

NORTH AMERICAN BIRD MIGRANTS IN CHILE

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DR. Rodolfo A. Philippi, Curator of birds in the National Museum of Chile, has published (1940) a list of 34 species of North-American birds which are included in the unpublished check-list of Chilean birds. These migrants have been divided into three groups: 1. Regular migrants (RM); 2. Irregular migrants (IM); and 3. Occasional visitors (OV).

The following list shows these migrants by families, the letters following each indicates the group in which it has been placed.

1. Barn swallow, *Hirundo rustica erythrogaster* Boddaert. IM.
2. Black-poll warbler, *Dendroica striata* (Forster). OV.
3. Red-tailed hawk, *Buteo jamaicensis borealis* Gmelin. OV.
4. Osprey, *Pandion haliaetus carolinensis* (Gmelin). OV.
5. Duck hawk, *Falco peregrinus anatum* Bonaparte. IM.
6. Semipalmated plover, *Charadrius hiaticula semipalmatus* Bonaparte. OV.
7. Golden plover, *Pluvialis dominica dominica* (Muller). OV.
8. Black-bellied plover, *Squatarola squatarola cyanosurae* Thayer and Bangs. RM.
9. Surf-bird, *Aphriza virgata* (Gmelin). RM.
10. Ruddy turnstone, *Arenaria interpres morinella* (Linnaeus). RM.
11. Hudsonian curlew, *Numenius phaeopus hudsonicus* (Latham). RM.
12. Eskimo curlew, *Numenius borealis* (Forster). OV.
13. Upland plover, *Bartramia longicauda* (Bechstein). OV.
14. Greater yellow-legs, *Totanus melanoleucus* (Gmelin). RM.
15. Lesser yellow-legs, *Totanus flavipes* (Gmelin). RM.
16. American knot, *Calidris canutus rufus* (Wilson). CV.
17. Marbled godwit, *Limosa fedoa* (Linnaeus). OV.
18. Hudsonian godwit, *Limosa haemastica* (Linnaeus). OV.
19. Sanderling, *Crocethia alba* (Pallas). RM.
20. Pectoral sandpiper, *Erolia melanotos* (Vieillot). IM.
21. White-rumped sandpiper, *Erolia fuscicollis* (Vieillot). OV.
22. Baird's sandpiper, *Erolia bairdii* (Coues). RM.
23. Spotted sandpiper, *Actitis macularia* (Linnaeus). OV.
24. Semipalmated sandpiper, *Ereunetes pusillus* (Linnaeus). OV.
25. Stilt sandpiper, *Micropalama himantopus* (Bonaparte). OV.
26. Red phalarope, *Phalaropus fulicarius* (Linnaeus). RM.
27. Wilson's phalarope, *Steganopus tricolor* Vieillot. OV.
28. Northern phalarope, *Lobipes lobatus* Linnaeus. OV.
29. Parasitic jaeger, *Stercorarius parasiticus* (Linnaeus). RM.
30. Long-tailed jaeger, *Stercorarius longicaudus* Vieillot. OV.
31. Franklin's gull, *Larus pipixcan* Wagler. RM.
32. Arctic tern, *Sterna paradisaea* Pontoppidan. OV.
33. Elegant tern, *Thalasseus elegans* (Gambel). IM.
34. Black tern, *Chlidonias niger surinamensis* (Gmelin). OV.

As far as species are concerned, this list is probably complete, but I believe that several of those listed as irregular or occasional visitors

will be found to be regular migrants when we have more information concerning the migration and winter range of these birds.

Eleven are listed as regular migrants, four as irregular and 19 as occasional visitors. Included with the regular migrants are several species of shorebirds which merit special attention. These are the ruddy turnstone, greater yellow-legs, lesser yellow-legs, sanderling, Hudsonian curlew, Baird's sandpiper, black-bellied plover and the American knot. In the A. O. U. Check-List (1931) it is interesting to note that they all have one thing in common in their seasonal distribution. All of the species, with the single exception of the lesser yellow-legs, have non-breeding birds which do not go to the usual breeding grounds of the species. The following is what the Check-List gives concerning the distribution of these individuals that do not go to the usual breeding grounds:

Black-bellied plover. "Casual all summer on the coasts of Florida and Western Ecuador."

Ruddy turnstone. "Individuals linger all summer on the mainland beaches."

Greater yellow-legs. "Occasionally at all times of year (non-breeding birds) in the West Indies, Bahamas, Florida, Texas and California."

Sanderling. "Non-breeding birds linger all summer on the coast of Florida."

American knot. "Small numbers have been found throughout the summer on the coasts from Virginia to Florida."

Hudsonian curlew. "Non-breeding migrants linger all summer from the coast of Virginia to western Ecuador."

Baird's sandpiper. "Casual in summer in Guerrero, Mexico."

Chapman in his 'Autobiography of a Bird Lover' (1933) makes an interesting observation concerning a trip made along the coast of Ecuador. He says, "The cruise took us to many little-frequented water-ways on Puna Island and the mainland and southward nearly to Peru. It was notable chiefly for the discovery of *large numbers* [italics mine] of our shore-birds, which at this season, mid-July, should, theoretically, have been nesting north of the Arctic Circle. All were apparently in winter plumage, and the sexual organs of those collected were dormant. Evidently these non-breeding birds had received no inner prompting to return to the region of their birth to reproduce their kind and hence were remaining in their winter quarters during the summer. With these boreal birds were others equally characteristic of the austral regions which in this sub-equatorial winter, were at the northern limit of their range."

Are we sure that these birds observed by Dr. Chapman were hatched in North America? Is it not entirely possible that their homeland was Chile or the Argentine Republic, and that they were passing the winter months in a more congenial clime to the north? I am of the

opinion that this is exactly what we are going to discover when sufficient study has been made of the breeding regions of the shorebirds in the southern part of South America.

Some of the species under consideration have been taken in practically every month of the year in Chile. Dr. Philippi (1940) found five ruddy turnstones in winter plumage on July 5, 1935, in Arica. He considers this observation most significant and asks the question, "Do not some of these birds nest in the southern hemisphere?"

Two species of North American birds have in South America allied geographical races which are so nearly alike that if the place of origin of the specimen is not known, the two forms cannot be separated with any degree of certainty. The killdeer in North America was shown by Chapman (1920) to be replaced in northwestern Peru by a closely allied resident form, *Charadrius vociferus peruvianus*.

Hellmayr (1932) described the Chilean snowy plover, *Charadrius alexandrinus occidentalis* (Cabanis), as a distinct species and prophesied that it would be found breeding all along the Chilean coast as far south as Laraquete, although at that time no nests of the species had been reported from Chile. In the same year that Hellmayr made this prophesy, I found it breeding on Mocha Island, which is considerably farther south than any previous record, and published (1936) the first positive record of its nesting in the southern hemisphere. We now know that Hellmayr was entirely correct; this species has been found breeding over a considerably larger region than was suspected.

The other North American migrants which have fairly large numbers of non-breeding birds during the North American breeding season present a most interesting and intriguing problem for further observation and study. It is entirely possible that most of these non-breeding birds of the different species of shorebirds are really South American forms spending their winter in North America. I am of the opinion that we will find another half-dozen North American species with allied forms in the southern hemisphere.

The coast of Chile from about the region of Concepcion south to the Island of Chiloé, a distance of some 350 miles, is composed, in considerable areas, of extensive sand dunes interspersed with marshes and small fresh-water lakes. It presents an almost ideal breeding habitat for large numbers of shorebirds. Except in small localities, the whole region, as well as considerable similar areas farther north, is very sparsely inhabited. One can travel for miles along the coast without seeing a single human being.

In one trip, made some years ago through a small section of this area, the author sought information concerning the nesting of the

Hudsonian curlew which was particularly abundant in that locality. Indians living in the same general region assured me that the curlews nested regularly there.

Over all this extensive region Hudsonian curlews, greater yellow-legs, lesser yellow-legs, Baird's sandpipers, sanderlings and ruddy turnstones are found in considerable numbers. Along with these are found a number of distinctively South American species in their natural breeding region.

It is a region which has *never* been studied systematically and carefully by any ornithologist during the breeding season of the shorebirds. We might say that it is almost unexplored territory, as far as the bird populations are concerned. Chile has no professional ornithologists who can devote their time and energy to the study and solution of these and many other problems concerning the avifauna of the country.

One of the reasons for writing the present paper is to call the attention of North American ornithologists to this interesting condition in the hopes that some institution might be interested in making a detailed study of the region during the breeding season of the shorebirds. A careful investigation of these North American migrants along with their South American associates in a region which is almost virgin territory is sure to reveal important information. There is a possibility, and some of us believe a probability, that it will reveal that several of the North American species have allied breeding forms in the southern part of South America.

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