

than in the English speaking countries of the Northern Hemisphere, and this well written book is a delightful picture of the great outdoors adapted especially to bird lovers in that far away land.

Americans who delight in the writings of Burroughs or Bradford Torrey will enjoy making the acquaintance of the Australian birds under Mr. Chisholm's guidance. They will however be startled to find the first touches of spring coming in August instead of in February and March, which are the midsummer months; and to find Robins and Thrushes that are utterly different from the birds that we know by those names, along with Diamond-birds, Whip-birds, Honey-birds and others totally unknown in American ornithology. The wider circulation of books such as this will do more to spread a knowledge and interest in general ornithology and create a desire to know something about the birds of other countries than can be accomplished in any other way, therefore we urge all who desire to broaden their knowledge to read Mr. Chisholm's little volume. It will be of interest to American readers too to find that he refers to several American species in the course of his accounts, as the Bluebird, Bobolink, Hummingbird etc., and has references to several of our best known popular writers. How many Americans we wonder, can speak as intelligently of bird life or bird students in Australia! Interesting too is his account of the inauguration of Bird Day in the schools of South America "backed by a recommendation from the United States" and the subsequent development of interest in bird conservation among the Australian children.

The author is an expert in bird photography and the book is illustrated by numerous excellent half-tones from photographs.

There are five chapters on the "Pageant of Spring" and six biographical sketches of characteristic Australian birds. An introduction by C. J. Dennis includes some painful evidence that the cat question is as vital in Australia as in the United States and the writer says: "A book upon 'Mateship with Cats' would earn my hearty disapproval."

We strongly commend Mr. Chisholm's book to American bird lovers and after reading it, on their next visit to the museum, the exhibit of Australian birds, which meant almost nothing to them before, will take on a real interest.—W. S.

Bretscher on Bird Migration in Central Europe.¹—This important contribution to the study of bird migration is based upon an astonishing series of records covering arrival dates of many species for from twenty-five to thirty years or more. The period of the migration is divided into ten-day periods and the number of first arrival records which fall in each period, are given.

¹ Der Vögelzug in Mitteleuropa Mit 16 Karten und villen Tabellen. von K. Bretscher. Innsbruck. Druck der Wagner'schen Universitäts-Buchdruckerei. 1920, pp. 1-162.

The Swift, for instance, in the middle district of Switzerland, arrived between the 11th and 20th of April at 14 stations in various years, while between the 21st and 30th, there were 86 firsts reported and between the 1st and 10th of May, 80. In all Switzerland which is divided into nine districts there were available 262 records of arrival of this species covering a period of 57 years, 1860-1917.

The data is arranged in several chapters dealing respectively with the spring flight in Switzerland, Alsace and Lorraine, Brunswick, and Hungary, and the autumn flight in Switzerland. There are also chapters on plotting the migration curves and the relation of temperature to migration.

The Hungarian record is based upon the wonderful series of observations of the Hungarian Ornithological Society and comprises from 3000 to 14000 records of arrival for the various species. From these records plottings have been made, which are added to the report in a folder and which illustrate graphically the daily advance of the species, presenting much the appearance of a contour map. Curiously enough there is a rather remarkable variation in the detail of the several charts.

To those interested in methods of handling bird arrival records this report will prove of the greatest interest.—W. S.

Todd on New Finches and Tanagers from Tropical America.¹—

In the course of a critical study of the Finches and Tanagers in the collection of the Carnegie Museum the following apparently undescribed forms were found: *Poospiza pectoralis* (p. 89), Guanacos, Bolivia; *Arremon aurantiirostris strictocollaris* (p. 90) Rio Atrato, Colombia; *Sicalis luteiventris flavissima* (p. 90) Para, Brazil; *Sporophila americana dispar* (p. 90) Santarem, Brazil; *S. castaneiventris rostrata* (p. 91) Santarem; *Pitylus grossus saturatus* (p. 91) Guacimo, Costa Rica; *Tangara boliviana lateralis* (p. 91), Rio Tapajos, Brazil; *T. cayana fulvescens* (p. 92) Palmar, Boyaca, Colombia; *Thraupis palmarum atripennis* (p. 92) Guapiles, Costa Rica; *Piranga saira rosacea* (p. 92) Palmarito, Chiquitos, Bolivia; *Mitrospingus cassinii costaricensis* (p. 93) El Hogar, Costa Rica; *Chlorospingus canigularis conspicillatus* (p. 93) Bitaco Valley, Colombia.

Friedmann on the Weaving of the Red-bellied Weaver Bird.²—

This paper is based upon studies of the captive birds in the aviary of the New York Zoological Park. The birds instead of building the type of nest that they do in a wild state built a cup-shaped nest with arched canopy attached at each end to the sides of the cup leaving an opening at the front and back. Mr. Friedmann also describes the stitches used by the bird and the method of holding the straw with one foot against

¹ New Forms of Finches and Tanagers from Tropical America. By W. E. Clyde Todd. Proc. Biol. Soc. Washington, Vol. 35, pp. 89-94. July 12, 1922. pp. 89-93.

² The Weaving of the Red-bellied Weaver Bird in Captivity. By Herbert Friedmann. Zoologica. Vol. II, No. 16. New York Zoological Society, August 23, 1922, pp. 1-372.