

ORNITHOLOGICAL LITERATURE

AN INTRODUCTION TO ORNITHOLOGY. By George J. Wallace. The Macmillan Company, New York, 1963: xiii + 491 pp., 205 figs. \$8.95.

The first edition of Wallace's widely used text has been completely revised, but it remains unaltered in aim: the college or university undergraduate course in introductory ornithology. In 1955, when the first edition was published, it had little competition. Now there are a number of books in the field, but examination shows them to range from those oversimplified and thus somewhat inaccurate through those entirely adequate but of length unsuited to a single course to texts which are too advanced for the first college course.

Publishing delays held the book up until 1963. Actual content revision ceased, to judge from the "Literature Cited" section, in early 1961. There are only nine 1961 citations. That the author kept his material as up to date as possible is indicated by the fact that almost half of the citations are from the period 1957-61.

This book is divided into two parts. The first part consists of 14 chapters with 384 pages; the second part is of three chapters and 50 pages. For teaching, Part I could be easily adapted to either a quarter or a semester. The first chapter surveys the history and current status of bird study, and includes sections which give recognition to such facets of ornithology as daily lists, annual lists, life lists, and the Christmas Count. These are activities which are too often dismissed humorously as "bird golf." Since these are the very activities which frequently lead young, and not-so-young, people into a lifetime of professional ornithological work, it is pleasant to find them carefully and sympathetically described.

Following this introductory chapter, the bird is treated in terms of its characteristics, origin, and classification; external features and their adaptations; internal features and their functioning; locomotion; sense organs and endocrines; and behavior. The chapters on locomotion and on behavior are new; the others are thorough revisions of similar chapters of the first edition.

The next four chapters are devoted to the annual cycle and migration. The importance of the annual cycle in the bird is stressed by the length of these chapters. When the first edition was published, there was some question raised as to the necessity for a separate chapter on migration, the argument being that as it is an integral part of the annual cycle it should be treated in the appropriate places. Wallace has continued to maintain a separate chapter, in which he treats migration *as* migration: problems of origin, regulation, orientation, and mechanics. Insofar as migratory behavior is directly involved in other aspects of the annual cycle, it is treated in the appropriate places. There is little duplication.

Part I concludes with three chapters on the distribution of birds, their food habits, and their economic relations. It is unfortunate that the material on conservation and management so very logically fits at the end of this section of the book, where it will normally be skimmed due to the lack of time that occurs at the end of every course. The material in it, on land use, drainage, pollution, and pesticides, as well as the practical information on feeding, housing, and attracting birds, is precisely the material that students will most frequently be questioned about in their private or public lives as citizens, parents, and teachers. It is also unfortunate that considerations, perhaps of space limitation, or perhaps the author's own judgment of how much he should intrude himself into his text, prevented a fuller and more dramatic account of the DDT studies in which Dr. Wallace has been so deeply involved in Michigan.

Part II could as easily have been treated as an appendix. Its three chapters are: a classification of orders and families of birds of the world, following Wetmore, but with citations to other arrangements; a chapter of ornithological methods; and finally a chapter devoted to ornithological societies and journals. In the classification, distinguishing characteristics are given for all nonpasserine families, and for all North American passerine families. The material on methods includes field identification, by sight or sound, as well as brief accounts of skin preparation, field studies, and banding. Incidentally, Blake's manual on field preparation of study skins is available, Wallace's statement to the contrary. The Chicago Natural History Museum Bookstore carries it.

A few errors should be pointed out. Most are typographical, such as the reference to Whitaker, 1957b, with no 1957a listed. Apparently an item was dropped. In the legend for Figure 67, p. 113, "gliding flight" is not a new type of flight, but rather is something which should have been caught in proof. More serious is the error in Figure 45, p. 76. Here the same sort of structure is labeled both as narrow red fiber and as capillary. The indicator line from the label "capillary" is misdirected. In the original *Auk* article the structures were not labeled.

Most of the errors have resulted from the complete newness of the book. It is not simply a corrected copy of the first edition. There is one place where I wish Dr. Wallace had revised the first edition. On page 163 he has continued to give a map of a hypothetical set of territories, in conjunction with his exposition of territoriality. There has been enough published on territory in birds so that he easily could have found just as simple and a more meaningful *real* example of territoriality.

These minor criticisms aside, here is an excellent textbook of elementary ornithology, attractively presented, that is well worth consideration by anyone who is teaching such a course. The book would also make an excellent and useful addition to the library of any amateur who has a serious interest in birds.—ORMSBY ANNAN.

THE BIRDS. By Roger Tory Peterson and the Editors of *Life*. Time Inc., New York, 1963: 8½ × 11 in., 192 pp., 192 illustrations, 64 in color. \$3.95.

With all the bird books that have been published in recent years, this new *Life* Nature Library volume on "The Birds" succeeds in handling the subject in still a somewhat different manner. Brief though the treatment is of the varied topics discussed, the writers have done well at hitting the pertinent high points and have brought the subject treatments well up to date. The most outstanding feature of the volume is, as one might expect from a *Life* magazine publication, the illustrations. It is obvious that no expense or effort has been spared in securing top-ranking photographs, diagrams, paintings, and marginal sketches to illustrate the discussions. The art work of Roger Tory Peterson, of course, does much to maintain this high standard of illustration, but his photographic skill as well as his writing ability also shows up in a distinguished manner.

The rather unusual coverage in this volume appears in the chapter headings: From Archeopteryx to Sparrow, What it Takes to Fly, Birds as Food Gatherers, How Many Birds?, The Riddle of Migration, How Birds Communicate, From Egg to Adult, and Toward a Balance with Man. These treatments, of course, do not pretend to constitute a textbook but the book is a good example of today's tendency to digest and condense subjects for the casual reader, a reader perhaps who has neither the time nor the depth of interest to spend long hours delving into the subject. The format follows that of previous volumes in the series. Each chapter begins with a text taking up about half the space devoted to the subject and credited to the authorship of Roger Tory Peterson.

The latter half, under an appropriate subheading, includes the illustrations with often whole paragraphs of explanatory titles authored by members of the editorial staff of *Life* magazine. The text is set in a narrow type bed, leaving space for the numerous well-designed and executed explanatory drawings in the wide margins. All the illustrations are carefully credited to individuals in a condensed half page. Acknowledgments on the same page include a host of authorities whose help was enlisted in compiling the book. An index of nearly five, four-column pages gives an excellent coverage of the materials, with italics referring to illustrations. A bibliography on another four-column page includes 72 references classified into subjects including several 1962-63 references. These seem well selected for the use of the readers for whom this book is intended.

In a digest of broad fields of information such as this nearly every reviewer will probably point out omissions that appear important to him. In his discussions of pesticides' effects on birds, editor Peterson fails to mention Rachel Carson's book "Silent Spring." Although I find Miss Carson's book expressing some exaggerations and distortions, I still consider that this book holds a leading position in arousing the public to the seriousness of this problem and deserved a mention. I note that its 1962 publication date predates some of the references in the bibliography.

I have scrutinized both the text and illustrations for errors and find them nearly flawless. However, on page 38 in the drawings of the grebe foot the right-hand figure (c) fails to show the broad structure of the leg as well as the foot as viewed from the side, an important detail in explaining the efficient form of this superb swimming organ. Also credit for the very good penguin photograph on page 93 was overlooked.

The last chapter, "Toward a Balance with Man," touches on numerous subjects such as primitive man's use of bird feathers as decorations, domestication of poultry, hunting of game birds, disease transmission by birds, and others not ordinarily mentioned in most bird books. The fourth chapter, "How Many Birds," also stresses total populations and numbers of species more than do most bird books.

From ordinary photographic standards certain illustrations might be considered unacceptable. One of these, the Fairy Tern on the cover, I feel is well chosen for the purpose. One excellent photographer commented that he would have thrown away the tern shot on page 32, but as an effective suggestion of rapid flight to introduce the chapter on "What It Takes to Fly" it serves beautifully. Particularly striking photographs in the volume are: the Starlings on pages 30 and 31, the flying flamingo pattern on pages 96 and 97, the warbler-cuckoo (although I feel the "warbler" should have been further identified) on page 153, and the drumming Ruffed Grouse on page 119. Several should be commended for showing actions particularly difficult to photograph: the Bobwhite in flight on page 49; the pelican catching a fish under water on page 67; the woodpecker's tongue inside of the bark of a tree on page 68.

My feeling is that this book will be very effective in drawing the casual reader into a better understanding of the interesting and complex nature of ornithological study and may very well succeed in adding many readers to the rapidly growing fraternity of serious bird watchers.—W. J. BRECKENRIDGE.

NOTES ON THE BIRDS OF GREAT SMOKY MOUNTAINS NATIONAL PARK. By Arthur Stupka. University of Tennessee Press, Knoxville, 1963: 8½ × 5½ in., vii + 242 pp. \$3.00 (paperbound).

Within the limitations of its geographic scope, it is difficult to avoid unrestrained praise for this checklist. At the very outset the author enumerated the kinds of information to

be presented, then stuck doggedly and faithfully to his task. The nine points of coverage include status in the Park area, altitudinal range, migration dates, nesting data, quantitative data from Christmas and breeding-bird counts, and ceilometer kills at the nearby Knoxville airport. References to subspecies appear as footnotes.

Also found in the Introduction are descriptions of the area, its climate, and its flora, as well as an account of its ornithological history. Records specifically cited in the species accounts are, in many cases, credible sight records of observers mentioned in the historical account. The accounts were also based, however, on more than 500 collected specimens, most of which predated the establishment of the Park.

In the discussion of the flora, it is heartening to find a top-notch field man with experience in a critical area referring without apology to life zones. The presence of a Canadian Zone in the Great Smoky Mountains is substantiated not only by the breeding of the Saw-whet Owl, Red-breasted Nuthatch, Brown Creeper, Winter Wren, and other boreal species, but also by the fact that at the higher altitudes "59% of the woody plants are made up of northern species" (Cain, 1930).

Although I could find no reference to the total number of species recorded in the Park, it was a distinct surprise to one familiar with its almost complete lack of open water to learn that 46 species of water birds had been seen there, including four species of geese. The accounts of some water birds (e.g., Laughing Gull and Sooty Tern) make fascinating reading, as do most of the species accounts for that matter.

Other valuable bits of information are contained in the Appendixes. There are ten pages of specific localities and their altitudes; three pages giving full names of contributors who are mentioned in the text; a list of 179 references cited in the text; and a list of the common and scientific names of all plants mentioned in the text. The Species Index includes both common names and scientific binomials of birds, as well as the scientific names of their families. No omissions were noted.

In consideration of the wealth of valuable information so masterfully presented, it is picayune to mention minor flaws or any omissions which some may consider unjustified. Those who would like the above features combined with a field guide will learn in the first sentence of the Introduction that this is not such a book. True errors are few and far between. One which should be pointed out concerns the extension of breeding range of Traill's Flycatcher into Tennessee in 1958 "southward from West Virginia, Maryland, and eastern Pennsylvania." Although this statement was correctly attributed to the AOU *Check-list* (1957), the breeding of this species in Virginia was reported in *The Auk* in 1947 and in North Carolina, with specimen support (loc. cit.) in 1958. Even this minor *lapsus*, however, was concerned with extralimital records. There are far too few such errors to detract materially from the general excellence of the work.—HENRY M. STEVENSON.

THE HAWKING OF JAPAN: The History and Development of Japanese Falconry. By E. W. Jameson, Jr. Published at Davis, California, by the author, 1962: 7 × 10½ in., [xii] + 97 pp., decorative chap. headings, 19 figs., 10 pls. (5 col.), front. (col.). \$15.00.

What we know of falconry as practiced in past centuries is dependent on those rare scholars who, familiar with the sport, have a flair for working with unfamiliar languages and a dedication to searching among "forgotten" archives. One such person was Dr. Casey A. Wood. I can think of no greater labor of love than his translation of "De Arte Venandi cum Avibus" by Frederick II of Hohenstaufen, published under the title "The Art of Falconry" by Stanford University Press in 1943. Perusing this 637-page volume

I never cease to marvel at the storehouse of knowledge he made available to us from the Latin, penned in the 13th century.

In a more modest but no less commendable degree Dr. Jameson, Professor of Zoology at the University of California in Davis, has made available to us a knowledge, hitherto unknown in the West, of falconry as practiced in Japan from as far back as 650 bc. His material, obtained from visits with many falconers, observations on their methods and gear, and information from old books and scrolls, is presented in seven chapters: History of Hawking in Japan, The Sporting Hawks of Japan, Housing and Equipment, Methods of Obtaining Hawks, Manning and Training, Consummation, and Daily Care. We find, as we read these chapters, that the Japanese show the same precision and sensitivity in falconry that they do in many other pursuits.

The raptors used in Japanese falconry include the Peregrine Falcon, Pigeon Hawk, and Goshawk, which are among the same species employed by North American and European followers of the sport, the Hobby (*Falco subbuteo*) and Eurasian Sparrow Hawk (*Accipiter nisus*), which are also employed by Europeans, and two additional species unknown to Westerners, namely, the diminutive Besra Sparrow Hawk (*Accipiter virgatus*) and the powerful Hawk-eagle (*Spizaetus nipalensis*). The latter is the largest raptor regularly trained in Japan. Although considered too large and slow to capture birds, it "can kill a hare (*Lepus brachyurus*) with apparently little exertion and trained birds occasionally take foxes, raccoon dogs, and marten."

Dr. Jameson has managed to inject considerable lore about the traits and behavior of the raptors concerned, especially of the Goshawk, which is the classic and most popular hunting hawk in Japan. His text, however, is essentially about falconry for falconers.

The book is artfully designed and printed, attractively and sturdily bound. Admirers of Nipponese paintings will enjoy the hunting scenes (Color Plates 3 and 5), exquisite in tone and delicacy. No doubt this volume will soon be a collector's item, as only 500 copies were printed.—OLIN SEWALL PETTINGILL, JR.

EXOTIC BIRDS: Parrots, Birds of Paradise, and Toucans. Text after François Levaillant (translated by Eric Moshbacher). The Viking Press, Inc., New York, 1963: 117/8 × 16 in., 16 col. pls. with unnumbered text pages between. \$12.50.

This sumptuous production consists essentially of 16 color plates from the "Histoire Naturelle des Oiseaux," published between 1796 and 1812 by the explorer François Levaillant. Sixteen of the plates are by Jacques Barraband, the other two are by Auguste, about whom, we are told, little is known.

The plates have been handsomely reproduced on heavy, flat-white paper. The subjects themselves, each perched on a pedestal without background, consequently stand out with stark clarity. Since the birds depicted are notable for their bright colors and, in the case of the birds-of-paradise, elaborate plumes, the plates are indeed eye catching, if not spectacular. As in most bird illustrations prior to Audubon, the birds have the stiffness of mounted specimens complete with staring, glass eyes, but this fault fails to detract from their decorative value.

Only to the extent of showing what 16 different kinds of birds look like is the book an ornithological contribution. The text consists for the most part of brief remarks on the birds shown, usually on their form and colors, which are already obvious. The species are designated solely by vernacular names and little, sometimes nothing, is said about distribution. One of the 16 "exotic birds" is none other than our Blue Jay with an eye

as blue as its plumage. Compared to the other 15 birds in the book, the Blue Jay is pitifully somber, even with the colorful eye that it should not have.

I agree with the suggestion on the flyleaf of the jacket that this will be highly regarded by every lover of old prints. No doubt many copies of the book will come into the hands of interior decorators, the plates to be torn out and used to embellish new bank lobbies, motel bedrooms, waiting rooms in dental offices, and so on.—OLIN SEWALL PETTINGILL, JR.

THE WILD DANUBE: Portrait of a River. By Guy Mountfort. Illustrated by Eric Hosking. Houghton Mifflin Company, Boston, 1963: 6 $\frac{5}{8}$ × 9 $\frac{3}{4}$ in., 207 pp., line drawings by Penelope Gillespie, 56 pls. (130 photos.), front. (col. photo.). \$6.00.

Guy Mountfort, one of Britain's distinguished ornithologists, is an entertaining teller of personal adventures. In "Wild Paradise" he wrote about the three expeditions that he led to the fabulous Cota Donaña in the wilds of southern Spain. Here he gives us another narrative, this time of two more recent expeditions under his leadership to Bulgaria and Hungary. Lying behind the "Iron Curtain," these countries are unfamiliar to most present-day travelers and naturalists from the West; thus, the book is in many respects a revelation.

Both Bulgaria and Hungary have quiet, romantic countrysides, lofty mountains, mirrored lakes, deep forests, and fine marshes, all supporting a rich fauna and flora. But travel is not for the comfort loving since tourism is generally undeveloped and still based on the premise that all men are equal. Visitors from the West are suspect, and if they are so peculiar as to be ornithologists and bird photographers, they are apt to be under surveillance much of the time. Even so, Mountfort and his associates were treated kindly and offered cooperation willingly by fellow naturalists and most other people, particularly those residing in country districts.

In telling his story Mountfort has the knack of interspersing his brisk accounts of ornithological exploits with fascinating notes on the history, geography, and economy of the areas visited, with numerous experiences and problems—humorous or otherwise—in reaching different destinations, and with observations on the people, their way of life, and their political philosophies. "The Wild Danube" should satisfy most anyone interested in birds, people, and adventure in places that are off the beaten path. The generous representation of Eric Hosking's photographs in appropriate places throughout the text adds substantially to the realism of the narrative.

Concluding the book is an appendix listing the birds (by both common and scientific names) noted during the expeditions and giving their status in the regions visited, a selected bibliography, and a good index.—OLIN SEWALL PETTINGILL, JR.

THE SONG OF WILD LAUGHTER. By Jack Couffer. Simon and Schuster, New York, 1963: 6 $\frac{1}{4}$ × 9 $\frac{1}{4}$ in., 190 pp., many photos. \$5.00.

With the happy combination of professional interests in both biology and the cinema arts, Jack Couffer was ideally qualified as a cameraman for Walt Disney's "True Life Adventure" series. Here he relates some of his experiences while filming for Disney such widely diversified subjects as seals and tortoises in the Galápagos Islands, a dog and a black bear cub in the Canadian Rockies, a trained Golden Eagle and a pet bobcat in the Grand Canyon, bats in a Texas cave, Adélie Penguins in Antarctica, trap-door spiders in a vacant lot in Los Angeles, Chinook salmon in the Columbia River, and gray wolves in Arizona. From an ornithological viewpoint, the highlight of his experiences was find-

ing an albino Adélie Penguin and observing the extremely aggressive behavior shown toward this bird by the other penguins in the colony.

Couffer discovered early in his cinematic career that the eye of an animal "is the point on which to focus, the target of the camera. . . . If the eye alone is sharp, everything else will appear to be in focus. . . . Keep the lens trained and sharp on an animal's eye, and through it he [the animal] will reveal himself. . . . It is the eye which is all-expressive, the key to individuality."

The writing is quick paced and spiced with good humor; descriptions of episodes are not over dramatized. Attention is given mainly to the animals and the author's experience with them. Problems concerning photography and the techniques employed and the successes and failures in meeting the objectives of the camera work are mentioned only now and then. Essentially this is a book about animals, not photography.

Unfortunately the title of the book, taken from the epilogue wherein the author refers to the vocal sounds of the Tasmanian Kookaburra as "the song of wild laughter," gives no clue to the contents of the 10 chapters. The book is liberally illustrated with the author's photographs, all of them fine but, except in four instances, without captions.—
OLIN SEWALL PETTINGILL, JR.

THE LONG-SHADOWED FOREST. By Helen Hoover. Thomas Y. Crowell Company, New York, 1963: 5½ × 8¾ in., [x] + 272 pp., numerous marginal line drawings by Adrian Hoover. \$4.95.

"The Long-Shadowed Forest"—how provocative! My love for the Gunflint Trail in northeastern Minnesota will be enhanced by thinking of its wildness as the long-shadowed forest. That is a spell-binding title.

The book is spell binding too. It is not another "We Took to the Woods"—it is not a chronicle of personal adventure in the wilderness. Neither does it have the mysticism with which Sigurd Olson approaches nature in "Singing Wilderness" and "Listening Point." Rather it is the day-by-day forest, throughout the seasons, seen through Mrs. Hoover's eyes.

And what quick and penetrating eyes she has. Nothing seems to escape them. She sees the great trees and forest animals, but she also notices such minutiae as fungi and lichens, strange insects, tiny plants, snow patterns. Of frost decorations on the lake's ice sheet, she writes that the "frost buds grew—into acres of crocus-like 'flowers,' and finally into frost 'roses' as big as cabbages, their frail petals made of the delicate and ephemeral crystals."

She has evidently read widely and she gives the reader the results of her scientific studies as well as details from her personal experience. Perhaps at times she falls into a school-teacherish vein. But not for long; her enthusiasm and joy in all the aspects of the wilderness save her from that.

What I enjoy most of all in her book is her feeling for color, being a confirmed color addict myself. She is conscious of the most subtle gradations ("The first light reveals the trees and brush as greenish gray shapes, primordial predecessors to themselves"), and of the most minute flashes ("The moths rest with silver-dusted wings against the screen, their eyes reflecting pink and yellow from the tantalizing light of my lamp"). On the other hand, she can *deluge* one with color, as when she writes, "Our trail upon the water lies behind us, gradually turning from turquoise to green. The slanting light is darkening from white to saffron to bronze, and details of the shore stand out in amber-traced clarity. The waves are green now, their patterns and droplets glowing like melted copper."

Mrs. Hoover is an ardent conservationist, of course, and her remarks are all the more effective in that they are scattered throughout the book, not presented as a set plea. She and I share a love for the profound silence this border wilderness once had, and a horror at its disappearance. For she tells of sitting on her shore at dawn to watch the mother-of-pearl mists rising. Suddenly two boats appeared. "QUIET, ISN'T IT?" rang out from the farther boat. "YEAH. AWFUL QUIET," bellowed the steersman of the second.—FLORENCE PAGE JAQUES.

THE WONDERS OF WILDLIFE: Nature Observed in 280 Pictures. Compiled by Franz A. Roedelberger and Vera I. Groschoff; English version by Mary Phillips and Peter Whitehead. The Viking Press, Inc., New York, 1963: 8 $\frac{5}{8}$ × 9 $\frac{3}{4}$ in., [iv] + 232 pp., 280 photos. (24 col.). \$8.50.

I find it hard to imagine how an album of natural-history photographs, so many in number, could be more superbly produced at such moderate cost than this one, printed in Switzerland. All the color and many of the more striking black-and-white shots are full page; they and practically all the other photographs, regardless of how much of the page they occupy, are bled. The consequent effect is one of greater size and more freedom of the subjects. Had the volume been higher to accommodate larger pictures, I doubt that the pictures could have been more greatly appreciated. As it is, we have a top-notch pictorial work that will fit ordinary bookshelves, will not have to be kept on its side or put in some odd, out-of-the-way place.

The subject matter, mostly European and photographed by Europeans, runs the gamut of wildlife from lowly invertebrates to birds and mammals. Birds are generously represented. The color plates, every one of them, are among the best I have ever seen anywhere. Besides a caption for each picture, there is usually an accompanying brief text pertinent to the subject, intelligently and concisely written, informative, and commendably authoritative.—OLIN SEWALL PETTINGILL, JR.

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