

sive index to the entire work close the volume which is the finest of the series and a fitting close to a great undertaking. Dr. Phillips has issued a limited number of copies of the bibliography separately bound.

From the time of Catesby and Edwards large illustrated works on birds have formed a conspicuous part of ornithological literature, often faunal in character, they, later, in the folio volumes of Gould and Elliot, took the form of monographs of families. With the more detailed studies of recent years where diagrams of characters are, from the purely technical standpoint, more important than colored plates, it would be supposed that such works might cease to be published, but it is most gratifying to find that the traditions of our science have not been entirely lost and that it is still possible, through the energy and support of lovers of fine books to produce such works, especially since the talents of both artists and field naturalists make the work of the present day superior in many respects to the classics of the past.

Quarto rather than folio size seems better for many reasons and gives the artist just as great opportunities as did the life size efforts of days gone by while the character of the text has greatly improved.

Dr. Phillips' book stands in the front rank of these modern illustrated monographs and he is to be heartily congratulated upon the completion of his task in bringing out this 'Natural History of the Ducks.' He has not only given us some of the best work of the recent bird artists but has written a text that demands our admiration for the exhaustive research involved in its preparation and the broad knowledge of the subject that he has displayed.—W. S.

**Wetmore on the Birds of Argentina.**<sup>1</sup>—As many of our readers are aware, Dr. Alexander Wetmore spent practically a year (June 21, 1920—April 29, 1921) investigating the bird life of Argentina and the adjoining countries, especially the status of the migrant shore birds, in the interests of the U. S. Department of Agriculture with which he was then connected. The present volume is the completed report of his experiences and the collection which he procured.

Those familiar with the thoroughness of Dr. Wetmore's work will be prepared for the admirable report which he has presented and which forms one of the most important contributions to Argentina ornithology that has yet appeared.

His narrative is interesting reading, describing the general character of the country through which he travelled, including several excursions in various directions from Buenos Ayres as a center; a survey of Uruguay; long trips up the Uruguay and Parana Rivers, the latter terminating in the interior Chaco northwest of Asuncion; and another trip to Tucuman and

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<sup>1</sup> Observations on the Birds of Argentina, Paraguay, Uruguay, and Chile. By Alexander Wetmore, Assistant Secretary, Smithsonian Institution. U. S. National Museum Bulletin 133, pp. i-iv, +1-448. pls. 1-20. Washington, 1926. Government Printing Office, 65 cents per copy.

Tapia. A series of excellent half-tone illustrations from photographs add greatly to these accounts of the country.

The author then gives with some hesitation his idea of the life zones of the countries he traversed which from the nature of the case must be regarded as tentative. He considers Puerto Pinasco, and the Chaco behind it, as within the southern limit of the Tropical Zone, though apparently not typical of it. Most of eastern and northern Argentina south to the valley of the Rio Negro, most of Uruguay and part of Paraguay constitute an area of moderate climate "where frost may occur regularly but snow only casually" and this is termed the Lower Austral. The country south of the Rio Negro Valley where conditions are more severe and "snow and ice are regular features of the prolonged winter" is termed the Upper Austral. The Temperate Zone lies still farther south and was beyond the limits of Dr. Wetmore's travels.

The bulk of the report consists of the annotated list of birds but the annotations are so extensive that they are often important contributions to the life histories of the species. There is usually a brief description of the specimens secured and comparison with related forms, then follows the author's experience with the species during his travels, while sometimes there are valuable notes on anatomical characters, either specific or generic. Notable among these is the fact that the bill tip of the Baird's Sandpiper is narrow and devoid of pits which peculiarity forms an excellent character by which to distinguish it from either the White-rumped or Pectoral in which the tip is broader and pitted. In the case of the Turkey Vultures, the South American races of which have always been in more or less confusion, Dr. Wetmore has presented a synopsis based upon his study of this interesting if unsavory group. The yellow-headed bird is shown to be *C. urubitinga*, while five races of *C. aura* are recognized, *aura* from Mexico and the West Indies, *septentrionalis* from the United States, *ruficollis* from eastern and southern South America (= *pernigra*), *jota* from Chile along the Andes to Colombia (= *meridionalis* Swann), and *falklandica* from the Falkland Islands and southern Chile.

The races of *Myospiza humeralis* and *Belanopterus chilensis* are also reviewed. With regard to our wintering shorebirds Dr. Wetmore found that the Field Plover (*Bartramia*) was now a rare bird although it formerly occurred in vast numbers and was a regular item of the bills of fare at all the leading hotels and restaurants. Similarly the Hudsonian Godwit which fifty years ago occurred in great bands is now seen only in small numbers while the Eskimo Curlew, another famous game bird of Argentina, is gone forever. Both species of Yellow-legs, the Pectoral Sandpiper and the Golden Plover still occur in more or less abundance and are regularly shot on their spring migration northward. Of the smaller species the White-rumped Sandpiper was very plentiful and as many as 2000 could be recorded in a day. Other species which reach this far south on their flights are the Western Solitary, Spotted, Baird's,

Stilt and Buff-breasted Sandpipers and Sanderling, although of some only a very few were seen, the majority stopping farther north. Apparently the only land bird migrating as far as Argentina is the Bobolink which is in much favor as a cage bird.

Dr. Wetmore's attitude on genera will be regarded with interest as he has anatomical reasons for all of his actions. He fails to distinguish generic characters for the two species of Yellow-legs or for separating some of the Godwits as *Vetola*. His classification moreover is original and will be found to conform pretty closely with that which he and Mr. Miller have prepared for the new A. O. U. 'Check-List' (see antea p. 337).

To those familiar with the bird life of Argentina through the works of Hudson, Dr. Wetmore's account of its present status will be most interesting, while to all of us the description of the birds of a foreign country, by one who goes out from our own country, is always interesting and satisfactory, as his impressions and reactions are in all probability those that we ourselves would experience. Dr. Wetmore is to be congratulated upon another important contribution to ornithology.—W. S.

**Shelford's 'Naturalist's Guide to the Americas.'**<sup>1</sup>—Botanists and zoologists have long since ceased to be content with the making of collections and the purely systematic study of a fauna or flora, and today a floral or faunal report must needs consider the region in its relation to other regions and its reference to definite zones or to special climatic or ecologic subdivisions. For information as to the physiography or climate of a region in any state or province of North or Middle America, or the make up of its wild life one hardly knew where to turn.

In order to meet this need there has recently been prepared by a committee of the Ecological Society of America, under the editorship of Dr. V. E. Shelford, a 'Naturalist's Guide to the Americas.' The other members of the committee and the numerous aids and contributors make up such an array of talent as could not help but bring together a vast amount of valuable and instructive data which together with the numerous lists of reference works should put the reader in touch with much of the information he desires concerning any region between the American Arctic Archipelago and the Amazon Valley.

Naturally with such a host of contributors specializing in various branches and with varying amounts of personal experience in the regions of which they write, the treatment must be decidedly uneven. Some sketches like that of Mexico, by Nelson and Goldman, are admirable but others are extremely weak and one-sided, while in some cases, as the Bahamas, there is no account at all. After studying a number of the sketches we are impressed with the fact that botany has been exploited in most cases at the expense of zoology, indeed some of the authors seem absolutely unacquainted with the zoology of their regions and have resorted to compilations or omitted the subject almost entirely. It seems a pity, considering the amount of labor expended on the work, that the