

Streams and Swamps and Birds of the Ocean; with further ecological divisions on the several plates. There are also fourteen photographs of habitats and a map. When we learn that some 700 species are treated (exclusive of subspecies which are not considered) we realize not only the wealth of the Australian avifauna but also the gigantic task that the author has so successfully completed.

There is only one omission—one that American bird students have been quick to recognize i. e. no mention whatever of Dr. Frank M. Chapman's book of the same title published in 1920, and treating of American birds. Not only is the title of Mr. Cayley's book the same but the same red question mark adorns the cover while there is the same idea of many small figures on a plate and the same reproduction of a foot rule with each plate to indicate the size of the birds.

It would seem impossible that all of these similarities should originate independently in two minds, and in view of the wealth of other acknowledgements in the preface some word of indebtedness to Dr. Chapman for the inspiration that prompted these admirable popular features would seem to have been in order.

Mr. Cayley's book will, we are sure, prove a most valuable aid to popular bird study in Australia as well as a welcome guide for the visiting ornithologist and an important hand book in any ornithological library.—W. S. S.

Brown's 'My Animal Friends.'—The Philadelphia Zoölogical Garden is well known as one of the earliest "zoos" in America and one in which a remarkably complete exhibition of animals has always been maintained. The present attractive volume¹ by C. Emerson Brown, director of the Garden, is based largely upon its collections and upon Mr. Brown's experiences in caring for his "wards."

It contains interesting accounts of the various species of animals usually found in captivity and some of the rarities in the Philadelphia collection, notably the wonderful series of anthropoid apes. There are also chapters on the care of animals in zoological gardens, their feeding and health—chapters which well-meaning critics of "zoos" would do well to read! There are also many excellent illustrations from photographs of the animals in the Garden.

While the work is mainly devoted to mammals there are several chapters on birds and one on reptiles. The book is interesting and instructive reading and will prove a most welcome guide to those whose experience with wild animal life is of necessity limited to zoological gardens.—W. S. S.

Coble and Life's 'Introduction to Ornithological Nomenclature.'
—This little book² is not, as its title might imply, a synopsis of the rules

¹ My Animal Friends | By C. Emerson Brown, C. M. Z. S. | Director, Philadelphia Zoological | Garden | Doubleday, Doran & Company, Inc. | Garden City, New York | 1932. Pp. i-xiv + 1-262. Price \$3.50.

² Introduction to Ornithological Nomenclature. By Mary Ferguson Coble, M.A. and Cora Smith Life, M.A. Wm. B. Straube Printing Co., Los Angeles. Pp. 1-91. Price \$1.00 [1932].

of zoological nomenclature but merely a discussion of the Latin terms that have been employed in naming the birds of our western states, which the authors tell us are "hard to understand and harder still to pronounce." They, therefore, explain for us the origin and meaning of the terms showing their derivation either from Latin words or from the names of persons and localities and their pronunciation.

Unfortunately there are two methods of pronouncing Latin words and both are given although among scientists the so-called "Latin" method, at least in its pure form, is rarely used. Would it not have been better to have adopted the "English" method throughout and thus helped to create uniformity, something that is sadly needed?

The generic and family names are arranged alphabetically with the species under them which necessitates many repetitions which could have been avoided had *all* the names—generic, specific, etc., been arranged in one alphabetical series. As the work deals only with names why should it be systematic? Some of the abbreviations are by no means clear as the oft-repeated "Lat. same"; for example under the Flicker we find "*borealis* Lat. same, northern, Boreal Flicker." A little more explanation would have been helpful. Curiously enough we find "Murrelet" listed with the Latin names though we look in vain for "Auklet" or any other English word.

The above are merely suggestions which would seem to us improvements in a work which should be very welcome to those not acquainted with Latin though many will ask why should such persons bother with the scientific names of birds at all. It is really only those engaged in purely technical investigations that must use them and we welcome the tendency to give them only secondary consideration in popular books or to drop them altogether.

Unfortunately the Latin names in very many cases do not give any clue to the characters of a bird. The Robin is named *migratorius* although it is the least migratory of our thrushes and the Blackburnian Warbler "*fusca*" because the brilliant orange throat in the painting upon which the description was based had faded to dull brown!

There are quite a few typographical errors in this little book which is almost inevitable in such a compilation, but more serious errors occur in the list of personal names which precedes the main list. For instance "*couchi*", at least as applied to the genus *Tyrannus*, refers to Lt. D. N. Couch of the U. S. Army (1858) not to Leo K. Couch, while "*merriami*" as used in names of recent birds refers to Dr. C. Hart Merriam not to Dr. J. C. Merriam, although the latter has had fossil birds named in his honor. William S. Vaux's first name has been omitted, few if any of his friends knew what his middle letter stood for, and there seems to have been a general mix-up in the Scotts, Major General Winfield Scott who died ten years before the A. O. U. was founded hardly was able to be "active" in its work, and "Bewick" by the way should be pronounced "Buick," and "Giraud," "Gir-eau", the general practice among ornithologists being to

pronounce the Latin genitives the same as the owners of the names pronounced them. These slips, however, can easily be corrected in a future edition.—W. S.

Griscom's 'Distribution of Bird-Life in Guatemala.'—The late Dr. Jonathan Dwight acquired, mainly through the able field work of A. W. Anthony, a representative collection of Guatemalan birds upon which he planned to report in association with Ludlow Griscom. This plan, however, was never carried out and after Dr. Dwight's death Mr. Griscom undertook the work alone, the collection, now the property of the American Museum of Natural History, having been placed at his disposal. His completed report¹ is now before us.

The author's previous experience in Panama and other countries of Central America, together with a short visit to Guatemala, admirably fitted him for his task and he has produced a most satisfactory volume, following the model established by Dr. Frank M. Chapman in his reports on the birds of Colombia and Ecuador.

As we turn the pages we find abundant speculation on the origin of Central American bird life; on the formation and extent of the life zones of Guatemala with lists of characteristic species; on the results of migratory movements; and even on the question of the origin of species—which make interesting reading and furnish much food for thought. Following this is an annotated list of the 736 species and subspecies so far recorded from Guatemala with field observations on those represented in the Dwight collection. The synonymy under each form includes references to all publications dealing with Guatemala with lists of localities, while the ranges of both species and subspecies are given. A number of illustrations depict characteristic scenery of the several life-zones and add much to the value of the report.

Mr. Griscom emphasizes the richness of the Guatemalan avifauna—for the country is not larger than the state of New York and only about one sixth the area of Ecuador. He attributes this abundance of bird life to the antiquity of the country geologically, its position between two great zoological regions, and the survival of certain pre-glacial elements; as well as the arrival of northern forms during the pleistocene and of tropical elements during post glacial times. He points out the fact that the mountains are of great geological antiquity, unlike the recent upheaval of the Andes, and emphasizes the indirect effect of the glacial epoch in affecting enormous migrations and in lowering temperatures so that upper life zones must have been brought down to sea level with probable extermination of many of the older types. Recent geological studies, he shows, have demonstrated that no elevation of more than 1000 ft. ever existed at Panama so that the so-called "Panama Fault" brought about through submersion of part of a

¹ The Distribution of | Bird-Life in Guatemala | A Contribution to a Study of the Origin | of Central American Bird-Life | By Ludlow Griscom | Bull. Amer. Mus. Nat. Hist. Vol. LXIV, May 7, 1932. Pp. i-ix + 1-439. 11 figures and 4 maps.