. quite near the border of Ecuador.

The whole course of the Cuembi is in Colombian territory; the Ecuador boundary is at the mouth.

CUEVA, LA, about 300-400 m., Magdalena. A locality visited by Carriker in the eastern foothills of the Santa Marta Mts., above and west of Fonseca.

CUMARAL (Ee), 340 m., Meta. A small village near the base of the Eastern Andes, 22 km. northeast of Villavicencio.

CUMBAL (Volcán de), Nariño (0°57' N., 77°52' W.). A volcano rising to 4764 m. about 18 km. northeast of Volcán de Chiles. The Páramo de Cumbal is at a lower altitude (approx. 3500-4200 m.). The village of Cumbal is at 3030 m. Collections labeled "Cumbal" were made at altitudes varying from 3000 to 4200 m.

CUMBRE, LA (Ww), 1580 m., Valle. Near the divide of the Western Andes, southeast of Pavas and above Bitaco.

CUNCUGACA, 3300-3700 m., Magdalena. A high valley visited by Carriker at the source of the rio Cataca, south of the snow peaks, on the southwestern side of the Santa Marta Mts.

CUNDAY (Ew), 485 m., Tolima (4°05' N., 74°41' W.). A small town in the upper Magdalena, 20 km. east of the river, and not far to the southwest of Icononzo.

DABEIBA (Ww), 600 m., Antioquia (7°02' N., 76°16' W.). A small town in the upper rio Sucio valley. The rio Sucio flows westward into the lower Atrato.

DAGUA (Ww), 816 m., Valle. The new name of the town of Caldas, in the arid and treeless section of the upper Dagua valley (700-1000 m.), southeast of Cisneros.

DAGUA, río (Ww), Valle. A river rising on the western slopes of the Farallones de Cali near El Carmen and flowing into the Pacific at Buenaventura Bay.

DARIÉN (Serranía del), Chocó. A forested range stretching across the eastern end of the Isthmus of Panamá and forming the boundary of Colombia and Panamá. Its highest point is Cerro de Tacarcuna, 2280 m. in height. The name Darién was often extended by early geographers (until the last century) to include the whole of the Chocó region of Colombia south to Buenaventura Bay. It is now restricted to extreme eastern Panamá and the adjacent part of Colombia lying west of the lower rio Atrato and north of the rio Truandó along the Panamá border.

DIBULLA, 0-150 m., Magdalena. A small village on the northeast coast of the Santa Marta region, 60 km. southwest of Riohacha. Most of

the "Dibulla" birds were really taken at "La Victoria", a cattle estate and plantation owned by Dr. Dugand's father when the Carrikers visited the region in February and April, 1914. This hacienda is situated in the humid forest between the río Dibulla and the río Lagarto, less than 10 km. southwest of Dibulla.

DIFÍCIL, EL, 100-200 m., Magdalena (9°53' N., 74°13' W.). An oil camp in the lower Magdalena valley, between the río Magdalena and the río Ariguani, about 45 km. southwest of Caracolicito.

DIQUE, about 75 m., Santander. A point on the east bank of the río Magdalena just north of Ciénaga de Paturia, near the junction of the Sogamoso and the Magdalena. (Shown on Wyatt's map but not on modern ones). "Dique de Paturia" is the name of the outlet of Ciénaga de Paturia into the río Magdalena. This is very probably the locality referred to by Wyatt.

DONAMA, 600 m., Magdalena. A plantation and village about 30 km. east of Santa Marta. Misspelled "Don Amo" by Todd and Carriker. "DON AMO". A misspelling for Donama, which see.

DON DIEGO, 0 to 100 m., Magdalena. An old plantation in the humid forest of the north coast of the Santa Marta region, about 60 km. east of Santa Marta.

DONJACA, 30 m., Magdalena. A railroad station on the Caribbean coast, about two thirds of the distance between Santa Marta and Ciénaga.

DONJUANA, LA (Ee), 734 m., Norte de Santander. A village 26 km. south and a little west of Cúcuta on the río Pamplonita.

DORADA, LA, 175 m., Caldas. An important river port and railroad terminus on the west bank of the Magdalena River (5°28' N.) at the head of steamer navigation, 30 km. north of Honda. It is at the southern limit of the heavily forested bottomland of the middle Magdalena valley.

EDÉN, EL (Ce), 2500-2700 m., Tolima. A posada on the old Quindio Trail above Ibagué.

EDÉN, EL (Ee), 100 m., Norte de Santander. A railroad station about 26 km. north of Cúcuta.

ENCONOSA, Cundinamarca. "Near Bogotá" according to Chapman, who says (p. 517) that a few birds from that locality were purchased from a native collector. Not located on maps. The name is probably that of a ranch or of a small creek, or perhaps just a misspelling for Icononzo.

- ENVIGADO (Ce), 1620 m., Antioquia. A town about 10 km. south of Medellín, at which Salmon collected.
- ESMERALDA, MONTAÑA DE (Ew), about 2500 m., Cundinamarca. The name of the slope below the Páramo de La Piñuela, overlooking the town of Pacho, about 4 to 5 km. south of this town.
- ESPERANZA, LA, about 100 m., Magdalena. A cattle ranch visited by Carriker on the valley floor of the río Cesare, 18 km. southwest of Codazzi, near the west base of the Perijá Mts.
- ESPINAL, 440 m., Tolima. A small town in the plains of Tolima, near the west bank of the río Magdalena, 18 km. south and slightly west of Girardot, Cundinamarca, along the road to Ibagué.
- ESPINAL (Ww), 1000-1200 m., Valle. A station on the railroad from Buenaventura to Cali, in the upper Dagua Valley east of Cisneros. Collections were probably made on the slopes of the valley above the locality since the altitude of the railroad station is only 650 m. (Misspelled "Aspinal" on the Millionth Map).
- ESTACION SALDAÑA, about 400 m., Tolima (3°56' N., 75°01' W.). A railroad station quite near the río Saldaña in the plains of Tolima, 12 km. northwest of Purificación.
- FACATATIVÁ, 2600 m., Cundinamarca. A town near the western edge of the Sabana de Bogotá, 40 km. northwest of Bogotá. The distance from Bogotá to about 5 km. west of Facatativá (i.e. 45 km.) is the greatest width of the Sabana de Bogotá.
- FALOTE OR FALOTES (Laguna de), 355 m., Meta. A small lagoon near the Apiay airfield, about 22 km. southeast of Villavicencio.
- FLORENCIA, 450 m., Caquetá (1°36' N., 75°36' W.). The capital of Caquetá, near the base of the Eastern Andes and a few kilometers west of the río Orteguaza, which flows southward into the río Caquetá at Tres Esquinas. The altitude of 675 ft. (206 m.) given by Chapman is incorrect.
- FLORIDA, LA (We), 2200-2400 m., Cauca. Near the crest of the Western Andes west of Popayán, northeast of Cerro Munchique.
- FÓMEQUE (Ee), 1825-1930 m., Cundinamarca. A small town 25 km. southeast of and below Bogotá, on the other side of the valley from Choachí. It is probably a source of many "Bogotá" trade skins.
- FONCE, RÍO, Santander. An affluent of the río Suárez, on which San Gil is situated.
- FONSECA, 200 m., Magdalena (10°54' N., 72°51' W.). A village at the eastern base of the Santa Marta Mts., on the level plain of the

upper rio Ranchería, which is only separated from the rio Cesare drainage by a very low divide. Here the valley between the Santa Marta Mts. and the Eastern Andes (Sierra Negra) is only about 18 km. wide, and very flat.

FRIJOLERA, LA (CW), 1500-1600 m., Antioquia. A collecting station in the virgin forest above Puerto Valdivia, near the town of Valdivia.

FRONTINO (WW), 1330-1550 m., Antioquia (6°47' N., 76°08' W.). A town in the upper valley of the rio Sucio, at which Salmon collected. The country about Frontino is so rugged and steep that birds labeled from that locality may have been taken from 1200 to 1800 m.

FUNDACIÓN, 62 m., Magdalena. A small town in the lowlands at the western base of the Santa Marta Mts. and on the edge of the lower Magdalena valley, 80 km. due south of Santa Marta.

FÚQUENE (LAGUNA DE), (EW), 2580 m., Cundinamarca and Boyacá. A large lake 100 km. northeast of Bogotá on the border of Cundinamarca and Boyacá. About $\frac{3}{4}$ of the lake belongs to Cundinamarca, the rest lies in Boyacá.

FUSAGASUGÁ (EW), 1750 m., Cundinamarca (4°21' N., 74°22' W.). A town about 40 km. southwest of Bogotá, and probably a source of many "Bogotá" trade skins. Collections have been made from this point up to 500 m. above and 250 m. below the town. The name is often incorrectly spelled "Fusugasuga" in ornithological literature.

GACHANCIPÁ, 2600 m., Cundinamarca. A village in the northern part of the Sabana de Bogotá (5° N.) about 50 km. north and slightly east of Bogotá.

GAIRA, 0 m., Magdalena. A small village 6 km. south of the town of Santa Marta, in the arid region of the west coast of the Santa Marta district.

GAIRACA, 0 m., Magdalena. A cove on the north coast of the Santa Marta district, a few kilometers northeast of the town of Santa Marta. The name has been misspelled "Guairaca".

GALAPA, 80 m., Atlántico. A village 15 km. southwest of Barranquilla.

GALERAZAMBA, 0 m., Atlántico and Bolívar (10°48' N., 75°15' W.). The name of a strip of the Caribbean coast lying on the border of Atlántico and Bolívar.

- GALLERA, LA (Ww), 1700-2100 m., Cauca. A settlement in the virgin forest on the western slope of the Western Andes north of Cerro Munchique.
- GAMARRA, 70 m., Magdalena. Formerly known as Puerto Nacional. A port on the east bank of the río Magdalena (8°19' N.), just north of the junction with the río Lebrija.
- GARRAPATAS, río (Ww), Chocó and Valle. An affluent of the río Sipi. It rises in Dept. del Valle about 20 km. south of Cerro Tatamá and is known in the upper part of its course as río de las Vueltas (misspelled "Bueñas" in Chapman's book). See also under Silencio.
- GIRARDOT, 285-330 m., Cundinamarca. An important town on the east bank of the río Magdalena (4°18' N.) on the border of Cundinamarca and Tolima. Misspelled "Giradot" and "Jiradot" in Chapman's book.
- GLORIA, LA, 60 m., Magdalena. A village on the east bank of the río Magdalena (8°37' N.).
- GORGONA (ISLA DE). A heavily forested island in the Pacific (2°58' N., 78°11' W.). It is 9 km. in length by nearly 3 km. in greatest width, triple-hilled, the central peak rising to 395 m. above sea level.
- GORGONILLA (ISLOTE DE). The name applied to a small peninsula-like extension from the southern tip of Gorgona Island, separated at high water.
- GRAMALOTE (Ee), 1020 m., Norte de Santander. A town 32 km. due west of Cúcuta.
- GRAMALOTE, CAÑO, 450 m., Meta. A small stream quite near Villavicencio.
- GRANDE, CAÑO, 450 m., Meta. A stream flowing into the río Ocoa between Villavicencio and Apiay.
- GUABAS, río (We), Cauca. A stream west and slightly south of El Tambo, south of Cerro Munchique.
- GUABINAS (We), 1000 m., Valle. A small village just 10 km. north of Cali on the road to Yumbo, near the río Cauca.
- GUADUAS (Ew), 1010 m., Cundinamarca (5°04' N., 74°36' W.). An old colonial town lying in the first valley southeast of Honda, below the ridge known as Alto del Sargento. Probably a source of many "Bogotá" trade skins. See also under El Consuelo.
- GUAICARAMO OR GUAYCARAMO (Ee). Several hills rising at the base of the eastern Andes near the junction of río Guavió and río Upiá, where the boundaries of Boyacá, Cundinamarca, and Meta come

together (4°43' N., 73°02' W.).

GUAINÍA, río, Vaupés (2° to 2°45' N.). The name of the upper course of the río Negro above the junction with the Casiquiare. It forms the boundary between Colombia and Venezuela from 67°52' W. to the confluence of the Casiquiare. The name is often spelled "Huaynia" in ornithological literature.

GUAIRACA. See Gairaca.

GUÁJARO (LAGUNA DE), 12 m., Atlántico. A large lagoon 15 km. long and from 1½ to 4½ km. wide, about 55 km. southwest of Barranquilla. La Peña and Aguada de Pablo are situated on its eastern shore.

GUAJIRA, LA (also spelled Goajira). A large peninsula forming extreme northern Colombia as well as the extreme northern tip of South America, stretching from 11°15' to 12°30' N. between the Caribbean Sea and the Gulf of Maracaibo. It is low and very arid except on the Macuire Mountains and the Montes de Oca region.

GUALANDAY, 480 m., Tolima. A railroad station in the plains of Tolima about 9 km. northwest of Chicoral.

GUAMALITO, 400 m., Tolima. A small village on the west bank of the upper río Magdalena (3°56' N.), north of Purificación.

GUASCA, 2720 m., Cundinamarca. A village in one of the northeastern side valleys of the Sabana de Bogotá. The name Páramo de Guasca applies to the summit of the main ridge of the Eastern Andes which rise just above and east of the village. Birds have been collected at altitudes varying from 2800 to 3400 m. both on the western and the eastern slope.

GUATAPURÍ, río, Magdalena. The name of a river and valley on the southeastern slope of the Santa Marta Mts. The Guatapurí flows into the río Cesare near Valledupar. Collections have been made recently by Carriker in the upper valley at 2400-3000 m.

GUATIQUEÍA, río, Meta. An affluent of the río Meta, which it joins between Puerto López and Cabuyaro. Villavicencio is situated on its south bank.

GUAVIARE, río. A large river flowing across the Eastern Llanos into the Orinoco, which it joins near San Fernando de Atabapo, Venezuela. Known in the upper part of its course (above the mouth of the Ariari) as río Guayabero.

GUAVIO, río (Ee), Cundinamarca. An affluent of the río Upía, which it joins quite near Gualcaramo. Part of its lower course forms the border of Cundinamarca and Boyacá.

- GUAYABAL (Ee), 200-300 m., Norte de Santander. A railroad station 18 km. north of Cúcuta, where the semi-arid vegetation of the Cúcuta lowlands merges into the humid forest of the Catatumbo basin.
- GUAYABERO, río, Meta. The upper course of the río Guaviare, above the mouth of the río Ariari.
- GUAYACANA, LA, 200-800 m., Nariño. A point on the Pacific slope near El Diviso which is about 25 km. west and somewhat north of Ricaurte. It is situated in the valley of the río Güiza, an affluent of the río Mira. The name has been misspelled "La Guayana".
- GUAYANA, LA. See La Guayacana.
- GUAYURIBA, río, Meta. A small affluent of the upper río Meta flowing about 20 km. south of Villavicencio.
- GUENGÜÉ, 1050 m., Cauca (very near the border of Valle). A ranch in the Cauca Valley, on the río Guengué, 30 km. southeast of Cali and a few km. east of the Cauca River. Misspelled "Güengüe" by Chapman, who says in error that this locality is on the west side of the Cauca River.
- GUERRERO (PÁRAMO DE), 3000-3200 m., Norte de Santander (7°45' N., 73° W.). Just west of Salazar.
- GUINEO, about 100 m., Valle (4°02' N., 77°03' W.). A small village north of Buenaventura, near the río Calima, an affluent of the lower río San Juan.
- HACIENDA JARAMILLO (Ce), about 3100-3500 m., Tolima. A farm on the east slope of the Central Andes, just below Páramo del Ruiz, at which Carriker collected in September, 1918.
- HAMACAYACU, río, 100 m., Amazonas. A stream flowing into the northern side of the Amazon River at 3°48' S., 70°19' W., 60 km. northwest of Leticia.
- HERRADURA (Ee), about 1300 m., Norte de Santander. A Wyatt locality not found on maps. Wyatt shows it about 10 km. south and slightly east of Ocaña, between that town and La Cruz (= Abrego). He describes it as consisting of "half a dozen huts, and distant only three or four hours journey from Ocaña".
- HERRERA, LA (LAGUNA DE), 2550 m., Cundinamarca. A swampy lagoon on the Sabana de Bogotá, 21 km. due west from Bogotá, near Mosquera. Said by Chapman, in error, to be "south of Bogotá".
- HOLANDA, LA, 2555 m., Cundinamarca. The name of a large and well-known farm in the Sabana de Bogotá, quite near the Laguna de La Herrera (see above). Chapman is mistaken in locating it

"26 miles northeast of Bogotá", and he often misspells the name "La Olanda".

HONDA, 230 m., Tolima. An important town on the west bank of the upper rio Magdalena (5°13' N.), at the junction of the rio Guali. Expedition No. 7 of the American Museum collected at the Hacienda "El Triunfo", a few kilometers west of Honda along the road to Mariquita, at an altitude of about 300 m.

Birds labeled "west of Honda" were taken on the east slope of the Central Andes, in the upper rio Guali valley, along the road to Manizales from about 550 m. altitude (near Mariquita) to about 1500 m. in the vicinity of Fresno. A few of such labels indicate "6000 ft." (1800 m.).

"HUT", Norte de Santander. The hut mentioned by Wyatt was situated across a ridge about 6 km. to the north of "Portrerras".

IBAGUÉ (Ce), 1260 m., Tolima (4°26' N., 75°14' W.). The capital of Tolima, on the rio Combeima, at the eastern base of the Central Andes. Ibagué (not "Ibagüe" as spelled by Chapman) is at the entrance of the old trail—and of the new highway—leading over the Quindio Mts. to the Cauca Valley. Another trail follows up the Combeima valley to the Nevado del Tolima.

ICONONZO (Ew), 1305 m., Tolima. A small town about 28 km. southwest of Fusagasugá, quite near the border of Tolima and Cundinamarca.

ICONONZO (PUENTE NATURAL DE) (Ew), 850 m., border of Tolima and Cundinamarca. A natural sandstone bridge crossing the deep and narrow gorge of the rio Sumapaz, about midway between Icononzo, Tolima, and Pandi, Cundinamarca. In the vertical rocky walls of the gorge are many small caves in which live hundreds of Guácharos (*Steatornis caripensis*).

"IGUAMIANDÓ", Chocó (?). A locality at which Mrs. Kerr secured a few specimens for the American Museum, said by Chapman to be in the "upper Atrato Valley". Perhaps this is the rio Jiguiamiandó, just north of the border of Chocó in western Antioquia, north of Murindó, at 7°10' N., but this is in the lower Atrato Valley.

ISNO, EL, 1700 m., Huila. A series of terraced hills, better known as Lomas de Isnos, rising at the head of the Magdalena Valley, 10 km. north of San Agustín.

ITÉ, río, Antioquia (Ce). An affluent of the rio Magdalena, known as rio Cimitarra in the lower part of its course. It rises in the

Central Andes near Remedios and flows into the Magdalena at 7°27' N. after crossing a small part of the extreme southern tip of Departamento de Bolívar. Salmon collected a few birds on the upper río Ité.

JACOPÍ. See Yacopí.

JAMARRAYA, río (Ww), about 1400 m., Caldas. A mountain stream emptying into the río Tatamá, an affluent of the upper río San Juan, west of Pueblorrico. See also under Loma Hermosa.

"JAMBOS, LOS". See Los Tambos.

JAMPAVADÓ OR JAMPARADÓ, río, about 200 m., Chocó. A small stream in extreme northwestern Colombia, rising in the Darién range on the border of Panamá, and flowing into the río Juradó.

JAMUNDÍ (We), 975-1000 m., Valle. A town at the base of the Western Andes, near the Cauca River, 20 km. due south of Cali.

JARAQUIEL, 20 m., Bolívar. A small village on the west bank of the río Sinú, about 10 km. south of Montería, and about 50 km. inland from the coast. Visited by Carriker.

JAVILLA, LA (Ee), 35 m., Norte de Santander. A railroad station about 43 km. north of Cúcuta, in the humid lower Zulia valley, a few km. from the Venezuelan border. Visited by Brother Nicéforo-María.

JERICÓ (We), 1967 m., Antioquia (5°48' N., 75°47' W.). A town at which Salmon collected, about 58 km. southwest of Medellín.

JIMÉNEZ (Ww), 480-720 m., Valle. A point visited by Palmer on the Pacific slope, "a morning's walk from Los Mangos" (= Cisneros), in the río Dagua valley. Not shown on maps, and often misspelled "Jiminez" in Chapman's book.

JORDÁN, 150 m., Magdalena. A plantation on a stream of the same name, along the trail from Santa Marta to Riohacha, about 3 km. east of Cacagualito.

JUANCHITO, 985 m., Valle. The port of Cali on the west bank of the río Cauca, 5 km. east of Cali.

JUANMINA, 50 m., Atlántico. A small village 11 km. west and slightly south of Barranquilla. Also spelled Juan Mina.

JUNCO (LAGUNA DE) (Ew), 2300-2700 m., Magdalena. A locality visited by Carriker on the west slope of Cerro Pintado, in the northern section of the Perijá Mts., southeast of Villanueva.

JUNTAS. See Cisneros.

- JUNTAS DE TAMANÁ (Ww), 120 m., Chocó (4°59' N., 76°24' W.). A small village on the río Tamaná, one of the tributaries of the upper río San Juan.
- JURADÓ, Chocó (7°07' N., 77°46' W.). A small village on the Pacific Coast, near the Panamá border and at the mouth of the río Juradó. Birds have been collected along the río Juradó from about 100 m. to 300 m. altitude.
- JURUBIDÁ, río, 50 to 1000 m., Chocó. A small coastal stream flowing into the Pacific at 5°51' N. It rises on the western slope of the Baudó Mts., just south of Alto del Buey.
- LAGUNETÁ (Cw), 2100-3100 m., Caldas (4°36' N.). Just west and slightly north of the Quindío Pass, above Salento.
- LAGUNILLAS (Ew), 3300-3400 m., Boyacá. Not shown on maps. A high valley visited by Carriker near the crest of the Eastern Andes, along the old trail from Cocuy, Boyacá, to Tame, Arauca. It lies on the southwest side of the snow peak called Pan de Azúcar, one of the summits of the Sierra Nevada de Cocuy.
- LANDÁZURI (Ew), 1080 m., Santander (6°14' N., 73°48' W.). A village on the Carare Road from Vélez to the Magdalena River, near the divide between the Carare valley and the río Opón.
- LEBRIJA, río (Ew), Santander. A river rising a short distance south of Bucaramanga and flowing into the Magdalena at 8°08' N. There is also a small town called Lebrija, about 12 km. west of Bucaramanga, at 1100 m. altitude.
- LEMONS, 960-980 m., Valle. A town in the Cauca Valley, near the base of the Western Andes, about 33 km. southwest of Cartago.
- LEONERA, LA (Cw), 3640-3700 m., Caldas (near the border of Tolima, at 5°05' N., 75°20' W.). A point visited by Carriker quite near the crest of the Central Andes, east of Manizales and north of Nevado del Ruiz, close to the Páramo de Letras where the road from Manizales to Mariquita crosses the ridge.
- LETICIA, 100 m., Amazonas (4°13' S., 69°57' W.). The capital of the Intendencia del Amazonas, on the north bank of the Amazon River, less than 4 km. from Tabatinga, Brazil, and just across the river from the territory of Perú. It is the southernmost point of Colombia. Visited by F. Carlos Lehmann in 1939, and by J. I. Borrero in 1946.
- LÍBANO (SIERRA DEL), 1500-1800 m., Magdalena. A western spur of the San Lorenzo ridge in the northwestern corner of the Santa Marta Mts.

- LOMA HERMOSA (Ww), 1200-1500 m., Caldas. A locality visited by Palmer a few kilometers west of Pueblorrico, on the rio Jamarraya, an affluent of the rio Tatamá which flows into the upper rio San Juan.
- LOMA LARGA, 750-1500 m., Magdalena. A small settlement and ridge near the eastern end of the Santa Marta Mts., along the trail from Riohacha to Fonseca.
- LOMITAS (Ww), 1360-1500 m., Valle. A railroad station below Bitaco in the upper Dagua Valley.
- LORETOYACU, río, 100 m., Amazonas (3°46' S., 70°22' W.). A stream flowing into the northern side of the Amazon River, about 80 km. northwest of Leticia. This locality has appeared as Peruvian in ornithological literature. It was visited by J. Hauxwell in the late sixties of last century, and by J. I. Borrero in 1946.
- LORICA, 10 m., Bolivar. A town in the Caribbean coastal plain, a few km. inland from the mouth of the rio Sinú, north of Monteria.
- LURUACO, 20 m., Atlántico. A village on the eastern edge of a lagoon of the same name, about 60 km. southwest of Barranquilla.
- MACACUNÍ, 100 m., Vaupés (1°16' N., 66°53' W.). Very near the small rio Macacuni, south of its mouth, on the west bank of the rio Negro opposite El Carmen, Venezuela, and about 4 km. northwest of the point where the boundaries of Colombia, Venezuela, and Brazil come together. This is the easternmost point of Colombia. Birds collected there are labeled "opposite El Carmen, Venezuela".
- MACARENA (CORDILLERA DE LA), Meta. A large isolated mountain chain, about 120 km. long, rising steeply on the Eastern Llanos to a height of 1300 m. and separated from the Eastern Andes by a broad gap of tropical lowlands. It extends along 74° W., its northern edge being about 50 km. south and a little west of San Martín, the southern end bordering the rio Guayabero. Visited by E. Thomas Gilliard.
- MACOTAMA (PÁRAMO DE), 3300-3700 m., Magdalena. On the heights to the west of and above the upper Macotama Valley (see below).
- MACOTAMA (VALLE DE), 2100-2800 m., Magdalena. The upper course of the rio Macotama, on the northern slope of the Santa Marta Mts., above San Miguel and east of the snow peaks. Mountains rise on both sides of the valley to 3300-3900 m. The lower rio Macotama is known as rio Ancho.

MACUIRA OR MACUIRE (SERRANÍA DE), Guajira (12°05' N.). A small isolated group of low mountains rising abruptly on the arid Guajira plains at the northeastern tip of the peninsula. The highest point is about 860 m. A subhumid forest belt exists on this range according to Dr. Wetmore.

MAGANGUÉ, 27 m., Bolívar. A town on the left bank of the lower rio Magdalena, a few km. north of the mouth of the rio San Jorge.

MAGDALENA, RÍO. The most important river in Colombia (1538 km. long), rising at 1°55' N. on the Páramo de las Papas (Central Andes, 3500 m.) near the border of Huila and Cauca, flowing northward between the Eastern and Central Andes, and through the Caribbean coastal plain into the Caribbean Sea at Bocas de Ceniza (11°06' N.), just north of Barranquilla. After crossing the Department of Huila and a large part of Tolima, the rio Magdalena forms the boundary of nine Colombian Departments, namely Tolima, Cundinamarca, Caldas, Boyacá, Antioquia, Santander, Bolívar, Magdalena, and Atlántico.

The Magdalena Valley is divisible into three distinct sections. The *Upper* Magdalena Valley, including Huila, western Cundinamarca, and eastern Tolima north to La Dorada (5°30' N.) is arid or semi-arid. The *Middle* Magdalena Valley from La Dorada northward to about 9° N., near El Banco, is covered with dense humid forest. The *Lower* Magdalena Valley, from 9° N. northward to the mouth of the river, is characterized by the semi-arid forest and many marshes of the Caribbean coastal plain.

MAICAO, 50 m., Guajira (11°23' N., 72°14' W.). A cross-road village in the southern plains of the Guajira Peninsula, near the Venezuelan border.

MAIPURES, 115 m., Vichada (5°12' N., 67°51' W.). An extinct hamlet on the west bank of the rio Orinoco, beside the Maipures Rapids, on the border of Colombia and Venezuela. This locality has appeared as Venezuelan in ornithological literature. Sanariapo, a Venezuelan locality, is just across the Orinoco from Maipures.

MÁLAGA (BAHÍA DE), 0 m., Valle. A bay on the Pacific littoral (3°55' N.), about 30 km. west of Buenaventura.

MALAGUITA, 20 m., Valle (4°09' N., 77°10' W.). A small village 38 km. inland from the mouth of the rio San Juan, on the left bank of that river, the lower course of which forms the border of Valle and Chocó. The name has been misspelled "Malagita".

- MALAMBO**, 15 m., Atlántico. A village 12 km. south of Barranquilla, near the west bank of the rio Magdalena.
- MALENA**, 150 m., Antioquia. A railroad station in dense bottomland forest, a short distance west of the rio Magdalena, about 13 km. southwest of Puerto Berrio.
- MALPELO (ISLA DE)**. A small island in the Pacific Ocean (3°59' N., 81°34' W.) about 500 km. off the coast due west of Buenaventura. It is bare and rocky and is inhabited only by sea birds.
- MAMANCANACA**, 3180 m. at camp site (Carriker), Magdalena. A high páramo valley rising from about 3000 m. to snow line (4600 m.) on the southern side of the Santa Marta Mts., just south of the snow peaks.
- MAMARONGO (PÁRAMO DE)**, 3200-3500 m., Magdalena. East of the Macotama Valley and just south of Cerro de Caracas on the northern slope of the Santa Marta Mts.
- MAMATOCO**, 15 m., Magdalena. A small village 7 km. east of Santa Marta, on the road to Bonda.
- MÁMBITA (Ee)**, about 900 m., Cundinamarca (4°46' N., 72°18' W.). A village in the rio Guavio valley, near the border of Boyacá, in the eastern foothills of the Eastern Andes.
- MAMÓN, EL**, 2400-2700 m. (highest point: 3050 m.), Magdalena. A mountain visited by W. W. Brown, Jr., on the southern side of the Santa Marta Mts., about 5 km. northeast of San Sebastián de Rábago.
- MANATÍ**, 12 m., Atlántico. A village and a large marsh in the southern portion of Atlántico, 63 km. south and slightly west of Barranquilla, and about 22 km. north of Calamar, Bolívar.
- MANAURE**, 840 m., Magdalena (10°22' N., 73° W.). A settlement visited by F. A. Simons in the lower western foothills of the Sierra de Perijá, 25 km. east and a little south of Valledupar, near the border of Venezuela.
- MANGOS, LOS**. See Cisneros.
- MANUELITA, LA**, 1050 m., Valle (3°35' N., 76°16' W.). A large sugar-cane plantation 5 km. north of Palmira in the Cauca Valley, near the western base of the Central Andes.
- MANZANARES (Ee)**, 1300-1600 m., Meta. A settlement in the dense forest on the eastern slope of the Eastern Andes, 20 km. west and a little south of Villavicencio, near the border of Cundinamarca.

- MAR, LA**, 2620 m., Cundinamarca. The old name of a farm in the northwestern portion of the Sabana de Bogotá, near Subachoque. The altitude of "8203 ft." (= 2501 m.) given by Chapman for this locality is incorrect.
- MARÍA, LA**, (Ww), 1410 m., Valle. A locality on the Pacific slope, in the upper Dagua Valley. Not shown on maps.
- MARIQUITA**, 535 m., Tolima. A small town in the northern plains of Tolima, about 17 km. west of Honda, quite near the east base of the Central Andes.
- MAROCASA OR MAROCASO**, 630 m., Magdalena. A small hamlet in the upper río Ranchería valley, east side of the Santa Marta Mts.
- MARZO, CABO**. See Cabo Marzo.
- MASINGA**, 180 m., Magdalena. A village on the río Manzanares about 16 km. east of Santa Marta and 4 km. east of Bonda. "Masinga Vieja" is practically the same locality.
- "MATAJIRA"**. See Matojiro.
- "MATISUGA"**. See Mutiscua.
- MATOJIRO (VALLE DE)**, 50 to 400 m., Magdalena. A small valley and stream between Bonda and Cacagualito, in the Santa Marta district. Misspelled "Matajira" by Todd and Carriker.
- MAYASQUER (Ww)**, 2145 m., Nariño (0°53' N., 78°02' W.). A small town about 1 km. north of the Ecuador boundary, 15 km. west of Volcán de Chiles, in the headwaters of the río San Juan de Nariño, which flows into the río Mira. Birds labeled "Mayasquer" were collected by von Sneidern at altitudes varying from 1300 to 2700 m. Others, labeled "above Mayasquer", at 3000-3500 m.
- MECHENGUE, RÍO (Ww)**, 700-900 m., Cauca. A small stream on the northwest slope of Cerro Munchique. It is a tributary of the río Micay, which flows into the Pacific.
- MEDELLÍN (Ce)**, 1540 m., Antioquia (6°15' N., 75°34' W.). The capital of Antioquia, in the northern part of the Central Andes. In many cases the name has a regional rather than definite local value.
- MEDIACANOA (LAGUNA DE)**, 960 m., Valle. A lagoon just off the west bank of the río Cauca, 8 km. west of Buga.
- MEDIALUNA, RÍO (Ce)**, 800-850 m., Antioquia. A small upper branch of the río Nechí, flowing southeast of Valdivia.
- MEDINA (Ee)**, 500-600 m., Cundinamarca (4°30' N., 73°21' W.). A small town at the eastern base of the Eastern Andes, about 50 km. northeast of Villavicencio. The Catalogue of Birds of the British

Museum lists specimens collected here by F. H. Wheeler. The locality has also been visited by Brother Nicéforo-Maria.

MEGUA, 80-100 m., Atlántico. The name of a tract of land between Galapa and Baranoa, about 20 km. southwest of Barranquilla.

MELGAR (EW), 430 m., Tolima. A village in the upper Magdalena Valley, at the west base of the Eastern Andes, on the border of Tolima and Cundinamarca, 36 km. southwest of Fusagasugá. Collections have also been made above Melgar at a place called Boquerón de Melgar (900-1100 m.).

MENCIPÁ OR MENZIPÁ, río (EW), Cundinamarca. A small river in northern Cundinamarca, near the border of Boyacá, south of Paime. It is a tributary to the río Minero (as the upper río Carare is known there). The altitude is 1250 m. where the bridge crosses the stream on the road from Villagómez to Paime.

MENDIGUACA, 0 m., Magdalena. A point on the north coast of the Santa Marta district, at the mouth of the río Mendiguaca, about 40 km. east of Santa Marta.

MENEGUA, 270 m., Meta (4°06' N., 72°54' W.). The name of a settlement and marshes near the right bank of the río Meta, about 8 km. east of Puerto López, in the Eastern Llanos.

MESA, LA (EW), 1320 m., Cundinamarca (4°38' N., 74°28' W.). A small town below the western border of the Bogotá tableland. Probably a source of many "Bogotá" trade skins.

META, río. The main Colombian affluent of the Orinoco, rising on the southeastern slopes of Sumapaz (there known as río Humadea), and flowing eastward through the Eastern Llanos into the Orinoco, which it joins at Puerto Carreño. The Catalogue of Birds of the British Museum lists specimens collected along the Meta by F. H. Wheeler.

META (LLANOS DEL), Meta. Formerly known as "Llanos de San Martín", they are that portion of the Eastern Llanos lying within the Intendencia del Meta. The portion extending north of the río Meta, in eastern Boyacá and Arauca, is called "Llanos de Casanare". The name "Llanos de San Martín" is now restricted to the part where the village of San Martín is situated, but it once was applied to the whole of the plains (except Casanare) eastward to the Vichada and the Orinoco.

MIEL, LA, río, about 180 m., Caldas and part of Antioquia. An affluent of the río Magdalena (5°47' N.). It forms the boundary between Caldas and Antioquia in the last 15 km. of its course.

- MINCA, 660 m., Magdalena. A small village and plantation 24 km. southeast of Santa Marta, between La Tigrera and Cincinnati. Birds were collected on the slopes below and above Minca from about 450 m. to 800 m. altitude. "Mineca" is a misspelling of the name of this locality.
- MIRAFLORES (CW), 2040 m., Valle. A bungalow on the western slopes of the Central Andes, east of and above Palmira. Collections were made below and above this place from about 1600 m. to 2500 m. altitude.
- MITÚ, 150 m., Vaupés (1°07' N., 70°03' W.). The chief town of the Comisaría del Vaupés, on the río Vaupés, a few km. from the Brazilian border. The place is really only a village in spite of its rank of capital of the Comisaría del Vaupés. F. Carlos Lehmann collected a few birds there in 1939.
- MOCAGUA (ISLA DE), 100 m., Amazonas (3°51' S., 70°16' W.). The largest Colombian island in the Amazon River, about 55 km. northwest of Leticia. Formerly known as Isla Loreto, a name still shown on modern maps.
- MOCOA, 580 m., Putumayo (1°08' N., 76°37' W.). The capital of the Comisaría del Putumayo, at the base of the Andes of Pasto, on the río Mocoa, which flows into the upper río Caquetá.
- MOJARRAS, 400 m., Cauca. A small village in the arid section of the upper Patia Valley, near the northern border of Nariño.
- MOLINERO, 50 m., Atlántico. A small village 48 km. southwest of Barranquilla, a short distance north of the Laguna de Guájaro.
- MONOS, PLANO DE LOS. See "Plano" de Los Monos.
- MONOS, LOS, Santander. "Near Bucaramanga". (Not located on maps).
- "MONGUIDO", Chocó. Not located on maps. A locality at which Mrs. Kerr collected. Probably a misspelling of Munguidó. There are three streams in Chocó by this name; one flowing from the Baudó Mts. into the Atrato just north of Quibdó, the other from the western slope of the Western Andes into the río Sucio; the third is a tributary of the lower río San Juan near the border of Valle. As Mrs. Kerr is known to have collected at and near Quibdó, it is highly probable that "Monguido" refers to the río Munguidó entering the Atrato 5 km. north of that town.
- MONTAÑA DE ESMERALDA. See Esmeralda.
- MONTE ELÍAS, 1000-1700 m., Magdalena. A locality visited by Carriker on the west slope of the Sierra Negra, Perijá Mts., east of Fonseca.

- MONTERÍA, 20 m., Bolívar (8°46' N., 75°49' W.). A large town on the río Sinú about 50 km. inland from the coast.
- MONTERREDONDO (Ee), 1375 m., Cundinamarca. A point about 6 km. east and below Quetame on the road from Bogotá to Villaviciencio. It lies on the north side of a deep valley with high steep slopes.
- MONTES DE OCA, 150-600 m., Magdalena and Guajira. The name of the heavily wooded foothills which constitute the extreme northern end of the Perijá Mts. along the border of Colombia and Venezuela, just south of Carraipía, Guajira. See also under El Bosque.
- MORELIA (Ee), 400 m., Caquetá (1°31' N., 75°42' W.). Misspelled "Muralla" and "Murelia". A settlement in the heavy forest at the base of the Eastern Andes, on the río Bodoquero, 18 km. southwest of Florencia along the trail to Belén. Chapman's guide maps and text indicate, in error, that "La" Morelia is east of Florencia. Morelia (not "La" Morelia) is actually southwest of that town. This is borne out by L. E. Miller in Chapman's book (p. 48) by saying that the place is between the Bodoquera and Pescado Rivers, although by mistake he says "southeast" of Florencia. The altitude of "600 feet" (= 180 m.) given by Chapman is also incorrect.
- MOSCOPÁN (Ce), 2000-2900 m., Huila. The name of a stream and of the general region in the upper río La Plata valley, 32 km. west of the town of La Plata, about 2°20' N. Part of this territory is in dispute between the Departments of Cauca and Huila but all maps show it within the boundaries of Huila. Records from the Moscopán region, including río Bedón, San Marcos, Tijeras, and west of La Plata, have been erroneously referred to the Department of Cauca.
- MUNCHIQUE (CERRO) (W), 1800-2900 m., Cauca (about 77° W.). A mountain rising to 3012 m., west of Popayán, one of the highest in the Western Andes. Some specimens are labeled "west slope" as low as 1800 m.
- MUNCHIQUE, río (Ww), 700-900 m., Cauca. A small stream on the western slope of Cerro Munchique. It flows into the río Micay.
- MURALLA, LA. See Morelia.
- MURELIA. See Morelia.
- MURINDÓ, 30 m., Antioquia (7°02' N., 76°45' W.). A small town visited by Carriker near the Chocó-Antioquia border, in the lower Atrato Valley, west of Alto Bonito and Dabeiba.

- MUTISCUA (Ee), 2650 m., Norte de Santander. A town visited by Wyatt in the extreme headwaters of the río Zulia, 15 km. southwest of Pamplona. Misspelled "Mutisgua" on Wyatt's map and "Matisuga" in Chapman's book.
- MUZO (Ew), 600-1240 m., Boyacá (5°32' N., 74°06' W.). A small mining town (famous for its emeralds) 100 km. almost due north of Bogotá. The altitude given on maps is 824 m. for the town, but the sides of the valley are so steep that "600 to 1240 m." is nearer the truth, as far as bird collecting is concerned.
- NAHUANGE, 0 m., Magdalena. A point on the north coast of the Santa Marta district, 15 km. northeast of the town of Santa Marta. The name has been misspelled "Neguange" and "Nenguange".
- NARANJITO (Ww), 1170 m., Valle. A locality visited by Palmer on the Pacific slope. The name is either that of an obscure place in the upper Dagua Valley or it may refer to the río Naranjito, a small mountain stream emptying into the río Sanquinini, a tributary of the ríos Garrapatas and Sipi. The two last named rivers were also visited by Palmer.
- NARANJO (Ew), 750 m., Santander (7°12' N., 73°18' W.). A small village about 20 km. northwest of Bucaramanga, along the old mule trail to Puerto Wilches.
- NARANJO (Ww), 580-850 m., Valle. A locality visited by Ed. André on the Pacific slope of the Western Andes, in the lower Dagua valley. The altitude given by Chapman (p. 650) is "1900 ft." (= 580 m.) but André apparently collected also above Naranjo for a specimen of *Myrmotherula surinamensis pacifica* is recorded by Chapman (p. 373) from near Naranjo "2800 ft." (= 850 m.). Naranjo is not shown on maps but, according to reliable information, it is very likely the name of an extinct posada called "El Naranjo" or "Los Naranjos", at the mouth of the Quebrada Naranjal on the río Dagua, between Cisneros and Espinal.
- NARE, 132 m., Antioquia. A small village on the left bank of the middle río Magdalena (6°11' N.), at the mouth of the río Nare, about 45 km. south of Puerto Berrio.
- NATAGAIMA, 370 m., Tolima. A village on the left bank of the upper Magdalena (3°37' N.), south of Purificación.
- NAZARET, 180 m., Guajira (12°10' N., 71°18' W.). A small village in the subhumid forest belt of the Serranía de Macuira or Macuire, near the tip of the Guajira Peninsula.

NECHÍ (Ce), 60-100 m., Antioquia. A small mining town at the junction of the lower río Cauca and the río Nechí (8°06' N.), very near the border of Bolívar. Misspelled "Neché" in Chapman's book, and "Nichi" in the Catalogue of Birds of the British Museum, which lists specimens taken there by Salmon. It is probable, however, that Salmon's "Nichi" refers to the upper río Nechí, in the vicinity of its junction with the río Medialuna, about 110 km. southwest of the town of Nechí.

NEGRO, río. One of the principal northern affluents of the Amazon River, rising in the territory of Vaupés, Colombia, and forming the Colombia-Venezuela boundary for 238 km. It is known as río Guainía ("Huaynia") from its source to the junction with the Casiquiare. The boundaries of Colombia, Venezuela, and Brazil meet on the small island of San José at 1°14' N. From that point southward both sides of the río Negro belong to Brazil. See also under Macacuni and San Felipe.

NEGRO, río (Ee), Boyacá and Arauca. A collecting station of Carriker in the valley of the río Negro, a small affluent of the upper río Casanare forming the boundary between Boyacá and Arauca. The camp site was at 1467 m. altitude (Carriker).

"NEGUANGE" OR "NENGUANGE". See Nahuange.

NERCUA, río, 100-200 m., Chocó. A small stream visited by the Michler Expedition in the headwaters of the río Truandó. It belongs to the Caribbean drainage although it flows very near the Pacific coast, from which it is separated by a low range of hills.

"NICHÍ". See Nechí.

NOANAMÁ, 53 m., Chocó (4°39' N., 76°52' W.). A village on the middle río San Juan, Pacific coast region.

NÓVITA, 70 m., Chocó (4°58' N., 76°35' W.). A small town on the río Tamaná, 15 km. east of its junction with the río San Juan.

NÓVITA TRAIL, Chocó. Any point along the trail which winds down the heavily forested western slope of the Western Andes, west of Silencio, Valle, from about 2200 m. to about 480 m. altitude, east of and above Nóvita.

NUBES, LAS, 1350-1650 m., Magdalena. A plantation on the northern slope of the San Lorenzo ridge, east of Cerro Quemado, Santa Marta Mts.

NUQUÍ, 30 m., Chocó. A settlement on the Pacific coast at 5°42' N., on the Gulf of Tibugá or Tribugá.

- OCAÑA (Ee), 1200 m., Norte de Santander (8°14' N., 73°22' W.). A town in the first valley east of the Magdalena. The streams about Ocaña all flow to the Catatumbo River, which empties into Lake Maracaibo, Venezuela.
- OCOA, río, 400 m., Meta. A small affluent of the río Guatiquía, about 6 km. southeast of Villavicencio (where the bridge crosses the stream on the road to Puerto López).
- OCTAVIA ROCKS, Chocó. Some rocky islets in the Pacific, 7 km. off the Chocó coast, just south of Cabo Marzo, about 6°45' N. A breeding place for sea birds.
- "OLIN, LAGUNA". See Otún.
- ONACA, 600-750 m., Magdalena. A coffee plantation on the lower northern slope of the San Lorenzo ridge, below Las Nubes, Santa Marta district.
- OPÓN (OR BOCA DE OPÓN), 115 m., Santander. A place on the east bank of the middle río Magdalena (7° N.), below Puerto Berrio, at the mouth of the río Opón.
- "OPPOSITE SAN CARLOS, VENEZUELA". See under San Felipe.
- "OPPOSITE TAUAPUNTO", about 100 m., Vaupés. A collecting locality of the Olalla brothers on the west (Colombian) bank of the río Vaupés, opposite a point on the Brazilian side called Tauapunto ("Tahuapunto"), not far above Jauareté or Yavaraté, a Colombian-Brazilian post at the mouth of the río Papurí.
- ORIHUECA, 30 m., Magdalena. On the río Orihueca, 22 km. southeast of Ciénaga, between Riofrío and Sevilla. The name has been misspelled "Arehueca" and "Arihueca".
- OSCURO, río (Ww), Valle or Chocó. Not located on maps. Judging from birds recorded from this locality, it is probably situated on the west side of the Western Andes.
- OTÚN, LAGUNA DE (Cw), 3800 m., Caldas. A large lagoon on the Páramo de Santa Isabel, just west of and below the Nevado de Santa Isabel. Birds were also collected above the lagoon (near 4000 m. altitude) by von Sneider.
- PACHAQUIARO, 280 m., Meta. A small settlement and a stream about 60 km. east of Villavicencio, in the Eastern Llanos, not far from Puerto López and the río Meta.
- PACHO (Ew), 1860 m., Cundinamarca (5°07' N., 74°10' W.). A town about 60 km. north and slightly west of Bogotá, just below the northwestern rim of the Sabana de Bogotá. It is probably a source of "Bogotá" trade skins.

PAILA, LA, 935 m., Valle. A village on the rio Paila, 7 km. east of the rio Cauca, 50 km. south of Cartago.

"PAILLON, EL". See Pailón.

PAILÓN, 20 m., Valle. A locality visited by André in the Pacific coast region, 11 km. east of Buenaventura, in the humid forest of the lower rio Dagua. Misspelled "El Paillon" in Chapman's book.

PALENQUE, 40 m., Magdalena. A cattle estate about 10 km. east of Santa Marta, about midway between Mamatoco and Bonda.

PALESTINA (Cw), 1600-1800 m., Caldas (5°01' N., 75°38' W.). A town in the middle Cauca Valley, 15 km. southwest of Manizales.

PALESTINA, 5 m., Chocó (4°08' N., 77°03' W.). A settlement on the right bank of the lower rio San Juan, at the junction with the rio Calima.

PALETARÁ (Cw), 2700-3600 m., Cauca. A high valley just below the source of the rio Cauca, near the border of Huila (2°10' N.).

PALMA, LA (Ce), 1680 m., Huila. A ranch in the dense primeval forest at the head of the Magdalena Valley, a day's journey southwest of San Agustín, near the junction of the rio Mulales with the rio Magdalena.

PALMAR (Ww), Valle. Rio Dagua valley near La María. Not located on maps.

PALMAR (Ee), 500 m., Boyacá (6°10' N., 72°01' W.). A ranch on the south side of the upper rio Casanare, quite near the border of Arauca, on the western edge of the Llanos de Casanare. Visited by Carriker.

PALMAR DE CANDELARIA, 80 m., Atlántico. A small village just north of Laguna de Tocahagua.

PALMAR DE VARELA, 7 m., Atlántico. A small village 26 km. south of Barranquilla, near the west bank of the rio Magdalena.

PALMIRA, 1010 m., Valle. A large town 25 km. east and slightly north of Cali, on the plain of the Cauca Valley, near the foot of the Central Andes.

PALMITA, LA (Ew), 1700-1800 m., Magdalena. A small hamlet on the western slope of the Eastern Andes, on the old trail from Loma Corredor to Ocaña. Visited by Carriker.

PALOGORDO (Ee), about 1400 m., Norte de Santander. A locality visited by Carriker 25 km. south of Cúcuta, in the rio Táchira valley.

PALO HUECO (Ew), 2210 m., Cundinamarca. A forested locality just below the northwestern end of the Bogotá tableland, near and above Pacho.

- PALOMINO**, 1500 m.?, Magdalena. An Indian village on the north slope of the Santa Marta Mts., on the río Palomino (about 11°07' N., 73°35' W.). Brown's skins from here were secured by an Indian who told him the village was situated "two days travel on foot east [north] from Pueblo Viejo". Sometimes misspelled "Palomina".
- PAMPLONA** (Ee), 2340 m., Norte de Santander (7°23' N., 72°39' W.). A town quite near the source of the río Pamplonita, an affluent of the río Zulia which it joins north of Cúcuta.
- "PAMPLONA, PÁRAMO DE"** (Ee), 3000-3500 m., Norte de Santander. According to Wyatt's map this name refers to the Páramo de Santurbán, a high ridge rising just west of Mutiscua, between that town and Vetás, Santander.
- PANAMÁ** (EW), 2100-2200 m., Cundinamarca. A small ridge known as Serranía de Panamá, rising about 6 km. west of Pacho, below the northwestern rim of the Bogotá tableland.
- "PANUELA, LA"**. See La Piñuela.
- PARAÍSO, EL**, 7 m., Atlántico. A cattle estate and plantation visited by Dugand on the west bank of the río Magdalena (10°41' N.), between Palmar de Varela and Ponedera, 1 km. above and opposite Remolino, Magdalena.
- PARAMILLO** (NUDO DE), Antioquia (about 7° N., 76° W.). A massive group of mountains rising to 3960 m. near the northern end of the Western Andes. The río Sinú rises on its northern slope. Collections on the Paramillo Mts. were made by L. E. Miller and H. Boyle mostly near a camp site at 3700-3800 m. Other specimens labeled "Paramillo" or "Paramillo Trail" were taken at lower altitudes on the southeastern slope, along the trail leading up from Peque.
- PASTO**, 2524 m., Nariño (1°13' N., 77°17' W.). The capital of Nariño. A source of early trade skins in the Andes of southwestern Colombia.
- PATÍA, RÍO**. A river rising in the Central Andes south of Popayán, near the source of the río Cauca but flowing in an opposite direction, southwestward through the southern portion of Dept. Cauca, and northwestern Nariño, to the Pacific Ocean. Birds from the río Patía herein recorded are from the arid section of the upper Patía Valley lying in Dept. Cauca, south and southwest of Popayán, between the altitudes of 400 m. and 1000 m.
- PATURIA** (LAGUNA DE), 75 m., Santander. A large lagoon just off the east bank of the middle río Magdalena (7°27' N.), near Puerto

Wilches, 27 km. northeast of the junction of the Magdalena with the río Sogamoso.

PAVAS (WW), 1320 m., Valle. A village northwest of La Cumbre, just west of and below the divide in the Western Andes, along the railroad from Cali to Buenaventura.

PAZ, ALTO DE LA. See Alto de la Paz.

PEDROPALO (LAGUNA DE) (EW), 2010 m., Cundinamarca. A lagoon just below the western border of the Bogotá tableland, 9 km. north of and above Tena.

PEÑA, LA, 15 m., Atlántico. A small village visited by Dugand on the northeastern shore of Laguna de Guájaro, about 53 km. southwest of Barranquilla.

PEÑABLANCA (CW), 2800-3000 m., Cauca. A point near the southern end of the Central Andes east of Popayán.

PEÑABLANCA OR PEÑA BLANCA (EW), 2800 m., Boyacá (about 6°33' N., 72°30' W.). A valley southwest of Chiscas in northern Boyacá, near the border of Santander. Visited by Carriker.

PEÑA NEGRA (EW), about 3600 m., Boyacá. A little valley visited by Carriker just below and west of the crest of the Eastern Andes, on the trail from Cocuy to Chinibaque. It lies southeast of the town of Cocuy, on a southern ridge of the Sierra Nevada de Cocuy known as Rechiniga.

PENDALES, LOS, 20-100 m., Atlántico (10°38' N., 75°14' W.). The name of the forested region in southwestern Atlántico, extending from the west shore of Laguna de Luruaco to the border of Dept. Bolívar. About 62 km. southwest of Barranquilla and 43 km. northeast of Cartagena. Visited by Dugand.

PEÑÓN, EL (EW), 2880 m., Cundinamarca. A tiny settlement south of Sibaté, along the abandoned mule trail from Bogotá to Fusagasugá, near the top of a ridge called Páramo de San Fortunato rising at the extreme southern rim of the Bogotá tableland. The new highway to Fusagasugá passes just west of El Peñón at San Miguel, 2800 m. The name is misspelled "El Piñon" in Chapman's book.

PEPINO, about 1200 m., Putumayo. A locality visited by von Sneider on a small stream of the same name, which flows into the upper río Caquetá just south of the río Rumiaco region, south of Mocoa.

PEQUE (We), 1500 m., Antioquia (6°59' N., 75°51' W.). A small village on the southeastern slope of the Paramillo Mts., above the lower Cauca valley.

PERALONSO, 300 m., Meta. A small settlement and stream in the Eastern Llanos, 3 km. northeast of Caño Quenane.

PERICO (Ee), 1600 m., Norte de Santander. Described by Wyatt as "the name of three or four huts situated at an altitude of about 5300 feet... and about 1000 ft. above La Cruz". His map shows it as about 28 km. west and very slightly south of La Cruz (= Abrego). Misspelled "Pirico" by Wyatt and Chapman.

PERIJÁ (SIERRA DE), Magdalena. A long mountain range in northern Colombia, forming the boundary with Venezuela. It is an extension of the Eastern Andes, dividing the Magdalena Valley from the basin of Lake Maracaibo. Known in its southern part as Sierra de Motilones and in the northern part as Sierra Negra. The northern part is but a very short distance from the southeastern base of the Santa Marta Mts.

"**PERLASIVÍ**", río, 1170-2250 m., Nariño. Near the Ecuador border at 0°57' N., 78°06' W., 15 km. west of Mayasquer. The name is variously spelled Peasbí (Map of the Colombian Bureau of Longitudes) and Perlasvi (Millionth Map, Amer. Geogr. Soc. N. Y.).

PETRÓLEA, about 100 m., Norte de Santander (8°28' N., 72°34' W.). An important oil camp visited by Carriker in the forested lowlands of the lower Sardinata valley, Catatumbo basin, about 5 km. from the Venezuelan border.

PICA, LA (Ew), 2800 m. at camp site (Carriker), Santander. The stretch of mountain trail crossing the ridge known as Cruz de Piedra, between San Andrés and Málaga, north of Molagavita.

PICALEÑA (Ce), 947 m., Tolima. A railroad station 12 km. east of Ibagué.

PIENDAMÓ (Cw), 1800 m., Cauca. A railroad station 30 km. northeast of Popayán.

"**PIÑÓN, EL**". A misspelling for El Peñón, which see.

PIÑUELA, LA (Ew), about 3000 m., Cundinamarca. This is "La Panuela" of Chapman (p. 648), said by him to be "a paramo north of Facativá". The Páramo de La Piñuela (not "La Panuela") lies on the ridge which borders the northwestern side of the Bogotá tableland, north of Pradera and south of Pacho. The trail from Subachoque and Pradera to Pacho crosses this large

páramo at 3440 m. altitude. The collections cited by Chapman were probably made on the north side, above Pacho.

"PIRICO". See Perico.

PISOJÉ (Cw), 1800-2000 m., Cauca. A creek about 12 km. east of Popayán.

PIZARRO, 0 m., Chocó (5°10' N.). A village visited by von Sneider on the Pacific coast, at the mouth of the río Baudó.

PLAINS OF TOLIMA, Tolima. A locality given by Stone in his report on the Detwiler collection. It is probably the country lying between the río Magdalena and Ibagué through which this collector passed in going to the last named city.

"PLANO" DE LOS MONOS (Ww), 780 m., Valle. A locality visited by André on the Pacific slope east of Buenaventura. Not shown on maps. It is presumably in the arid pocket of the Dagua Valley called "Caldas Basin" by Chapman. The correct spelling of the first word is Llano (= plain).

PLATA, LA (Ce), Huila (2°23' N., 75°53' W.). A town on the río La Plata, in the upper Magdalena Valley. The altitude of the town is 1054 m. but the collections so labeled were made on the mountains west and above it at 1800-2900 m.

PLAYA, LA, 0 m., Atlántico. A small village on the Caribbean shore, just 10 km. northwest of Barranquilla.

POCUNÉ (Ce), 600-800 m., Antioquia. A station at which Salmon collected, on the río Pocuné, an affluent of the lower río Nechí, northwest of Remedios.

PONEDERA, 8 m., Atlántico. A village on the west bank of the río Magdalena, 38 km. south of Barranquilla, about midway between that city and Calamar.

POPAYÁN, 1760 m., Cauca (2°26' N., 76°36' W.). The capital of Departamento del Cauca, at the southern end of the Cauca Valley. It is situated on the northern slope of a relatively low transverse ridge connecting the Western and Central Andes and forming the divide between the río Cauca and the río Patía.

PORQUERA, LA (Ew), 2620 m., Cundinamarca. A small creek flowing into the río Subachoque, an affluent of the río Bogotá, near the northwestern end of the Sabana de Bogotá. Chapman (p. 648) is wrong in saying that La Porquera is "above La Pradera". Both localities are within the Bogotá tableland, La Porquera being south of and 115 meters below Pradera.

PORTETE (BAHÍA DE), 0 m., Guajira. A large enclosed bay on the northern coast of the Guajira Peninsula.

"PORTRERRAS" (Ew), 2100 m., Norte de Santander. Not shown on maps. The name is unusual and is probably a misspelling. Wyatt says of it, "Another hut we stopped at was called Portrerras by our muleteers; but whether this was its real name is, I think, doubtful". On Wyatt's map it is shown as about 16 km. north of Cachirí. This would place the locality in Dept. Norte de Santander, south of Cáchira (which see).

POTEDÓ (Ww), Chocó. A farm visited by Carriker on the río San Juan below Noanamá, near the mouth of the río Potedó (about 4°35' N.).

POZOS COLORADOS, 0 m., Magdalena. The name of large salt-flats and of a sandy beach on the Caribbean coast between Santa Marta and Ciénaga.

PRADERA, OR LA PRADERA (Ew), 2735 m., Cundinamarca. A small village at the northwestern end of the Sabana de Bogotá, 9 km. due north of Subachoque, along the trail leading over the Páramo de La Piñuela ("La Panuela" of Chapman) to Pacho. On Chapman's map (pl. XLI, facing p. 656), both La Pradera and La Porquera are shown north of Palo Hueco. This is an error since both localities are situated on the Sabana de Bogotá, whereas Palo Hueco lies below it, north of Pradera.

The altitude of "5325 ft." (= 1624 m.) given by Chapman (p. 648) for La Pradera is doubtlessly a mistake since no point on the Sabana de Bogotá lies at a lower altitude than 2540 m.

PRIMAVERA (Ww), 1500-1700 m., Valle. A locality on the Pacific slope, apparently in the upper Dagua Valley. It is probably the name of a now abandoned ranch or traveler's inn on the old trail from Buenaventura to Cali.

PUEBLO NUEVO (Ee), 1720 m., Norte de Santander. A village about 5 km. west of and above Ocaña.

PUEBLORRICO (Ww), 1500-1700 m., Caldas (5°12' N., 76°08' W.). A town north of Cerro Tatamá, near the headwaters of the río San Juan. The altitude of "720 m." appears on a few records from this locality, the name of which is often spelled Pueblo Rico.

PUEBLO VIEJO, 600-700 m., Magdalena. A village on the northern slopes of the Santa Marta Mts., southwest of Dibulla and near the Chirúa Valley.

PUENTE ANDALUCÍA, 2650 m., Cundinamarca. A locality on the Sabana de Bogotá, near Subachoque. The altitude of "8263 ft" (= 2520 m.) given by Chapman is incorrect.

PUERTO ASÍS, 260 m., Putumayo (0°29' N., 76°31' W.). A village on the río Putumayo, about 18 km. northeast of the junction of this river with the río Cuembí, near the border of Ecuador.

PUERTO BARRIGÓN. See Barrigón.

PUERTO BERRÍO, 130 m., Antioquia. An important port and railroad terminus on the west bank of the río Magdalena (6°29' N.).

PUERTO BOYACÁ, 155 m., Boyacá. A village on the east bank of the río Magdalena (5°47' N.), opposite the mouth of the río La Miel, at the extreme western tip of Dept. Boyacá. This section of Boyacá is usually known as Territorio Vásquez.

PUERTO CARREÑO, 95 m., Vichada (6°11' N., 67°28' W.). The capital of Vichada, at the junction of the Meta and Orinoco Rivers. It is one of the easternmost points of Colombia.

PUERTO COLOMBIA, 0 m., Atlántico. On the Caribbean shore, 18 km. due west of Barranquilla.

PUERTO GIRALDO, 10 m., Atlántico. A small village on the west bank of the río Magdalena, 53 km. south of Barranquilla.

PUERTO LÓPEZ, 0 m., Guajira. A small village better known as Tucacas, on the north shore of a small, shallow bay called Laguna de Tucacas, near the eastern tip of the Guajira Peninsula and just south of the Serranía de Macuira.

PUERTO LÓPEZ, 250 m., Meta (4°06' N., 72°57' W.). A small village in the Eastern Llanos, on the west bank of the río Meta, a short distance above the junction with the río Humea, 75 km. east of Villavicencio. Formerly known as Yacuana and Puerto Banderas.

PUERTO NACIONAL. See Gamarrá.

PUERTO SAGOC, 60 m., Magdalena. An oil camp near La Gloria on the río Magdalena (8°37' N.).

PUERTO SANTANDER, 25 m., Norte de Santander. A railroad station 60 km. north of Cúcuta and quite close to the border of Venezuela, where the río La Grita joins the río Zulia.

PUERTO VALDIVIA (Cw), 180 m., Antioquia. On the east bank of the lower Cauca River (7°14' N.), at the very base of the western slope of the Central Andes. The Western Andes rise abruptly from the west bank of the river just across from Puerto Valdivia. See also under Valdivia.

- PUERTO VILLAMIZAR, 25 m., Norte de Santander. At the junction of the río Zulia and the río Táchira, a short distance from the Venezuelan border, 55 km. north of Cúcuta.
- PUERTO ZAPOTE, 0 m., Bolívar. This is Cispata, a village on the east side of Cispata Bay, opposite the mouth of the río Sinú.
- PUNTA ARDITA. See Ardita.
- PURACÉ (CW), 2646 m., Cauca. A small town about 20 km. east of Popayán and northwest of Volcán de Puracé which rises to 4900 m. near the border of Cauca and Huila. Collections have been made here from an altitude of about 2100 m., well below the town, up to the Páramo de Puracé, just north of the volcano, at 3400-3600 m., along the highway to Moscopán, Huila. See also under Quintana and Laguna de San Rafael.
- PURIFICACIÓN, 354 m., Tolima. A town on the west bank of the upper río Magdalena (about 3°51' N.). This locality is probably a source of some "Bogotá" trade skins.
- QUEMADO (CERRO), 2200-2500 m., Magdalena. The western end of the San Lorenzo ridge, southeast of Santa Marta.
- QUENANE (CAÑO), 300 m., Meta. A small river fringed with dense forest, about 35 km. east and a little south of Villavicencio in the Eastern Llanos (4°06' N., 73°21' W. where the road to Puerto López crosses the river).
- QUETAME (Ee), 1530 m., Cundinamarca. A small town about midway along the motor road from Bogotá to Villavicencio. It is probably a source of many "Bogotá" trade skins.
- QUIBDO, 55 m., Chocó. The capital of Chocó, at the head of steamer navigation on the río Atrato (5°41' N.).
- QUIEERA, LA (Ce), 1400-1600 m., Antioquia. The name of a low pass over one of the eastern ridges of the Central Andes, 55 km. northeast of Medellín, along the railroad line from this city to Puerto Berrio.
- QUINDÍO PASS, 3480 m., Caldas and Tolima. The pass in the Central Andes (4°33' N.) on the famous and now abandoned Quindío Trail, between Salento and Ibagué. The new highway from Ibagué to Armenia crosses the ridge at La Línea (3280 m.), 13 km. south of the Quindío Pass. The usual name is Boquerón del Quindío (Boquerón = pass). The name Quindío—often spelled Quindiu in literature—is now restricted to the western slopes of the mountains in the southern, point-shaped portion of Dept. Caldas lying between Pereira and the río Barragán on the border of

Valle. However, old timers still refer to the eastern slopes above Cajamarca (in Tolima) as "El Quindio". In a general way, "Cordillera del Quindio" is the name of the section of the Central Andes extending from the Páramo de Barragán to the Nevado del Quindio.

QUINTANA (CW), 2800-3000 m., Cauca (2°23' N., 76°21' W.). A settlement near the crest of the Central Andes about 11 km. north of Volcán de Puracé. A few birds labeled "Quintana" were collected by von Sneider at a much lower altitude (2000-2100 m.).

RAMÍREZ (EW), 2000-3000 m., Norte de Santander (7°48' N., 73°05' W.). A farm at which Carriker collected just north of Cáchira, below and northwest of Páramo de Guerrero.

RANCHERÍA, río, Magdalena and Guajira. A river rising on the eastern slope of the Santa Marta Mts., north of the headwaters of the río Cesare, and emptying into the Caribbean Sea at Riohacha. Part of its lower middle course crosses the southern tip of La Guajira and the extreme lower course (also known as río Calancala) forms the border between La Guajira and the Department of Magdalena.

REMEDIOS (Ce), 700-1000 m., Antioquia (7°02' N., 74°41' W.). A town in the headwaters of the río Ité, an affluent of the río Magdalena. It is one of Salmon's most important stations.

REMOLINO, 7 m., Magdalena. A village on the east bank of the río Magdalena, 33 km. south of Barranquilla. There is also a locality of this name on the río Meta, in the Eastern Llanos, 10 km. east of Yurimena.

RESTREPO, 400-500 m., Meta. A village at the base of the Eastern Andes 15 km. northeast of Villavicencio.

RETIRO (Ce), 2225-2400 m., Antioquia. A town at which Salmon collected, about 23 km. south and slightly east of Medellín.

RICAUARTE, 1000-1500 m., Nariño (1°12' N., 77°59' W.). A town in the valley of the río Guabo, Pacific slope of southern Nariño.

RIOFRÍO, 30 m., Magdalena. A small town at the foot of the west slope of the Santa Marta Mts., 15 km. southeast of Ciénaga. Collections have also been made above Riofrio at 150 m. to 450 m. altitude.

RIOFRÍO, 970 m., Valle. A station in the Cauca Valley, on the east bank of the río Cauca at 4°10' N. The village of Riofrio is on the west bank, 28 km. north of Buga.

RIOHACHA, 0 m., Magdalena (11°33' N., 72°55' W.). A town in the arid section of the Caribbean coast, at the mouth of the río Rancheria

(also known as río Calancala), on the border of Dept. Magdalena and the Comisaría de La Guajira.

RÍO DE ORO (Ee), 1170 m., Magdalena. A town 8 km. north of Ocaña, near the border of Dept. Magdalena and Dept. Norte de Santander. It is situated in the only and small portion of the east slope of the Eastern Andes belonging to Dept. Magdalena.

RÍOLIMA (We), 1500 m., Valle. A locality where J. H. Batty collected, west of and above Cali, near San Antonio. Río Azul, another Batty locality, is probably also near Cali. He records it as in the Cauca Valley.

ROBLE, EL (EW), 2400-2500 m., Cundinamarca. A point on the abandoned trail from Sibaté to Fusagasugá, above Aguadita and just below the southern rim of the Bogotá tableland.

RONDA, ISLA DE, 100 m., Amazonas. An island in the Amazon River, 6 km. northwest of Leticia.

RUÍZ (NEVADO DEL) (C), Caldas and Tolima (4°52' N.). A large, snow-covered mountain 5400 m. high, rising on the border of Caldas and Tolima. The name Páramo del Ruiz is broadly applied to either the eastern or western slope above an altitude of about 3400 m. Carriker collected on the east slope at a farm known as Hacienda Jaramillo.

RUMIYACO, río, 1000-1200 m., Putumayo (1°05' N., 76°42' W.). A small stream flowing from the west into the río Mocoa, an affluent of the upper río Caquetá, 8 km. south of the town of Mocoa. Collections were made by K. von Sneidern on the upper Rumiaco, on the northern slope of a spur of the Andes of Pasto known as Cordillera de Portachuelo, which divides the basin of the Caquetá from that of the Putumayo.

SABANA DE BOGOTÁ. See Bogotá (Sabana de).

SABANALARGA, 55 m., Atlántico (10°38' N.). A town 42 km. south and slightly west of Barranquilla, on the highway to Cartagena. There is also a locality of this name in north-central Antioquia, near the río Cauca, at the western base of the Central Andes.

SABANETA (We), 1800-1900 m., Cauca. A locality visited by von Sneidern northeast of Cerro Munchique, near Chisquío.

SABANILLA, 0 m., Atlántico. Up to the year 1871 this was the sea port of Barranquilla. Nothing remains today of the village since it was gradually destroyed by the sea, which now covers the site. Salgar, the nearest locality (less than 3 km. from Sabanilla), was the port officially called "Sabanilla" from 1871 to 1888.

SABANILLITA, 15 m., Atlántico. A small, shallow lagoon just off the north side of the highway to Puerto Colombia, 10 km. west of Barranquilla.

"SAGAMOSO". See Sogamoso.

SALAUÍ, RÍO, 100-400 m., Chocó. An affluent of the lower río Atrato, which it joins together with the Truandó. It rises very near the Panamá border.

SALAZAR (Ee), 870 m., Norte de Santander. A town 37 km. west and slightly south of Cúcuta.

SALDAÑA. See Estación Saldaña.

"SALENCIO". See Silencio.

SALENTO (Cw), 1500-2200 m., Caldas (4°38' N., 75°34' W.). A small town in the valley of the río Boquía, on the west side of the Quindío Mts., in the general region now called "Quindío". Birds were also collected above Salento at about 2700 m.

"SANCUDO". See Zancudo.

SAN AGUSTÍN, 1500-1800 m., Huila (1°53' N., 76°16' W.). A small town at the head of the Magdalena Valley. Collections have been made both in the semi-arid region near the town and in the sub-tropical forests south and above it.

SAN ALFONSO, 420 m., Huila. In the upper Magdalena Valley, near the east bank of the river and just south of the border of Tolima.

SAN ANTONIO (We), 1900-2340 m., Valle. A small village above Cali, near the pass of Las Cruces, on the road from Cali to Buenaventura.

SAN ANTONIO DE TENA (Ew), 1520 m., Cundinamarca. A small village below the western rim of the Bogotá tableland, 12 km. east of La Mesa.

SAN CAYETANO (Ew), 2208 m., Cundinamarca (5°18' N., 74°04' W.). A small town 75 km. due north of Bogotá, near the border of Boyacá.

SAN FELIPE, 100-200 m., Vaupés (1°55' N., 67°05' W.). A small hamlet on the west (Colombian) bank of the río Negro, opposite San Carlos, Venezuela, about 12 km. south of the junction of the río Guainía with the Casiquiare. Birds collected there are labeled "opposite San Carlos, Venezuela".

SAN FRANCISCO, 1800 m. (?), Magdalena. A small Indian hamlet on the north slope of the Santa Marta Mts., in the upper Macotama Valley, east of and below Páramo de Mamarongo. According to

Carriker (Bds. Santa Marta Region, p. 124), the altitude is only about 1200 m.

SAN GIL (EW), 1095 m., Santander (6°33' N., 73°09' W.). A town on the río Fonce, a tributary of the río Suárez, which flows into the Sogamoso. Visited by Brother Nicéforo-Maria.

"SAN JOAQUIM", Valle. Dugand has been unable to find any historical record showing that this was an old name for Buenaventura, the Pacific Coast port, as stated by Hellmayr. San Joaquín is really the name of the low divide rising between the río Calima, which flows northwestward to the río San Juan, and the small streams flowing southward into the Bay of Buenaventura. This is commonly called "Istmo de San Joaquín" and it is situated north of Buenaventura, near the border of Chocó.

SAN JOSÉ, 1500 m., Magdalena. A village on the east slope of the Santa Marta Mts., on the upper río Guatapurí, 10 km. north of Atánques. Visited by Simons and by Carriker.

SAN JOSÉ (WW), 180 m., Valle. A small settlement in the dense rain forest of the lower río Dagua, 28 km. east of Buenaventura, at the western base of the Western Andes.

SAN JUAN, río. An important river rising on the Cerro de Caramanta (5°30' N., 76° W.) in the Western Andes, where the borders of Caldas, Antioquia and Chocó come together. It flows westward through the extreme western tip of Caldas, curving southward through the almost level alluvial plain of southern Chocó, and then westward again along the border of Chocó and Valle, into the Pacific northwest of Buenaventura. Not to be mistaken for the río San Juan in Nariño, which forms the border of Colombia and Ecuador from the Volcán de Chiles to the río Mira on the Pacific coast.

SAN JUAN DE RIOSECO (EW), 1305 m., Cundinamarca (4°51' N., 74°37' W.). A small town about 27 km. south of Guaduas in the upper Magdalena Valley.

SAN LORENZO RIDGE, 2100-2800 m., Magdalena. A large, semi-isolated spur at the western end of the Santa Marta Mts. jutting to the northwest. See also Cerro Quemado.

SAN LUIS (WW), 1320 m., Valle. A locality visited by Palmer in the Bitaco Valley, on the Pacific slope west of Cali.

SAN MARCOS, río (Ce), 2700-3200 m., Huila. A locality visited by F. Carlos Lehmann near the southern end of the Central Andes, east of the Páramo de Puracé and above the Moscopán region.

- SAN MARTÍN, 422 m., Meta (3°41' N., 73°42' W.). A village in the Eastern Llanos, about 60 km. south of Villavicencio, near the base of the Eastern Andes, between the upper rio Meta (here known as rio Humadea) and the upper rio Ariari. The region is very probably a source of many "Bogotá" trade skins.
- SAN MIGUEL (EW), 2800 m., Cundinamarca. A small settlement on the pass of the Eastern Andes through which runs the road from Bogotá to Fusagasugá, at the extreme southern end of the Bogotá tableland. Not far from El Peñón and above Aguadita. Mountains around San Miguel rise to about 3400 m.
- SAN MIGUEL, 1700 m., Magdalena. A village on the north slope of the Santa Marta Mts., on the upper rio Macotama, below Cerro de Caracas. Mountains rise abruptly west of this locality to an elevation of not less than 2700 m.
- SAN NICOLÁS (EW), about 900 m., Santander. West of Bucaramanga, about 6 km. southeast of Naranjo along the trail to the Magdalena. Described by Wyatt as a hut in dense forest, about an hour's ride west of "Canta".
- SAN PABLO (Ww), 1200-1400 m., Nariño (1°06' N., 78°01' W.). A small village near Ricaurte, on the other side of the rio Guabo valley.
- SAN RAFAEL (LAGUNA DE) (C), 3480 m., Cauca. A lagoon on the summit of the Central Andes, quite near the divide between the Departments of Cauca and Huila, about 6 km. northeast of Volcán de Puracé.
- SAN SEBASTIÁN = SAN SEBASTIÁN DE RÁBAGO, 2040 m., Magdalena. An Indian village on a level, plateau-like valley lying between Chinchicuá and El Mamón in the southern Santa Marta Mts., at the extreme headwaters of the rio Fundación which flows westward to the Ciénaga Grande. Collections around San Sebastián were made at altitudes varying from 1800 m. to 2400 m.
- SANTA CECILIA (Ww), 700-800 m., Caldas. A small village 15 km. northwest of Pueblorrico, near the junction of the rio Tatamá and the upper rio San Juan.
- SANTA CRUZ, 2400 m. (?), Magdalena. A tiny Indian hamlet visited by W. W. Brown, Jr., on the north slope of the Santa Marta Mts., on the rio Macotama. According to Carriker (Bds. Santa Marta Region, p. 126), the altitude of Santa Cruz is only about 900 m. Map shows 1240 m.
- SANTA CRUZ, 50 m., Atlántico. A small village 6 km. south of Los Penales, near the border of Bolívar. Visited by Dugand.

- SANTA ELENA (Ce), 2700-3000 m., Antioquia. Just 8 km. east of Medellín, on the top of the ridge overlooking the city. One of Salmon's most important collecting stations, also visited by Leo E. Miller and H. Boyle.
- SANTA ISABEL (PÁRAMO DE) (C), 3400-4000 m., Caldas. Near the summit of the Central Andes, north of the Quindío Mts. The Nevado de Santa Isabel, a snow-covered peak rising to 5100 m., is just on the border of Caldas and Tolima, between the Nevado del Quindío and the Nevado del Ruiz. The three peaks are part of a large mass of high mountains covered with snow known as Mesa Nevada de Herveo.
- SANTA MARTA, 0 m., Magdalena (11°15' N., 74°14' W.). The capital of the Department of Magdalena. An historical town (probably the oldest in continental South America, founded in 1525) on the Caribbean coast. The region known as "Santa Marta" lies to the south and east of it, including the Sierra Nevada (Santa Marta Mts.).
- SANTA MARTA MOUNTAINS (SIERRA NEVADA DE SANTA MARTA), Magdalena. A large isolated mountain mass in northern Colombia rising abruptly from sea level to perpetual snow, attaining an elevation of about 5800 meters (the highest in Colombia) at a point less than 40 km. from the sea shore. It occupies a relatively small base, triangular in shape with the apex pointing southward, from 10°20' to 11°20' N., and 72°40' to 74°10' W., the main axis running east and west, parallel to the coast line, along the 11° of N. latitude. There are seven main snow peaks, the highest two of which reach an elevation of 5835 m. and 5775 m. according to recent surveys.
- SANTA ROSA (Ce), 300-600 m., Bolívar. A locality visited by Carriker at the east base of the Serranía de San Lucas, a large northern spur of the Central Andes forming the divide between the lower Cauca basin and the middle Magdalena Valley, 20 km. west of Simití (which see).
- SANTA ROSA (Ew), about 1500 m., Magdalena. A locality visited by Wyatt on the western slope of the Eastern Andes, between Ocaña and the Magdalena Valley, very near and below "Alto". Described by Wyatt as "a shed in the forest".
- SANTA ROSA DE VITERBO, 2520 m., Boyacá (5°53' N., 72°59' W.). A town on the heights above the upper Sogamoso River, 33 km. north of Lake Tota.

- SANTO DOMINGO (Ce), 1970 m., Antioquia. A town 50 km. northeast of Medellín, just south of La Quiebra Pass.
- SANTO TOMÁS, 10 m., Atlántico. A large village 24 km. south of Barranquilla, near the west bank of the río Magdalena.
- SASAIMA (Ew), 1225 m., Cundinamarca (4°58' N., 74°26' W.). A small town north of and below Albán, about midway, as the crow flies, between Bogotá and Honda.
- SAUTATÁ, 10 m., Chocó. On the west bank of the río Atrato, 45 km. above its mouth in the Gulf of Urabá, near the eastern base of the Darién range. The name is sometimes spelled "Soatatá" and "Suatatá".
- "SAVANALARGA", "SAVANILLA". See Sabanalarga and Sabanilla.
- SELVA, LA (Ww), 1300-2200 m., Caldas. A farm on the northwestern slope of Cerro Tatamá, near the border of Chocó. Visited by Palmer and by von Sneider.
- SEVILLA, 30 m., Magdalena. A small town southeast of Ciénaga, on the río Sevilla, at the foot of the western slope of the Santa Marta Mts.
- SEVILLANO, 5 m., Magdalena. A small village 10 km. south of Ciénaga, near the northeastern shore of the Ciénaga Grande.
- SIATÓ (Ww), 1585 m., Caldas. A small mountain stream in the headwaters of río Tatamá, very near Pueblorrico. Visited by Palmer.
- SIBATÉ, 2615 m., Cundinamarca. A small village at the southern end of the Sabana de Bogotá, on the road to Fusagasugá. Often misspelled "Cibaté".
- SIECHA (LAGUNA DE) (E), 3455 m., Cundinamarca. A lagoon on the mountains which rise just east of Bogotá.
- SIERRA, LA (Cw), 1830-2040 m., Cauca. A town 35 km. south of Popayán, on a ridge overlooking the deep and arid valley of the upper río Patia.
- SILENCIO (Ww), 1500-1700 m., Valle. This is the "Salencio" of Chapman, situated in the extreme northern portion of Dept. Valle, on the río de las Vueltas (= upper río Garrapatas) which flows southward and westward to the río Sipí in Chocó. Therefore, the locality is not on the eastern slope as described by Chapman (p. 653) but on the western. Chapman's map (pl. XV) actually shows it in this position, in spite of the fact that in his list of localities (p. 653) he says that it is on the eastern slope of the Western Andes.

The town is now officially called Albán. It lies just below a ridge which forms the border of Valle and Chocó.

SIMÍCHUCUA or SIMÍNCHUCUA, 2570 m. at camp site (Carriker), Magdalena. A locality visited by Carriker on the south slope of the Santa Marta Mts., in the headwaters of the río Fundación, northwest of San Sebastián de Rábago. Collections appear to have been made here between the altitudes of 2500 m. and 3200 m.

SIMITÍ, 85 m., Bolívar (7°53' N., 73°57' W.). A village on the south edge of a large lagoon about 20 km. west of the río Magdalena. Collections were made by Carriker mostly west of Simití, on the east slope of the Serranía de San Lucas. See under Santa Rosa and Volador.

SINÚ, río, Bolívar. An important river rising in northern Antioquia on the north slope of the Paramillo Mts. and flowing northward through western Bolívar to Cispata Bay on the Caribbean coast. The upper Sinú Valley is heavily forested, whereas the lower part lies in the semi-arid and transitional vegetation zone of the Caribbean coastal plain.

SIPÍ, 70 m., Chocó (4°39' N., 76°37' W.). A village visited by Palmer on the río Sipí, which flows into the middle río San Juan.

SOATÁ (Ew), 2045 m., Boyacá. A town in northern Boyacá, on the west side of the deep río Chicamocha (Sogamoso) Valley. Birds labeled "Soatá" in the collection of the Instituto de Ciencias Naturales, Bogotá, were collected at various altitudes from 1300 m., at the bottom of the valley, to about 2600 m., just west of and above the town.

SOGAMOSO, río (Ew), A river rising in Boyacá south of Tunja near the border of Cundinamarca, flowing to the northeast and then curving to the northwest through Santander, finally emptying into the río Magdalena at 7°13' N. near Puerto Wilches. The same river is commonly known as río Chicamocha in the middle part of its course. The Sogamoso valley is heavily forested in the lower part, from a point just north of the junction with the río Suárez, to the río Magdalena. The middle section (known as Chicamocha Valley) is arid and scrubby.

SOLANO (BAHÍA DE), Chocó (6°17' N.). A bay on the Pacific coast, at the foot of the Baudó Mts. Visited by the "Askoy" Expedition of 1941.

SONSÓN (Cw), 2545 m., Antioquia (5°42' N.). A town in the Central Andes, about 65 km. southeast of Medellín, near the border of

Caldas. The Páramo de Sonsón, just east of the town, rises to about 3500 m.

SUÁREZ, río (Ew). A western branch of the río Sogamoso rising from Laguna de Fúquene on the border of Boyacá and Cundinamarca, and flowing northward, mostly through Santander. Also known in the upper part as río Saravita.

SUARRAGA, ? Cauca. Probably near El Tambo, Cauca.

SUBA, 2650 m., Cundinamarca. A small village lying on a low ridge rising from the Sabana de Bogotá about 9 km. due north of Bogotá. The "Suba Marshes" of Chapman are really known as Tibabuyes, and they lie about 3 km. west of Suba, bordering the east bank of the río Bogotá, at about 2560 m. altitude.

SUPACHOQUE, 2663 m., Cundinamarca. A village at the northwestern end of the Sabana de Bogotá, about 40 km. northwest of Bogotá.

SUBIA (Ew), Cundinamarca. The name of a large transverse ridge, properly a western spur of the Eastern Andes, rising between La Mesa and Fusagasugá, but much closer to the latter town. The altitude of Subia is given by Chapman (p. 655) as "5860 feet" (= 1787 m.) but this is doubtlessly a mistake. As seen from Fusagasugá (1750 m.) the lower crest of the Subia range is at least 400 to 500 m. higher than the town (i.e. 2150-2250 m.) and it rises gradually toward the northeast to about 3000 m., finally joining the main ridge of the Eastern Andes in the vicinity of the Tequendama Falls, near the southwestern end of the Bogotá tableland. The source of the small río Subia, which flows down the southern slope near Fusagasugá, is at 2700 m. Collections have recently been made there by J. I. Borrero at 2600 m. Chapman's error regarding the altitude of Subia is also shown by the birds labeled from that locality, for they are mostly kinds which are found only in the upper Subtropical and lower Temperate Zones.

SUCIO, río (Ww), Antioquia and Chocó. A river rising in northern Antioquia and flowing in a northwesterly direction into the lower río Atrato at 7°26' N., nearly opposite the mouth of the río Salquí. Frontino is situated on one of its headwaters.

SUESCA, 2635 m., Cundinamarca. A village on the Sabana de Bogotá, not far from the northeastern end, about 65 km. northeast of Bogotá.

SUMAPAZ ("NEVADO" DE), 4560 m. (3°57' N., 74°07' W.). A peak of the Eastern Andes, 72 km. due south of Bogotá, near the border of

Cundinamarca and Meta. The peak itself is in Meta. Although quite commonly used, the word "Nevado" is a misnomer since the summit is below the level of perpetual snow. However, the top of Sumapaz may at times appear covered with light snow in the early morning. This melts away with the first rays of the sun. The Páramos de Sumapaz lie mainly in the southern end of Cundinamarca, their altitude varying from 3200 to 4500 m. They extend northward to the headwaters of the rio Tunjuelo, near Bogotá, westward along the border of Cundinamarca and Meta to the headwaters of the rio Sumapaz, tributary of the Magdalena, and southward and eastward to the headwaters of the rio Meta (Humadea, as known there) and the rio Ariari, tributaries of the Orinoco.

SURATÁ (Ew), 1740 m., Santander. A town in the Suratá Valley, 35 km. northeast of Bucaramanga. The rio Suratá flows into the rio Lebrija in the vicinity of Bucaramanga. This is very probably the "Cocuta Suratá" of Wyatt.

SURÍA (Caño), 360 m., Meta. A rivulet fringed with heavy forest, about 22 km. southeast of Villavicencio, quite near the Sabana de Apiay where one of Villavicencio's airfields is located. Dense gallery forests fringing such "Caños" in the Llanos country are a very contrasting habitat among the surrounding grassy savannas.

SUSUMUCO (Ee), about 900 m., Cundinamarca and Meta. A creek 12 km. west of Villavicencio, between Quetame and Buenavista, on the west side of the Buenavista ridge, at exactly the border of Cundinamarca and Meta. This heavily forested region is very probably the source of many "Bogotá" trade skins.

TACAMOCHO, 25 m., Bolívar. A little village visited by Wyatt on the left bank of the lower rio Magdalena at 9°30' N., near the "Varrud" of Chapman. The name has been incorrectly spelled "Catamucho".

TÁCHIRA, RÍO (Ee), Norte de Santander. A river rising on the Páramo de Tamá and flowing northward into the rio Zulia at Puerto Villamizar. It forms the boundary of Colombia and Venezuela from its source to about 8°02' N., a few kilometers north of Cúcuta.

TADÓ, 90 m., Chocó (5°16' N., 76°32' W.). A village visited by M. G. Palmer on the upper rio San Juan, 25 km. northeast of Andagoya.

TAGANGA, 0 m., Magdalena. A fishing village and a small cove just

north of the Santa Marta harbor. Misspelled "Tayanga" in Dr. Allen's list (Bull. Amer. Mus. Nat. Hist., 13, 1900).

TAGUAS, LAS, 1500-1600 m., Magdalena. A point on the south slope of the San Lorenzo ridge, in the rio Córdoba valley, northeast of and above Vista de Nieve.

TAHUAPUNTO. See "Opposite Tauapunto".

TAMÁ (PÁRAMO DE) (Ee), 2400 m. at camp site, Norte de Santander. A somewhat isolated mountain rising to 3368 m. on the border of Colombia and Venezuela, its western side lying in Colombia. Visited by W. H. Osgood and S. G. Jewett who established one of their base camps in Colombian territory at the extreme headwaters of the rio Tachira.

TAMBO, EL (We), 1500-2000 m., Cauca (2°25' N., 76°49' W.). A large village at the head of the Cauca Valley, 25 km. west of Popayán.

TAMBO, EL, 65 m., Chocó. A collecting station of Carriker at the head of canoe navigation on the rio Atrato, 22 km. south of Quibdó, where the trail crosses to Istmina.

TAMBOR, EL (Ew), about 500 m., Santander (7°18' N., 73°16' W.). A farm on the east slope of the rio Lebrija valley, about 30 km. northwest of Bucaramanga. Visited by Carriker.

TAMBOS, LOS, 1800 m., Valle. A J. H. Batty locality not found on maps. It is very likely situated on the western slope of the Western Andes, east of Buenaventura, judging from the record of *Cephalopterus penduliger*, a Pacific slope form.

TAQUINA, 1800-2140 m., Magdalena. A small Indian hamlet on the north slope of the Santa Marta Mts. between San Miguel and Macotama.

TATAMA (CERRO). A mountain rising to 3950 m. in the Western Andes at 5° N. and 76°06' W., where the boundaries of Chocó, Caldas and Valle come together. Collections were made on the northwestern slope between 1380 m. and 3500 m. altitude.

TAUAPUNTO. See "Opposite Tauapunto".

TECHO, 2570 m., Cundinamarca. One of the airports of Bogotá, 8 km. west of the city, on the Sabana de Bogotá.

TEMPLADO, 1700-1800 m., Magdalena. An Indian plantation on the east slope of the southern Santa Marta Mts., just below and northeast of El Mamón.

TENA (Ew), 1384 m., Cundinamarca. A small village near La Mesa. It is probably a source of some "Bogotá" trade skins.

- TENASUCÁ** (Ew), 1950 m., Cundinamarca. A small settlement 4 km. east of and above Tena, and just below the western rim of the Bogotá tableland. East of Tenasucá the mountains rise steeply to the edge of the Sabana de Bogotá. This locality is probably a source of some "Bogotá" trade skins, which may have been collected at various altitudes from 1500 m. to 2200 m.
- TEQUENDAMA** (Ew), 2400 m., Cundinamarca. Also referred to commonly as "El Salto". The vertical falls (145 m. high) of the rio Bogotá, a few km. after flowing out of the southwestern end of the Sabana de Bogotá.
- TIBABUYES**. See Suba.
- TIERRA NUEVA**, 5 m., Magdalena. A settlement in the lowlands at the southeastern corner of the Ciénaga Grande, on the rio Aracataca, a few km. above and east of the mouth of this river.
- TIERRA NUEVA**, 1100-1800 m., Magdalena. A locality visited by Carriker on the west slope of the Sierra Negra, Perijá Mts., east of Fonseca.
- TIGRA, LA, OR EL TIGRE** (Ww), 1500-1750 m., Valle. A farm visited by André just below the pass of Las Cruces, on the old trail from Cali to Buenaventura. Not found on maps.
- TIGRE, EL** (Ww), 100 m., Chocó. A creek emptying into the rio Tamaná, an affluent of the upper rio San Juan, midway between Nóvita and Juntas de Tamaná. Also the name of a small settlement at the mouth of the creek. Visited by M. G. Palmer.
- TIGRERA, LA**, 170 m., Magdalena. A point 11 km. southeast of Santa Marta, on the road to Minca and Cincinatti.
- TIJERAS** (Ce), 2300 m., Huila. A collecting station near the Moscopán valley, on the eastern side of the Central Andes, near their southern end.
- TIMBA** (We), 1000 m., Cauca (quite near the border of Valle). A railroad station in the Cauca Valley, 45 km. south of Cali. The Timba Valley lies on the east slope of the Western Andes, just west of Timba, on the border of Dept. Valle. Birds were collected along this valley at 1500-2000 m. altitude.
- TIMBÍO, RÍO**, 1400-2000 m., Cauca. A small affluent of the upper rio Patía, rising just south of Popayán.
- TINAJAS, LAS**, 600 m., Magdalena. A locality without houses near the head of the Concha creek, between the seashore and the Matojito Valley, Santa Marta district.

- TOCAHAGUA (LAGUNA DE), 15 m., Atlántico. A reed-grown lagoon just west of Laguna de Luruaco and northeast of Los Pendales.
- TOCAIMA (Ew), 400-500 m., Cundinamarca. A village in the upper Magdalena Valley, 28 km. northeast of Girardot, at the foot of the Eastern Andes.
- TOCAIMITO (Ew), 3000-3100 m., Cundinamarca. An extinct ranch on the slopes south of and above Bogotá, just below and west of the Chipaque Pass, along the road from Bogotá to Villavicencio.
- TOCHE (Ce), 2000-2500 m., Tolima. A small valley along the río Toche on the east side of the Quindío Mts. above Ibagué. Erroneously accented "Toché" in Chapman's book.
- TOLIMA (NEVADO DEL) (C), Tolima (5°40' N., 75°20' W.). A prominent cone-shaped and extinct volcano covered with snow, rising in the Central Andes 30 km. northwest of Ibagué. The summit reaches 5215 m. but collections were made at 3600-4000 m., most likely on the southern slope along the trail leading up from Ibagué along the río Combeima valley. It is also a locality given by Stone in his paper on the Detwiler collection but the latter only collected in the foothills of the mountain.
- TOLIMA (LLANOS DEL), Tolima. The name usually applied to the floor of the upper Magdalena Valley, west of the river, from Honda southward to Natagaima. It is a semi-arid region, the altitude of which varies from 300 to 500 m.
- TOTA (LAGO DE), 3015 m., Boyacá (5°33' N., 72°55' W.). A large lake in the Eastern Andes, just below and east of the main ridge. It gives rise to the río Upía, a tributary of the río Meta.
- TRES ESQUINAS, 180-200 m., Caquetá (0°44' N., 75°15' W.). An airfield at the junction of the río Caquetá and the río Orteguaza, 105 km. southeast of Florencia and 94 km. due north of the point where the boundaries of Colombia, Ecuador, and Perú meet.
- TRES TETAS, LAS, Magdalena. Three peaks rising to 3500-3600 m. in the Perijá Mts. just south of 10° N., above Casacará and southeast of Codazzi, on the border of Colombia and Venezuela. Collections were made here by Carriker at various altitudes from 2200 to 3100 m.
- TROJAS DE CATACA, 5 m., Magdalena. A small fishing village at the mouth of the río Aracataca, on the southeastern shore of the Ciénaga Grande, 30 km. southwest of the town of Ciénaga.

- TRUANDÓ, RÍO, below 100 m., Chocó. A river rising very near the Pacific shore but flowing away from it in a northeasterly direction to the río Atrato which empties into the Caribbean Sea.
- TUCURINCA, 40 m., Magdalena. A village in the lowlands southeast of the Ciénaga Grande, about 16 km. north of Fundación and near the western base of the Santa Marta Mts.
- TUMACO, 0 m., Nariño. A Pacific coast port lying on an island at 1°49' N., and 78°46' W., near the westernmost corner of Colombia.
- TUNJA (Ew), 2820 m., Boyacá (5°32' N., 73°22' W.). The capital of Boyacá, in the extreme headwaters of the río Sogamoso, about 120 km. northeast of Bogotá.
- TUNJUELO, RÍO, Cundinamarca. A small stream rising in the extreme northern end of the Páramos de Sumapaz at about 3750 m. and flowing a short distance south and west of Bogotá into the río Bogotá near Bosa.
- TÚQUERRES, 3100 m., Nariño (1°05' N., 77°37' W.). A town on a high tableland in the Andes of Pasto, about 50 km. southwest of Pasto.
- TURBACO, 200 m., Bolívar. A large village about 20 km. inland from and southeast of Cartagena. Visited by Mrs. Kerr and by Carriker.
- TURBO, 0 m., Antioquia. A village visited by the Michler Expedition on the east shore of the Gulf of Urabá, nearly opposite the delta of the río Atrato.
- UMBRÍA, 380-500 m., Putumayo. A village visited by von Sneider on the río Guineo, an affluent of the upper río Putumayo, 35 km. south of Mocoa.
- UNIÓN, LA, 620-710 m., Huila (3°04' N., 75°08' W.). Present-day Tello, a town 25 km. northeast of Neiva in the upper Magdalena Valley.
- USAQUÉN, 2600 m., Cundinamarca. A large village about 4 km. north of 90th. Street in the city of Bogotá, of which it is practically a suburb.
- USIACURÍ, 100 m., Atlántico. A village 33 km. southwest of Barranquilla.
- UVITA, LA (Ew), 2471 m., Boyacá (6°18' N., 72°34' W.). A small town near Soatá in northern Boyacá, not far to the east of the Chicamocha Valley.
- VALDIVIA (Cw), 1200 m., Antioquia. A town below La Frijolera and above Puerto Valdivia in the lower Cauca valley. Collections

appear to have been made here between the altitudes of 1140 and 1260 m.

VALENCIA OR **VALENCIA DE JESÚS**, 160 m., Magdalena. A small town on the plain of the middle Cesare Valley, 25 km. southwest of Valledupar.

VALLE DE LA CALERA. See Calera.

VALLE DE LAS PAPAS (Ce), Cauca. As defined by L. E. Miller and A. A. Allen in Chapman's book, this refers to the valley of the río Papas (2800-3200 m., about 1°52' N., 76°40' W.) in the extreme headwaters of the río Caquetá. The Páramo de las Papas is just north of the valley (1°56' N.) at 3500-3700 m., surrounded by mountains rising to 4200-4400 m. The name "Páramo de las Papas" is commonly applied in a very broad manner to the general region where the Cauca, Magdalena, Caquetá, and Patia have their sources, which are very near each other, although these rivers flow in opposite directions to the Caribbean, the Atlantic, and the Pacific.

VALLEDUPAR, 210 m., Magdalena (10°28' N., 73°15' W.). A town on the plain of the lower río Guatapurí, an affluent of the Cesare, at the southeastern foot of the Santa Marta Mts. and not far from the western base of the Sierra de Perijá (Eastern Andes). Sometimes referred to as Valle de Upar and Valle Dupar. The latter is the original form of the name, whereas Valledupar is the official modern spelling.

VALPARAÍSO. And old name for Cincinatti, Santa Marta district.

"VARRUD", río Magdalena. Above Calamar. No such name is known, even among those of the many extinct refueling stations of steamer navigation. A refueling station, known here as *leñateo*, was commonly a group of two to a few thatched huts in which lived the men engaged in cutting firewood for the steamers (before fuel oil was used). Often the *leñateos* were moved up or down the river as the forests were cut down and firewood became scarce in a locality. Several steamboat captains agree with Dugand that "Varrud" is simply a misspelling for Barbudo, a word often contracted to Barbú and pronounced Barú or Balú by negroes. Barbudo was a refueling station on the east bank of the river, in Dept. Magdalena, at 9°36' N., i.e. "one day's sail above Calamar".

VAUPÉS, RÍO. A large river flowing southeastward through the Comisaría del Vaupés in Amazonian Colombia to the río Negro, Brazil.

Spelled Uaupés in Brazil. It forms the border of Colombia and Brazil for about 140 km. from the mouth of the rio Querari, slightly east of Mitú, to the mouth of the rio Papurí at Yavaraté (Jauareté). See "opposite Tauapunto" in this list.

VEGAS, LAS, 900-1800 m., Magdalena. A coffee plantation on the north-eastern slopes of the San Lorenzo ridge, on the upper rio Mendiguaca.

VENTANAS, LAS (EW), 2000-3000 m., Norte de Santander (about 7°48' N., 72°06' W.). A farm at which Carriker collected northwest of Ramírez, and a few kilometers southeast of a small village called Trapiche.

VERJÓN (LAGUNA DEL) (E), 3475 m., Cundinamarca. A small lagoon on the Páramo del Verjón, just above and southeast of Bogotá.

VERJÓN (PÁRAMO DEL) (E), 3400-3600 m., Cundinamarca. Just above and southeast of the city of Bogotá, on the west slope of the main ridge of the Eastern Andes. The Páramo de Choachi lies on the east slope just across the ridge, both páramos being practically continuous.

VETAS (EW), 2700-3300 m., Santander (7°19' N., 72°53' W.). A high valley and village visited by Wyatt northeast of Bucaramanga, just below the Páramo de Santurbán ("Páramo de Pamplona", of Wyatt).

VIEJA, LA (Ww), 300 m., Chocó. A creek or a hill at which Mrs. Kerr collected a few specimens just south of and above Bagadó on the upper rio Andágueda, upper Atrato Valley. This name is only to be found on old maps of Chocó.

VIGÍA, LA, 350 m., Meta. A cattle estate in the Eastern Llanos, south-east of Villavicencio, along the trail from Apiay to Surimena.

VILLA FELISA (Ee), 400-700 m., Norte de Santander. A farm visited by Carriker 20 km. south of Cúcuta.

VILLAGÓMEZ (EW), about 1500 m., Cundinamarca. A settlement in northwestern Cundinamarca, near the border of Boyacá, south of Paime, in the small valley of the rio Menciá.

VILLANUEVA, 280 m., Magdalena (10°37' N., 72°58' W.). A town near the west base of the Sierra Negra, Perijá Mts., 35 km. northeast of Valledupar. Collections have also been made by Carriker above and south of Villanueva at 1600-2000 m. on the west slope of the Perijá Mts.

VILLAVICENCIO (Ee), 420-500 m., Meta (4°09' N., 73°37' W.). The capital of Meta. An important town at the foot of the Eastern Andes and on the edge of the Eastern Llanos, on the río Guatiquía, 122 km. southeast of Bogotá by road. The heavily forested foothills of the Andes end abruptly near the upper streets of the town, and the country to the east is flat and open, but there is considerable forest growth along the many streams or "caños" which here leave the Andes.

A few specimens labeled "Villavicencio" have been taken between this town and Buenavista, at various altitudes from 600 m. to 1000 m. The region about Villavicencio is the source of a great number of "Bogotá" skins.

VILLAVIEJA, 435 m., Huila. A small town in the arid upper Magdalena Valley, 35 km. north of Neiva, on the east bank of the río Magdalena. Visited by Alden H. Miller.

VILLETA (Ew), 842 m., Cundinamarca. A town in the upper Magdalena Valley, about midway between Sasaima and Guaduas along the motor road from Bogotá to Honda. It is situated in the foothills of the Eastern Andes.

VIOTÁ (Ew), 750 m., Cundinamarca. A village in the foothills of the Eastern Andes, upper Magdalena Valley, 23 km. southwest of La Mesa.

VIROLÍN (Ew), about 1900 m., Santander (6°06' N., 73°08' W.). A small village on one of the headwaters of the río Fonce, 22 km. south of Charalá, near the border of Boyacá. Mountains rise well above 2500 m. very near the locality (to 3500-3800 m. at Páramo de La Rusia and Páramo de Agüero on the road to the Valle de Duitama), whereas the valley below drops steeply to about 1500 m.

VISTA DE NIEVE, 1200 m., Magdalena (74° W.). A hacienda on the south flank of the Cerro Quemado, San Lorenzo ridge, Santa Marta district.

VLADOR (Ce), 820-1000 m., Bolívar. A coffee plantation visited by Carriker on the east slope of the Serranía de San Lucas, a large northern spur of the Central Andes forming the divide between the lower Cauca basin and the middle Magdalena Valley, 30 km. west of Simiti (which see).

YACOPÍ (Ew), 1416 m., Cundinamarca (5°29' N., 74°20' W.). A village, also commonly known as Carmen de Yacopi, in northwestern Cundinamarca, quite near the border of Boyacá. Misspelled

"Jacopi" in Chapman's book. The country about Yacopi is for the most part heavily forested.

YEGUAS, 200 m., Caldas. A small village on the west bank of the rio Magdalena (5°24' N.), about 10 km. south of La Dorada.

YUMBO (We), 985 m., Valle. A town in the Cauca Valley, at the foot of the Western Andes, about 15 km. north of Cali, where the railroad to Buenaventura begins the ascent to La Cumbre.

YUNTAS. The same as Juntas or Cisneros, Valle.

YURIMENA, 200 m., Meta. A small river and a settlement in the Eastern Llanos, near the south bank of the rio Meta, 13 km. east of Cabuyaro. See also under Argentina Vieja.

YURUPARÍ, 150 m., Vaupés. A small settlement on the rio Vaupés near Mitú.

ZANCUDO (Cw), about 2400-2500 m., Caldas. A farm visited by Carriker about 13 km. east of and above Manizales, below the crest of Central Andes, on the old trail from Manizales to Mariquita.

ZAPOTE, RÍO, 0 to 100 m., Bolivar. A small coastal stream flowing into the Caribbean on the east side of Cispata Bay, opposite the mouth of the rio Sinú. See also Puerto Zapote of this list.

ZIPAQUIRÁ, 2650 m., Cundinamarca. A town on the Sabana de Bogotá, about 48 km. north of Bogotá.

"ZITAGUIRA". See Zipaquirá.

ZULIA, RÍO (Le), Norte de Santander. A river rising in Colombia on the Eastern Andes and flowing northward into the rio Catatumbo, which empties into Lake Maracaibo, Venezuela. The rio Zulia leaves Colombian territory and enters Venezuela at the confluence of the rio La Grita near Puerto Santander.