### SMITHSONIAN MISCELLANEOUS COLLECTIONS VOLUME 150, Part 2

# THE BIRDS OF THE REPUBLIC OF PANAMÁ

Part 2.—Columbidae (Pigeons) to Picidae (Woodpeckers)

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# THE BIRDS OF THE REPUBLIC OF PANAMÁ PART 2: COLUMBIDAE (PIGEONS) TO PICIDAE (WOODPECKERS)

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#### INTRODUCTION

The first section of this account of the avifauna of the Isthmus of Panamá, published December 27, 1965, covered the 202 species in the 35 families from the Tinamidae (Tinamous) to the Rynchopidae (Skimmers). The 18 families in this second part include 208 species in the groups remaining in the systematic sequence to the great order of the Passeriformes, the perching birds. As in the first part, the individual accounts include a summary of what is known of each species, based on personal observation and on the published records of others. A further season of field work, from January to March 1966, covered the Burica Peninsula in southwestern Chiriqui, an area not visited previously, and one from which little was known of its natural history. It was fortunate that the visit came at that time as forest cover there was being cleared rapidly for agriculture.

Introductory paragraphs in the first volume outline briefly the physical features of the Republic so these are not repeated here, except to note that with continued change in access to more remote areas, clearing of forests proceeds with a rapidity alarming in its steady pressure in restriction of the native fauna and flora. In this connection it is a pleasure to record the establishment of the National Park and Biological Reserve of Cerro Campana, an interesting region that marks the southern boundary of the mountain flora and fauna of the highlands of western Panamá. With this important beginning it is hoped that other areas also may be set aside for the preservation of their natural features.

Of equal interest and value is the action of the Ministerio de Agricultura, Comercio e Industrias in its Decree No. 23 of January 30, 1967, which establishes protective measures for the conservation of the native fauna, with provision for the establishment of a National Commission concerned with these important matters.

To repeat in part detail included in the introduction of the first volume, the account of each family begins with a brief general statement, followed by a key to identify the species known in Panamá, intended in the main to be used with specimens in hand. Arrangement in these keys is based on restrictive characters, and in its order is not intended to indicate relationship. The lineal order that the families follow is that in my last revision of the Classification for the Birds of the World (Smithsonian Misc. Coll., vol. 139, no. 11, June 23, 1960, pp. 1-37). References to literature cited throughout the text, given in parentheses, are condensed but are sufficiently complete for consultation if required.

The account for each species begins with the scientific name, its reference, and vernacular names in English and in Spanish. These are followed by a brief sentence on outstanding characters that may assist in recognition. Where two or more subspecies are found in Panamá, general information that applies to all is covered following a species heading. The subspecies follow, each with its scientific name and reference, a statement of the characters that separate it from its fellows, measurements, range in the Republic, and other pertinent data. If the nominate race is included among these, reference to the scientific name is given under it. Where this form does not reach Panamá the species heading carries this reference. In variable species of wide range, where only one race is found, the information is given under that single heading. Vernacular names, both in English and Spanish, apply to the species as a whole, not to any one subspecies if more than one is present. Much thought has been given to vernacular names, particularly those that have been long in use in standard works that cover the Isthmus. This in some cases has involved choice since in wide-ranging species some populations that have been regarded as distinct, so that each has had its separate vernacular name, now are called geographic races. In the case of migrants from the north the names used are those of the official A.O.U. Check-list (Check-list of North American Birds, fifth edition, 1957). With others, especially with tropical residents of wide distribution, names in some have varied so that choice has been necessary. Attempt has been made to select the name most often, or most widely, used as the one appropriate. In this the names suggested by Eugene Eisenmann in his Species of Middle American Birds (Trans. Linn. Soc. New York, vol. 7, 1955), and the more recent work by R. M. de Schauensee, Species of Birds of South America and Their Distribution (Acad. Nat. Sci. Philadelphia, 1966) have been helpful and valuable.

With the Spanish names, where the bird is one known to Pana-

manian countrymen there is no difficulty. But the great majority of smaller birds are not so recognized. With wide-ranging species through the American tropics, often appropriate names are available from other Spanish-speaking countries. With some of obscure habit it has been necessary to propose names in both languages.

The line drawings that accompany the text, made by the competent hand of Walter A. Weber, have been planned to illustrate type forms in the various families.

Usage in scientific names follows the International Code of Zoological Nomenclature, print of 1964, which includes amendments made at the XVIth International Congress of Zoology, held at Washington in 1963.

#### ACKNOWLEDGMENTS

In the preparation of the present volume, in addition to the extensive collections now in the U. S. National Museum, record specimens have been examined in the American Museum of Natural History, the Museum of Comparative Zoology, the Field Museum of Natural History, the Royal Ontario Museum of Zoology, and the British Museum (Natural History). Other important material has been received on loan from the Carnegie Museum.

The close and friendly association that I have had throughout the years of my work in the Republic with the Museo Nacional of Panamá and its Director, Dr. Alejandro Méndez Pereira, and with the staff of the Gorgas Memorial Laboratory and its Director, Dr. Martin Young, has been of continued value. More recently there has been similar contact with Dr. Horace Loftin, head of the Florida State University Center for Tropical Studies, with headquarters in the Canal Zone.

Government authorities of the Republic of Panamá have continued assistance in numerous ways. I have again to thank General de Brigada Bolívar E. Vallarino, Comandante Jefe de la Guardia Nacional, for permits that allowed continuance of work in the field in the seasons of 1965 and 1966. These two years have given especially valuable data for the present volume. In 1966 officials of the Chiriqui Land Company at Puerto Armuelles aided in providing living quarters and in other ways during work in the area of the Burica Peninsula.

Major assistance in the continued sharing of data of mutual interest has come especially from Dr. Eugene Eisenmann in New York, and from Dr. Pedro Galindo in Panamá. Many pleasant memories remain with me of my contacts with the friendly and courteous residents of the Republic as I have traveled and lived in their country.

#### Order COLUMBIFORMES

Family COLUMBIDAE: Pigeons and Doves; Palomas y Tortolitas

Members of this family, found widely throughout the temperate and tropical regions of the world, are absent only in the Arctic and Antarctic. Their greatest abundance in number of species is in the broad area between India and Australia. Pigeons vary in size from large to tiny, but all are heavy-bodied birds with small heads and short legs. Many are resident, though often such species shift about seasonally, moving to regions where seeds or berries are locally attractive. Some, as the races of mourning dove of northern North America, leave the northern third of the breeding range to move south, some even into the Tropical Zone. In the tropics of the Indo-Malayan region and the Pacific Islands species of this family with plumage variegated with green, orange, and red are frequent. Those found in Panamá are plain in color. The 23 species recorded on the Isthmus include several that are regarded as game and are sought for sport and for food.

#### KEY TO SPECIES OF COLUMBIDAE

1.	Tail feathers narrow, slender, graduated in length, pointed at the end.	
	Mourning dove, Zenaidura macroura, p. 2	1
	Tail feathers broad, only slightly graduated, not pointed at the end	2
2.	A prominent white band on the wing.	
	White-winged dove, Zenoida asiatica australis, p. 1	8
	210 profitment write band on the wing.	3
3.	Smaller, wing less than 120 mm	4
	Larger, wing more than 130 mm	7
4.	Tip of outer primary distinctly narrowed	5
	Tip of outer primary not distinctly narrowed	6
5.	Under tail coverts white or buffy white.	
	Maroon-chested ground-dove, Claravis mondetoura mondetoura, p. 3	5
	Under tail coverts gray (males), or cinnamon-brown (females).	
	Blue ground-dove, Claravis pretiosa, p. 3	3
6.	Under wing coverts cinnamon-brown, without black; smaller.	
	Plain-breasted ground-dove, Columbina minuta elacodes, p. 3	0
	Under wing coverts partly cinnamon-brown, partly black; larger.	
	Ruddy ground-dove, Columbina talpacoti, p. 2	5
7.	Outer primary decidedly narrowed at tip 1	5
	Outer primary not abruptly narrowed at tip	
8.	Middle toe and claw longer than tarsus	9
	Middle toe and claw equal to tarsus, or shorter 1	8

9.	Entire crown clear white.  White-crowned pigeon, Columba leucocephala, p. 6
	Without white in the crown
10	A prominent white band across the hindneck.
10.	Band-tailed pigeon, Columba fasciata crissalis, p. 9
	No white band on hindneck
11.	Feathers of breast, neck, and upper back light-colored, tipped on sides and ends with slate or slaty blackScaled pigeon, Columba speciosa, p. 11  Breast, neck, and upper back uniform without squamate markings 12
12	Crown and hindneck gray, distinctly different in color from back.
12,	Pale-vented pigeon, Columba cayennensis pallidicrissalis, p. 7  Crown and hindneck nearly or completely uniform in color with back 13
13.	Back, rump, wings, and tail darker; sooty brown.  Short-billed pigeon, Columba nigrirostris, p. 13
	Upper surface from crown to upper tail coverts paler, nearly uniform warm brown
	Crown and hindneck uniform dark gray
16.	Back warm brownBrown-backed dove, Leptotila battyi, p. 42 Back olive-brownGray-headed dove, Leptotila plumbeiceps notius, p. 40
17.	Under surface paler; breast vinaceous white; under tail coverts white.  White-fronted dove, Leptotila verreauxi verreauxi, p. 37
	Under surface darker; breast gray or partly gray, under tail coverts with outer webs gray or dusky
18.	Under surface of primaries partly, or wholly, cinnamon-brown (in some juvenile birds the brown reduced to a narrow outer line)
19.	Upper back with a prominent patch of violet; lower breast and abdomen
	whiteViolaceous quait-dove, Geotrygon violacea albiventer, p. 57  No violet patch on upper back; breast gray, cinnamon-brown, or buff; abdomen buff to cream-buff
20.	Breast dark gray; a prominent white band below the eye.  Ofive-backed quail-dove, Geotrygon veraguensis, p. 49
	Breast cinnamon-brown or buffy brown; band below eye, where present, buff.  Ruddy quail-dove, Geotrygon montana montana, p. 58
21.	Crown and hindneck dark russet-brown.
	Goldman's quail-dove, Geotrygon goldmani, p. 53
	Crown and hindneck gray or greenish gray 22
22	. Breast, sides and abdomen brown.
	Chiriquí quail-dove, Geotrygon chiriquensis, p. 60
	Breast gray, sides brownish gray, abdomen white or buffy white 23
23	Forchead white . Lawrence's quail-dove, Geotrygon lawrencii lawrencii, p. 51
200	Forehead buffCosta Rican quail-dove, Geotrygon costaricensis, p. 55