

ORNITHOLOGICAL LITERATURE

CIEN AVES DE EL SALVADOR. By Walter A. Thurber. Ministerio de Educacion, Direccion de Publicaciones, San Salvador, El Salvador, 1978:XXXV + 200 pp., 170 + color photographs, several range maps. Price not given.—This book (mostly in Spanish) includes full page color photographs of 100 species of birds occurring in El Salvador. Some species have additional smaller photographs depicting different plumages, nests or young. A short paragraph (with an English translation) describes some of the natural history of each bird. Resident species dominate, but a number of North American migrants (with accompanying range maps) are included.

Walter Thurber, an American who has lived in El Salvador since 1966, has banded and photographed birds and studied their behavior for 10 years. In this book he returns some of his acquired knowledge to that country in a form that will be of interest to a wide range of its people. Short chapters on avian biology, bird study and bird protection should do much toward habitat preservation and bird conservation. A history of ornithological studies and a bibliography are included.

The book was printed in El Salvador and is of high quality. Some photographs may not meet exacting standards and there are a few noncritical typographical errors, but I am most favorably impressed by Thurber's efforts and those of the Ministerio de Educacion, which published it. Anyone concerned with Central American birds will find this work of interest. The hardcover edition can be obtained from the Cornell Laboratory of Ornithology, 159 Sapsucker Woods Road, Ithaca, New York 14853 for \$16 plus \$1 postage.—STEPHEN M. RUSSELL.

BIRDS OF PENNSYLVANIA: WHEN AND WHERE TO FIND THEM. 3rd. ed. (rev.). By Merrill Wood, illus. by Dorothy L. Bordner, 1979. 146 pp., 201 line drawings, paper cover. Order from Pennsylvania State Univ., Box 6000, University Park, Penn. 16802. \$2.00.—A pocket-size guide to distribution (by counties), status and breeding of Pennsylvania birds.—R.J.R.

OWLS: THEIR NATURAL & UNNATURAL HISTORY. By John Sparks and Tony Soper. Taplinger Publ. Co., New York, 1979 (1970):206 pp., color frontispiece, 16 black-and-white plates, many drawings. \$8.50.

SWANS OF THE WORLD. By Sylvia Bruce Wilmore. Taplinger Publ. Co., New York, 1979 (1974):229 pp., 8 black-and-white plates, many maps and line drawings. \$8.50.—Both of these books are unrevised paperback reissues of books originally published in hard cover. Sparks and Soper was reviewed in *The Wilson Bulletin* 1972 [84]:360 and Wilmore was reviewed in 1975 [87]:434–435. As a note on inflation, Wilmore's book costs almost as much as the original edition, while Sparks and Soper's book costs considerably more.—R.J.R.

THE APPENDICULAR MYOLOGY AND PHYLOGENETIC RELATIONSHIPS OF THE PLOCEIDAE AND ESTRILIDAE (AVES: PASSERIFORMES). By Gregory Dean Bentz. *Bulletin of Carnegie Museum of Natural History*, No. 15, 1979:25 pp., 2 tables, 5 figures. \$2.00.—The phylogenetic relationships of the Ploceidae and Estrilidae are analyzed mainly on the structure of the forelimb and hindlimb muscles. Monophyly of the assemblage is hypothesized on the basis of common possession of a conical bill adapted to granivory, on biochemical affinities and in pterylographic similarities previously reported. The present study provided no myo-

logical synapomorphies to cluster the entire group in support of this hypothesis. Myological characters provide synapomorphies for all but the first branching point of a cladogram, and autapomorphies for most taxa. The Passerinae are the most primitive group myologically, and presumably the sister group of the remainder of the assemblage. The Estrildidae are more highly derived than are the Ploceidae. The Viduinae are included among the Estrildidae rather than the Ploceidae. Problems of classification are reviewed and a classification reflecting current understanding is presented.—(From the author's abstract).

WILDFOWL OF THE WORLD. By Eric Soothill and Peter Whitehead. Blandford Press, Poole, Dorset; Dist. in U.S. by Sterling Publishing Co., Inc., New York, 1978:297 pp., 128 color photos. \$14.95.

DUCKS, GEESE, AND SWANS OF THE WORLD. By Paul A. Johnsgard. University of Nebraska Press, Lincoln, Nebraska, 1978:404 pp., approx. 280 line drawings and maps, 59 color photos. \$35.00.

WATERFOWL: DUCKS, GEESE, AND SWANS OF THE WORLD. By Frank S. Todd. Sea World Press, San Diego, California, 1979:399 pp., 788 color photos. \$44.95.

Each of these books attempts to survey the Anatidae of the world through a combination of text and illustrations. Though their purposes are similar, the various authors have approached their tasks from different points of view. Soothill and Whitehead's book is the smallest—a brief introduction to the waterfowl is followed by an annotated list of important wetlands arranged alphabetically by country. Most of the book is devoted to a series of species accounts arranged conveniently with the text and a color photo on facing pages. The text concisely summarizes the appearance, distribution and habits of the species, and an outline map shows its distribution. The color photographs, many being of captive birds, are adequate for their purpose. There are a few errors, e.g., the photos of the Australian and Northern Shovelers (*Anas rhynchotis* and *A. clypeata*) on pp. 189 and 191 are transposed. The book is marred by incompleteness. One wonders why the authors, having considered nearly all species of waterfowl, failed to finish the job and include, e.g., the handsome and highly specialized Torrent Duck (*Merganetta armata*).

Johnsgard's similarly organized book is far more comprehensive. The text of the species accounts is longer and more detailed than in the other books, containing information on vernacular names, measurements and weights, field marks, relationships, and suggested readings, as well as the usual natural history and distributional information. The many line drawings are uninspired, and the 59 color photographs are inferior to those in the other 2 books. Some are grainy or printed with too much or not enough contrast. A large number are reprinted from Johnsgard's earlier book, *Waterfowl* (1968), and a comparison shows many differences in color balance in the 2 books, raising a question about the accuracy of the colors shown. Johnsgard provides the most references to the research literature, citing over 300 other works, compared to about 113 for Todd and only about 34 by Soothill and Whitehead. This list is especially useful because the references are cited in the text.

The book by Todd is the largest and most opulent of the 3 reviewed here. Like the others, it contains a combination of written and illustrative material reviewing the waterfowl of the world, and like the others, the bulk of the text is arranged as a series of species accounts following a standard taxonomic sequence. The writing is more informal in tone and organization, and there is a wealth of information on the usual topics, but with a greater emphasis on aesthetic and conservational aspects of waterfowl study. Unique features include a table summarizing information on distribution, weights, reproduction and status, as well as a brief discussion of waterfowl photography. It is in the illustrations that this book far exceeds the

others reviewed here, or any other for that matter. More than 780 color photographs illustrate virtually all living forms of waterfowl. The quality of these photographs lies not only in their technical excellence and superior reproduction, but in the variety of postures, behaviors and structural specializations illustrated. Beyond this, the photographs, most of them taken in nature rather than in captivity, often evoke an almost poetic appreciation for the relationship of the species and its habitat. This book is clearly a labor of love.

Here, then, are 3 additions to the endless waterfowl literature. Todd's book is by far the best in its illustrations, and if I could but only 1, this would be it. Johnsgard's book is the best general reference to the waterfowl of the world in a single volume, but visually inferior. The work by Soothill and Whitehead is, by most standards, an attractive and relatively inexpensive volume, but compared to the others has the least to recommend it.—ROBERT J. RAIKOW

PHYLOGENETIC ANALYSIS AND PALEONTOLOGY. By Joel Cracraft & Niles Eldredge (eds.). Columbia University Press, New York, 1979:233 pp., 35 line drawings. \$9.00 (paper), \$22.50 (cloth).—The 8 papers in this book are derived from a symposium convened at the North American Paleontological Convention II, held at Lawrence, Kansas, in 1977. Various opinions and arguments are presented by Cracraft, Eldredge, P. D. Gingerich, E. S. Gaffney, S. S. Bretsky, A. J. Boucot, and E. O. Wiley on such matters as the methods and purposes of phylogenetic inference and classification, the use of fossils in hypothesizing ancestor-descendent relationships, and the gradualist versus punctuated-equilibrium models of evolution. Although there are few matters relating specifically to birds, the questions debated are central to all areas of systematic biology, including ornithology.—R.J.R.

INDIANA BIRDS AND THEIR HAUNTS: A CHECKLIST AND FINDING GUIDE. By Charles E. Keller, Shirley A. Keller and Timothy C. Keller. Indiana University Press, Bloomington and London, 1979:214 pp., 14 maps. \$6.95 (paper), \$12.50 (cloth).—This book is divided into 2 parts. Part I, "The Haunts," describes 63 birding areas in sections treating the north, central and southern parts of the state. For each there is a description of the area, information on how to reach it, a list of birds to be seen at various seasons and the location of nearby accommodations. For many areas there is also a list of references to papers dealing with birds of the region. Part II of the book, "The Birds," is an annotated checklist of Indiana birds with information on distribution, abundance and former and current status. Altogether, this is an uncommonly thorough regional guide.—R.J.R.

GUIDE TO THE NATIONAL WILDLIFE REFUGES. By Laura Riley and William Riley. Anchor Press/Doubleday, Garden City, New York, 1979:653 pp., 181 maps, 27 color photos. \$14.95.—The nearly 400 National Wildlife Refuges in the United States are not as well-known to many ornithologists as the better publicized state and national parks, but offer a great variety of opportunities to study and observe birds and other wildlife. This book provides brief summaries of useful information for potential visitors to the refuges in all 50 states. For each refuge there is a discussion of the habitat, flora and fauna, and information on how to reach the refuge, hours and seasons that it is open, best times to visit, nearby accommodations, weather conditions, appropriate clothing, points of interest nearby, and the refuge's address and telephone number for further information.—R.J.R.