

REVIEWS

Les Migrations des Oiseaux.—Jean Dorst. 1956. Payot, Paris. 422 pp., 94 figs. Paper bound, 1500 francs. This is a well organized review of bird migration. Modern, as well as some older, theories, and the experimental data on which they rest, are discussed, including a number of papers published as recently as 1953–1954. Important knowledge has been gained, particularly as regards orientation and determining physiological factors, but it remains scattered. The complex problems of migration are still far from understood. Before discussing physiology, orientation, the origin and evolution of migration, and other related subjects, the author presents a series of introductory chapters. In one, methods of study are treated; other chapters review the pattern of migration in the various regions of the world. The geographic chapters are somewhat unbalanced. For instance, 73 pages of text, with an accompanying bibliography of 98 titles, are devoted to “Europe and northern Asia” (but chiefly to Europe), whereas only 18 pages with 12 titles are devoted to North America, although migration is more marked in North America than in Europe and has a vast literature. The North American reader should, however, welcome the fuller treatment accorded to the less familiar European data. Bibliographies accompany each chapter, and some of these are very extensive. Many works on migration are not easy to read, but the present one is a model of clarity and is well illustrated by good maps and diagrams.—C. VAURIE.

Life histories of North American Blackbirds, Orioles, Tanagers, and their allies. Order Passeriformes: Families Ploceidae, Icteridae, and Thraupidae.—Arthur Cleveland Bent. 1958. U. S. Natl. Mus. Bull., 211. 549 pp., 37 photog. pls. Superintendent of Documents, Washington 25, D. C. \$2.25. The twentieth volume of this series brings Bent's great work close to completion. At his death on December 30, 1954, in his eighty-ninth year, only the Fringillidae manuscript remained to be finished. Fortunately a committee will see the series through. This book follows the familiar format, with some differences in typography. According to the introduction, the manuscript was completed in 1949 (though the distributional information seems later), so there is some divergence between the English and technical nomenclature and that of the 1957 A. O. U. Check-list—especially in the retention of subspecific vernaculars. The Spotted-breasted Oriole now nesting in Florida is not included. While few of the references postdate 1940, this book conveniently summarizes most of the significant data that appeared prior to that time. It is to be hoped that there will be less of a gap between completion of the manuscript and the publication of the final volume or volumes. The price makes the book a rare bargain.—E. EISENMANN.

A Company of Birds.—Loke Wan Tho. 1957. Michael Joseph Ltd., 26 Bloomsbury St., London. 174 pp., 109 photos, 1 in color. 42 shillings. All of us who have admired Mr. Loke's beautiful bird photographs have hoped for many years that he would bring some of them together and publish them in book form. This, he has now done, and I am happy to report that they have lost little in reproduction. Loke is not only a photographer but also an ornithologist who has the patience to wait until he can take a biologically meaningful action picture. The birds shown occur in India, Malaya, and New Guinea. Many, if not most, of the birds in this volume have never been photographed before, and it gives me particular pleasure to find magnificent portraits of some of my old friends from the New Guinea mountain forest. The previously unknown nests of several New

Guinea species are also depicted. There is an introduction with hints on photography in the tropics. We are most grateful to Loke Wan Tho for sharing with us his treasure of beautiful bird portraits.—ERNST MAYR.

The Arctic Year.—Peter Freuchen and Finn Salomonsen. 1958. 438 pp.; numerous line drawings and maps. G. P. Putnam's Sons, New York. \$5.95. This book, a month-by-month account of life in the Arctic, is crammed with fascinating information—much of it ornithological, as is to be expected of the junior author, the prime expert on Greenland birds. A fine introductory chapter defines the Arctic as the region above tree line, points out the differences between the low-arctic and high-arctic regions, and sketches the basic factors affecting the distribution of plant and animal life, including the Pleistocene glaciation. This chapter contains a number of useful maps, but unfortunately there is a confusing transposition of legends under the maps on pages 8 and 16. The remainder of the book is devoted to an account of what is happening to the environment during each month and what the living creatures are doing. There is much unfamiliar data and stimulating speculation. In the discussion of Bergmann's rule (warm-blooded animals tend to be larger in colder areas, as increased size results in a relatively smaller outer surface, thus diminishing heat loss), it is pointed out that big animals living in areas where food is meagre, particularly in the high-arctic, may be reduced in size despite colder climate, because a large animal needs more food than a smaller one. This is suggested as a possible reason why the Arctic Whistling Swan is smaller than the more southern Trumpeter, Whooper, and Mute Swans. Arctic whiteness may have a function other than concealing, for in the high-arctic, where there is relatively little snow and much of the landscape, even in winter, is exposed rock, animals are whiter than in the low-arctic. The idea is advanced that lack of pigment within a feather or hair may leave an air space which may serve as insulation against cold. The molt migration of drake King Eiders from Canada to form an unsurpassed concentration of flightless waterfowl on the west coast of Greenland is vividly described and illustrated by a map. The arrangement by months and the lack of subheadings or formal organization within chapters make use as a reference work somewhat difficult. This book, after all, is designed for the general reader. But the serious student is aided by an index and a bibliography. Although perhaps half the text relates details of the daily life and special viewpoint of the Eskimos, their remarkable sexual customs are, surprisingly, passed over in silence. One suspects prudishness in the publisher.—E. EISENMANN.

The Ornithologists' Guide. Especially for Overseas.—Edited by Major-General H. P. W. Hutson. 1956. 275 pp., 34 text figs. British Ornithologists' Union. H. F. & G. Witherby Ltd. London. 21s. While designed primarily for bird students living away from the main currents of ornithological activity, to point out rewarding subjects and methods for serious bird-watching, this book should prove stimulating to amateurs anywhere. There are over fifty chapters, running from two to six pages, covering a variety of subjects, written by forty-six contributors, including most of the leading British ornithologists, as well as a few from other countries. The emphasis is on observational studies. Many of the articles, though their purpose is to suggest techniques or phases of behavior meriting study, are in themselves interesting and ornithologically informative. Here are described a variety of subjects, appealing to a variety of temperaments, on which a keen observer may contribute new and needed information, without

leaving his own area, without elaborate apparatus, and without long-term devotion to meticulous detail.

The section on "Regional Information" is planned to assemble the names of ornithological societies, bird collections, resident ornithologists, and the most useful bird publications in the ornithologically less developed countries of the world (i.e., everywhere outside of Europe, Canada and the United States). The information for Africa, Asia, and Australasia seems good and reasonably up-to-date, some cited literature being as recent as 1955. Unfortunately the same cannot be said for the New World information. Omitted is mention of fundamental reference works like Ridgway and Friedmann, "Birds of North and Middle America" and Cory, Hellmayr and Conover, "Catalogue of Birds of the Americas." For Brazil only "The Birds of Matto Grosso" is listed, while the major (and more recent) distributional compendium, Pinto's "Catalogo das Aves do Brasil" is overlooked, as well as Goeldi's old, but illustrated, "Album das Aves Amazonicas." It seems strange for a British book to omit Chubb's "Birds of British Guiana." Under the heading "Sea-Routes and Polar Regions" one fails to find the most valuable and enthralling bird book on the southern seas, Murphy's "Oceanic Birds of South America," still procurable at a very low price. For Mexico only Blake's fine book is listed, but there is no mention at all of major distributional works on El Salvador, Costa Rica and Panama (see bibliography in my "The Species of Middle American Birds"). With so many requests from persons going abroad for books bearing on identification and distribution of birds, it is disappointing that the more useful Western Hemisphere literature was not compiled with the care devoted to the Eastern Hemisphere. In other respects "The Ornithologists' Guide" should prove as useful to students in the New World as in the Old.—
E. EISENMANN.

The Bird Life of Great Salt Lake.—By William H. Behle. University of Utah Press, Salt Lake City, Utah. 203 pp., 43 figs. (photos., linedrawings, maps). Cloth, \$4.50. 1958. The subtitle, "The Life History, Ecology and Population Trends of the California Gulls, White Pelicans, Double-crested Cormorants and Great Blue Herons, Together with an Account of the Bear River Migratory Bird Refuge," outlines the chief subject-matter of this book. Some details are also given of the Caspian Terns that intermittently breed on islands in the Great Salt Lake, and there are distributional lists of the other species recorded from the various islands and from the Bear River Refuge. A major ornithological interest of Great Salt Lake is the nesting on small islands of colonial fish-eating birds, which must travel round-trip daily a minimum of seventy-five or a hundred miles to provide food for their young, as the Lake is too saline to support fish. Only the omnivorous California Gulls get some sustenance from the local brine flies and brine shrimp, and these do not suffice for their needs. The attraction of the barren islets in the Lake is their isolation from disturbance and absence of mammalian predators. Very full treatment is provided of the California Gull and White Pelican, including molts and plumages. Yet we still do not know the incubation period of the pelican and there is uncertainty whether the California Gull breeds in its third year (some few individuals apparently do). Despite lack of food, Great Salt Lake serves as a resting place for migrant water-fowl and phalaropes. The alkaline Bear River Marshes at the northeast corner of the Lake are justly famous for the millions of migrant ducks, as well as for many spectacular breeding species. Water control by diking of this great refuge has not only reduced the scourge

of botulism, but has greatly facilitated bird-study. It is good to have an authoritative account of this most interesting area.—E. EISENMANN.

Birds of Pine-Oak Woodland in Southern Arizona and Adjacent Mexico.—Joe T. Marshall, Jr. 1957. 125 pp., 2 col. pls., 26 text figs. Cooper Orn. Soc. Berkeley, Calif. Pac. Coast. Avi. no. 32. \$4 (paper); \$5 (buckram). Woodland of mixed pines and oaks is characteristic between 5500 to 6000 feet in southeastern Arizona—an extension of a more widely distributed belt in the mountains of Mexico. This report treats the birds of this habitat in Arizona and the nearby parts of Sonora and Chihuahua, with major emphasis on their ecology. The floristic composition is elaborately discussed. Censuses were made in various localities to determine numbers and habitat preferences. Tables show feeding sites used by the various species, their favored habitats in order of preference, and the species whose northern and southern limits occur in the area. Marshall found no evidence of ecological or altitudinal races, and he questions the assumption that subspecies are genetically disposed to select different habitats. In his view, a population uses whatever local manifestations of the overall species niche is available, which may seem very unlike until the basic requirement is understood. The adoption of truly different niches by island populations is made possible by the absence of competitors that normally occupy such niches. Interspecific competition in the study area is interestingly discussed. A species by species account, chiefly devoted to miscellaneous life-history observations, forms the second part of the book. The many photographs help in visualization of the habitats, and there are three half-tones and two color plates of birds by Don Eckelberry.—E. EISENMANN.

Birds and Men. American Birds in Science, Art, Literature, and Conservation. 1800–1900. Robert Henry Welker. 1955. 230 pp., 40 half-tones. Belknap Press, Cambridge, Mass. \$5.75. A general account, with many interesting reproductions of old illustrations, of the growth of interest in birds in the United States during the last century.—The emphasis is definitely not on the science of ornithology, but on the popular aspects.

Bird Life. Niko Tinbergen. 1954. 64 pp., 1 col. pl., numerous text figs. and photos. Oxford Univ. Press. \$2.75. An elementary but stimulating account of various aspects of bird behavior, with suggestions for the beginner in bird-watching, written by one of the leaders in this field. Examples are drawn from European birds.

A Handbook of Elementary Bird Study.—P. A. Bourke. 1955. 172 pp., 8 col. pls., 20 photos., 14 text figs. Patterson Brokensha Pty. Ltd. Perth, Western Australia. A book on bird-watching techniques for Australians (not an identification manual), with chapters on teaching bird study and on activities for school branches of the Gould League (the Australian equivalent of Junior Audubon Clubs).