THE BIRD FAUNA OF NORTH AMERICA IN RELATION TO ITS DISTRIBUTION IN SOUTH AMERICA

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More than one hundred species of birds leave the United States after the nesting season is over to spend the winter in South America, while others are either resident in their breeding area or find suitable winter quarters in the southern part of the North American continent. There are also species which are residents on both continents, breeding in both and still others which range into other parts of the world as well.

The North American birds, therefore, that occur also in South America, fall into three classes:

- I. Distinctively North American types, migrating to South America for the winter.
- II. Birds common to North and South America and probably breeding throughout the greater part of their habitat.
 - III. Birds of cosmopolitan distribution.

Each species must be studied throughout its range if we are to arrive at facts from which the whole narrative of migration and distribution may be read. Even among individuals of the same species, moreover, there are vast differences in migratory habits, and winter distribution cannot be determined from the summer home.

In the following lists the winter distribution of each species has been compiled from such published records as we have and additional data obtained from specimens in the collections of the American Museum of Natural History the latter source being indicated by an asterisk. Subspecies are not considered in the present paper as it is not always clear to which of several races the references apply.

CLASS I. DISTINCTIVELY NORTH AMERICAN BIRDS WINTERING IN SOUTH AMERICA.

Stercorarius parasiticus. Parasitic Jaeger.—To Brazil (inaccurate).

Larus franklini. Franklin's Gull.—Chile and Brazil. Larus atricilla. Laughing Gull.—Chile and Brazil.

Xema sabini. Sabine's Gull.—Peru.

Sterna maxima. ROYAL TERN.—Peru and Brazil.

Sterna sandvicensis. Sandwich Tern.—North Carolina to Brazil.

Sterna elegans. Elegant Tern.—Pacific coast, south to Chile.

Sterna forsteri. Forster's Tern.—Casual in Brazil.

Sterna hirundo. Common Tern.—Florida to Brazil.

Sterna dougalli. Roseate Tern.—Bahamas to Brazil.

Sterna antillarum. Least Tern.-Venezuela and Peru.

Sterna fuscata. Sooty Tern.—Louisiana to Brazil.

Chlidonias nigra. Black Tern.—Mexico to Dutch Guiana; Peru (Callao Bay) and Chile.

Querquedula discors. Blue-winged Teal.—Brazil, Ecuador.

Querquedula cyanoptera. CINNAMON TEAL.—Peru, Brazil, south to Falkland Islands.

Marila affinis. Lesser Scaup.—Ecuador.*

Steganopus tricolor. Wilson's Phalarope.—Central Chile, Central Argentina.

Lobipes lobatus. Northern Phalarope.—Ecuador.*

Gallinago delicata. Wilson's Snipe.—Colombia and southern Brazil.

Limnodromus griseus. Downthern.—Northern Brazil.

Micropalama himantopus. Stilt Sandpiper. Uruguay and Chile, Ecuador.*

Canutus canutus. Knot.—Ecuador.

Pisobia maculata. Pectoral Sandpiper.—Peru, Bolivia, Ecuador,* northern Chile.

Pisobia fuscicollis. White-rumped Sandpiper.—Paraguay to southern Patagonia.

Pisobia bairdi. Baird's Sandpiper.—Ecuador, Chile, Argentina, Patagonia.

Pisobia minutilla. Least Sandpiper.—Brazil, Chile, Ecuador, Galadagos Islands.

Ereunetus pusillus. Semipalmated Sandpiper.—Patagonia, Ecuador.*

Ereunetus mauri. Western Sandpiper.—Venezuela, Ecuador.*

Calidris leucophaea. Sanderling.—Patagonia, Ecuador.*

Limosa haemastica. Hudsonian Godwit.—Argentina, Patagonia.

Totanus melanoleucus. Greater Yellow-legs. Patagonia, Ecuador.*

Totanus flavipes. Yellow-legs.—Argentina, Chile, Ecuador,* Patagonia.

Tringa solitaria. Solitary Sandpiper.—Argentina, Ecuador.*

Catoptrophorus semipalmatus. Willet.—Brazil, Peru, Ecuador.*

Heteractitis incana. Wandering Tattler.—Galapagos, Ecuador.*

Bartramia longicauda. UPLAND PLOVER.—Pampas of South America to Argentina, Ecuador.

Tryngites subruficollis. Buff-breasted Sandpiper.—Argentina, Uruguay, Ecuador.*

Actitis macularia. Spotted Sandpiper.—Southern Brazil, Ecuador,* Central Peru.

Numenius hudsonicus. Hudsonian Curlew.—Ecuador, southern Chile, British Guiana, mouth of Amazon.

Numenius borealis. Eskimo Curlew.—Argentina, Patagonia.

Pluvialis dominicus. Golden Plover.—Campo of Brazil and Argentina.

Oxyechus vociferus. KILLDEER.—Venezuela and Peru, Ecuador.*

Charadrius semipalmatus. Semipalmated Plover. Patagonia, Chile, Ecuador, * Galapagos.

Charadrius nivosus. Snowy Plover.—Venezuela and Brazil.

Aphriza virgata. Surfbird.—Chile to Straits of Magellan.

Ardea herodias. Great Blue Heron.—Venezuela.

Butorides virescens. Green Heron.—Extreme northern—South America.

Fulica americana. Coor.—Colombia.

Porzana carolina. Sora.—Venezuela and Peru.

Circus hudsonius. Marsh Hawk.—Colombia.

Buteo platypterus. Broad-winged Hawk.—Venezuela, Peru, Ecuador.

Buteo swainsonii. Swainson's Hawk.—South America, south to Chile.

Falco columbarius. Pigeon Hawk.—Ecuador and Venezuela.

Pandion haliaetus. Osprey.—Peru, Ecuador, Paraguay.

Elanoides forficatus. Swallow-tailed Kite. Peru, Bolivia, Ecuador, Paraguay.

Coccyzus americanus. YELLOW-BILLED CUCKOO. Ecuador, Bolivia, Argentina

Coccyzus erythrophthalmus. BLACK-BILLED CUCKOO. Colombia amd Peru.

Ceryle alcyon. Belted Kingfisher.—Colombia and Guiana.

Chordeiles virginianus. NIGHTHAWK.—Brazil and Argentina.

Antrostomus carolinensis. Chuck-will's-widow.—Colombia.

Tyrannus tyrannus. Kingbird.—Colombia and British Guiana, Peru and Bolivia.

Myiarchus crinitus. Crested Flycatcher.—Colombia.

Nuttalornis borealis. OLIVE-SIDED FLYCATCHER.—Colombia to Peru.

Myiochanes virens. Wood Pewer.—Colombia and Peru.

Myiochanes richardsoni. Western Wood Pewee.—Ecuador, Peru and Bolivia.

Empidonax virescens. Green-crested Flycatcher.—Colombia and Ecuador.

Empidonax trailli. Traill's Flycatcher.—Colombia.

Empidonax minimus. Least Flycatcher.—Peru.

Dolichonyx oryzivorus. Bobolink.—Southern Brazil, Bolivia and Paraguay.

Icterus galbula. Baltimore Oriole.—Colombia.

Zamelodia ludoviciana. Rose-breasted Grosbeak.—Colombia and Venezuela.

Spiza americana. Dickcissel.—Colombia and Venezuela.

Piranga erythromelas. Scarlet Tanager.—Colombia, Bolivia, and Peru.

Piranga rubra. Summer Tanager.—Ecuador, Peru and Guiana.

Petrochelidon lunifrons. CLIFF SWALLOW.—Brazil, northern Argentina and Central Chile.

Hirundo erythrogastra. BARN SWALLOW.—Brazil, northern Argentina and Central Chile.

Riparia riparia. Bank Swallow.—Brazil and Peru.

Progne subis. Purple Martin.—Brazil.

Vireosylva olivacea. Red-Eyed Vireo.—Colombia, Ecuador and southern Brazil.

Mniotilta varia. Black and White Warbler.—St. Augustine, Fla., and southern Texas, through the West Indies to Venezuela and Ecuador. [Colombia, Salentos, Sept. 27, Las Lomitas, March 2, Santa Maria Region, August 21, March 12. Venezuela, Estado Carabobo, Las Trincheras, Oct. 9, Escorial, near Merida, Feb. 24.]

Protonotaria citrea. Prothonotary Warbler.—Nicaragua to Venezuela. [Colombia, Algondonal, January 23, Santa Marta Region, Sept. 11. Ecuador, Esmeraldas, Nov. 7.]

Vermivora chrysoptera. Golden-winged Warbler.—Guatemala to Colombia. [Colombia, El Eden, October 19, Villavicencio, March 11, Santa Marta Region, September 6, March 20. Venezuela, Nebrados, Merida, Aug. 12.]

Vermivora pinus. Blue-winged Warbler.—Northern Mexico to Guatemala and casually to Colombia. [A single specimen, Santa Marta region, Mar. 21.]

Vermivora peregrina. Tennessee Warbler.—Southern Mexico to Venezuela. [Colombia, Sta. Elena, December 1, Miraflores, April 19, Santa Marta Region, Oct. 14, April 4. Venezuela, Merida, November 24.]

Dendroica aestiva. Yellow Warbler.—Southern Mexico to Peru and northeastern Brazil. [Colombia, Barbacoas, October 3, San Augustin, April 12, Santa Marta Region, September 11, May 1. Venezuela, Valle, Merida, November 30, Escorial, March 19.]

¹ In the case of the Warblers additional migration or winter dates and localities are given. These are all taken from specimens in the American Museum of Natural History, excepting those from the Santa Marta Museum region, which are taken from Annals of the Carnegie Museum, Vol. XIV, Oct., 1922, 'Birds of Santa Marta Region' by Todd and Carriker.

Dendroica caerulea. CERULEAN WARBLER.—Western South America from Panama to Peru. [Colombia, Buena Vista, March 4. Ecuador, Rio Oyacachi, Abajo Chaco, August 10, San José Abajo, March 30.]

Dendroica fusca. BLACKBURNIAN WARBLER.—Central Mexico to Venezuela; Peru; casual to West Indies. [Colombia, Santa Isabel, September 22, Puente Andalucia, April 22, Santa Marta Region, February, March, April. Venezuela, Escorial, Merica, October 14. Ecuador (Prov. Loja), Zamora, November 3, Sumaco Abajo, January 8. Peru (Prov. Junin), Utcuyacu, November 25, Chelpes, April 22.]

Dendroica castanea. BAY-BREASTED WARBLER.—Panama and Colombia. [Colombia, Honda, November 23, Malena, March 10, Santa Marta Region, October 27.]

Dendroica striata. BLACK-POLL WARBLER.—Northern South America to Ecuador, Guiana and eastern Brazil. [Colombia, Rio Frio, November 25, Villavicencio, March 11, Santa Marta Region, September 29, February 28, Venezuela, Merida, October 4, April 29.]

Seiurus aurocapillus. Ovenberd.—Western Mexico to northern South America¹; mostly by the West Indies, the Bahamas, southern half of Florida and casually southern South Carolina and southern Louisiana.

Seiurus motacilla. Louisiana Water Thrush.—Mexico to Colombia, South America, most of the West Indies and the Bahamas.

Seiurus noveboracensis. Northern Water-Thrush.—Northern South America. [Colombia, W. Quindio, Salento, Oct. 1, Huila, near San Augustin, April 24, Santa Marta Region, March 17, Sept. 8. Venezuela, Tucacas, Estado Falcon, October 19, Boca de Sina, Cunucunuma River, Upper Orinoco, March 10.]

Oporornis formosa.² Kentucky Warbler.—Southern Mexico to Colombia, South America. Accidental in the West Indies. [Colombia, Santa Marta, Bonda, Oct. 7, Nov. 24.]

Oporornis philadelphia. MOURNING WARBLER.—Nicaragua to Ecuador. [Colombia, Rio Frio, Cauca, November 25, Villavicencio, March 12, Santa Marta region, between Feb. 12 and March 25, April 11. Venezuela, Escorial, December 14. Ecuador, Oyacachi, Abjao Chaco, January 17.]

Oporornis tolmiei. Macgillivray's Warbler.—Lower California to Colombia, South America.

Oporornis agilis. Connecticut Warbler.—Northern South America, the West Indies in migration. [Colombia, Santa Marta Region, Bonda, Oct. 22.3 Venezuela, Maipures, Upper Orinoco, April 28. Brazil, Sao Laurenco River, December 26, January 2.]

¹ An individual secured by one of Mr. Smith's collectors on Oct. 4, 1899, constitutes the only record for the Santa Marta region and is the only South American record for the species which ordinarily does not pass to the southward of Costa Rica during the winter months.

² There are only four records of this species in South America, all from the Santa Marta region.

³ It is not yet clear whether this species actually winters in this region or is merely a transient during migration.

Wilsonia canadensis. Canada Warbler.—Guatemala to Peru. [Peru, Prov. Junin, La Merced, November 19, Prov. Chaupe, February 9.]

Setophaga ruticilla. REDSTART.—Mexico and West Indies to Ecuador and British Guiana. [Colombia, Salento, September 28, Buena Vista, March 3, Santa Marta region, August 24, May 1. Venezuela, Valle, Merida, November 28, Escorial, March 14.]

Hylocichla fuscescens. Veery.—Colombia, British Guiana and Brazil.

Hylocichla ustulata. Olive-backed Thrush.—East Ecuador, British Guiana, Peru, Bolivia, Brazil and Argentina.

Hylocichla aliciae. Gray-cheeked Thrush.—Ecuador, Peru, Venezuela and British Guiana.

CLASS II. BIRDS COMMON TO NORTH AND SOUTH AMERICA AND BREEDING IN BOTH CONTINENTS

Very few land birds have a common breeding distribution in North and South America, as most of those occurring on the two continents are only winter migrants in the latter; and but few are residents. The list is as follows:

Podilymbus podiceps. Pied-billed Grebe.—Breeds from Canada to Chile and Argentina.

Geochelidon nilotica.¹ Gull-billed Tern.—Breeds from coasts of Texas, Virginia, etc. to Argentina.

Anous stolidus. Noddy Tern—Breeds from Florlda Keys to Brazil.

Phalacrocorax vigua. Mexican Cormorant.—Breeds from southern Illinois, etc. to Patagonia and Chile.

Pelecanus occidentalis. Brown Pelican.—Breeds from Florida and Louisiana to Brazil.

Dendrocygna fulva. Fulvous Tree Duck.—Breeds from southern Unites States to tropical South America.

Ajaia ajaja. Roseate Spoonbill.—Breeds from Texas, Florida, etc. to Patagonia.

Guara alba. White Ibis.—Breeds from Lower California, Texas and South Carolina, to Brazil and Peru.

Plegadis guarauna. Glossy Ibis.—Breeds from southern Oregon, Texas and Florida to southern South America.

Ixobrychus exilis. Least Bittern.—Breeds from Canada to West Indies and Brazil.

Casmerodius egretta. Egret.—Breeds from Oregon, California and North Carolina, to Patagonia.

Egretta candidissima. Showy Heron.—Breeds from South Carolina to Chile and Argentina.

Hydranassa tricolor.² Louisiana Heron.—Breeds from the Gulf States to Venezuela and Guiana.

¹ Nearly cosmopolitan.

² From Natterer's localities and dates it should nest in Brazil as it certainly does in Chile.

Florida caerulea. LITTLE BLUE HERON.—Breeds from Southern States to Argentina and Peru.

Nycticorax nycticorax. Night Heron.—Breeds from Canada to Patagonia.

Nyctanassa violacea. Yellow-crowned Night Heron.—Breeds from southern states to Brazil and Peru.

Ionornis martinicus. Purple Gallinule.—Breeds from Texas, and South Carolina to Ecuador and Paraguay.

Gallinula galeata. Florida Gallinule.—Breeds from Central States to Chile, Argentina and the Galapagos.

Himantopus mexicanus. BLACK-NECKED STILT.—Breeds from California, etc. to northern Brazil and Peru.

Hæmatopus palliatus. Oyster Catcher.—Breeds from Texas, Louisiana and Virginia to southern Brazil and central Chile.

Cathartes aura. Turkey Vulture.—Breeds from southern Canada, south to southern South America.

Catharista urubu. Black Vulture.—Breeds from the Southern States to southern South America.

Elanoides forficatus. Swallow-tailed Kite.—Breeds locally from Central States and South Carolina to Peru, Bolivia and Paraguay.

Elanus leucurus. White-tailed Kite.—Breeds fom California and South Carolina to Argentina, Chile and Venezuela.

Rostrhamus sociabilis. Everglade Kite.—Breeds from tropical Florida to Argentina.

Buteo albicaudatus. White-tailed Hawk.—Breeds in Arizona, New Mexico and southwestern Texas.

Spectyto cunicularia. Burrowing Owl.—Breeds from western United States, and southern Florida; to Chile, Brazil, and Paraguay.

Glaucidium phalaenoides. Pigmy Owl.—Breeds from southern border of the United States to southern Brazil, Colombia, Venezuela, and Peru.

Crotophaga sulcirostris. Groove-billed Ani.—Breeds from the lower Rio Grande Valley, and southern Lower California southward.

Ceryle torquata. KINGFISHER.—Breeds from the Lower Rio Grande Valley over the greater part of South America (Colombia, to Argentina, Bolivia and Peru).

Ceryle americana. Texas Kingfisher.—Breeds from southern Texas, to southern Brazil.

Cypseloides niger. BLACK SWIFT.—Breeds from southern British Colombia to British Guiana.

Amazilia tzactl. RIEFFER'S HUMMINGBIRD.—Breeds from the Lower Rio Grande Valley to Venezuela.

Tyrannus melancholicus. Couch's Kingbird.—Breeds from the lower Rio Grande Valley to Brazil and Paraguay.

Pitangus sulphuratus. DERBY FLYCATCHER.—Breeds from the Lower Rio Grande Valley, to Ecuador, Bolivia and Argentina, Guiana, southeast Brazil.

Pyrocephalus rubinus. Vermilion Flycatcher.—Breeds from the southwestern border of the United States, to Colombia, Peru, Guiana, Brazil, Argentina, and Galapagos.

Muscivora tyrannus. Fork-tailed Flycatcher.—Breeds from Mexico throughout South America.

Otocoris alpestris. Horned Lark.—North America to Colombia (Bogotá).

Megaquiscalus major. Great-tailed Grackle.—South Atlantic and Gulf States to Bogota, Colombia and W. Peru.

Progne chalybea. Cuban Martin.—Breeds from the lower Rio Grande Valley to Peru, Bolivia and southern Brazil.

CLASS III. NORTH AMERICAN BIRDS OF COSMOPOLITAN DISTRIBUTION.

The majority of species of cosmopolitan or nearly cosmopolitan distribution belong to the Charadriidae a family notable for the extended migratory flight of its species though most of them breed only in the far north.

In this group may be placed the following, although some of those listed in Class I, may with equal justice be included here.

Canutus canutus KNOT.

Calidris leucophaea. SANDERLING.

Squatarola squatarola. Black-bellied Plover.

As nearly cosmopolitan breeding birds may also be mentioned.

Pandion haliaetus. Osprey.

Asio fiammeus. Short-eared Owl.

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