

ORNITHOLOGICAL LITERATURE

THE HAMLYN GUIDE TO BIRDS OF BRITAIN AND EUROPE. By Bertel Bruun. Illustrated by Arthur Singer. Consultant Editor, Bruce Campbell. The Hamlyn Publishing Group Ltd., New York, 1970: $4\frac{1}{2} \times 7\frac{1}{2}$ in., 319 pp., 516 birds illustrated in color. 25/- (= \$3.00).

Having had the pleasure of reviewing "Birds of North America" for this journal (Wilson Bull., 79:251-254, 1967), I looked forward eagerly to reviewing its natural companion, a European guide by two of the same authors, Bruun and Singer. In general, I was not disappointed. The same charm of Arthur Singer's illustrations is maintained throughout, and his meticulous attention to detail makes this an identification book *par excellence*. Every bird is pictured in color, and there is the same abundance of illustrations. Special treatment is given to difficult groups, and much space is devoted to immatures, seasonal plumages, flight pictures, and silhouettes. Immature and female buntings have a two-page spread, for example, and Bonelli's Eagle has five illustrations—an adult and an immature standing and an adult, a first-year bird, and a second-year bird in flight. It is this wealth of color illustrations that distinguishes a really fine field guide such as this from the host of mediocre publications masquerading under that name. The publishers are to be complimented for not trying to cut corners and illustrating some birds by line drawings, as is so often done.

The general format is the same as that followed in *Birds of North America*: the text is on one page and the illustration of the bird on the opposite page. This time-saving feature is universally praised whenever I hear this book or its predecessor being discussed, and has undoubtedly contributed greatly to their success. A field guide is for use in the field, and the less time it takes you to look up a bird, the better. Individual species are given five to ten lines of text, exceptionally 15; brief note is made of habitat and sometimes behavior, if significant for identification purposes, but the text is mainly concerned with field identification. Range is shown by a map beside the text, an excellent feature. The maps are small but adequate, and in addition to showing summer and winter ranges they also indicate with arrows the principal routes taken by migrants. Sonagrams of bird songs, which were one of the less successful features of *Birds of North America*, have wisely been omitted in the present volume, their place being taken by written descriptions.

At the end of each species description a symbol has been added to indicate the status of the bird in Britain, i.e. R (= resident), S(ummer), W(inter), P(assage), and V(agrant). A given bird may belong to several categories—the Grey Heron, for instance, is RWP, but since the category "V" by definition excludes all other categories, the unfortunate result is that no bird can be RSVP! If the book is translated into other languages, it would be appropriate to change the symbols to fit the bird's status in the country involved.

In addition to the individual species treatment, there is a general introduction of 5-10 lines to each family and major subfamilial and generic grouping, giving the salient points of life history and anatomy. This is a first-rate idea, especially for the beginner interested in the broad distinctions between the major groups. These familial accounts are often charmingly illustrated with representative species, as in the waterfowl (pp. 42-43) and the warblers (pp. 222-223).

The area covered by the book extends eastward to include the Ural Mountains, Caspian Sea, and the Caucasus and thus introduces the reader to a number of species not illustrated or even described in other European bird books, e.g. Pallas' Sea Eagle, Siberian White

Crane, Oriental Cuckoo, Citrine Wagtail, and Menetries' Warbler. The book includes all birds that have occurred in Europe at least five times in this century; accidentals not meeting this requirement are not described but listed separately at the back of the book. Also included are introduced and escaped species "well established in a feral state." While not quarrelling with this principle, it would have been interesting to know more precisely what guidelines were used; this is a perennial problem for checklist compilers.

The major fault of the book is one that concerns the publishers, not the authors. The book is so cheaply put together that it literally falls apart with even minimal use. The pages are stuck in with glue, and my review copy came apart right on my desk by the mere act of turning the pages; I can imagine what would happen to the book in the field. The same complaint has been heard to a lesser degree about *Birds of North America*, and one would have thought that a lesson might have been learned, but apparently not, since the European guide is even worse in this respect. Those who would like to give this book a lot of use (which it certainly deserves) might seriously consider taking it to their local bookbinder for a proper cover.

The other faults of the book, though numerous, should be seen in their proper perspective. When a new book comes out on such well-covered areas as Europe or North America I think a reviewer has a duty to be extra-critical of it because readers want to know why they should buy this book rather than any of the other books on the subject. Some parts of the world are still not covered by any popular bird book, and in these cases it is worth buying almost anything that comes out, and reviewers tend to be more lenient. But Europe has a multiplicity of bird books, and the following complaints should be seen in this light.

First, the book badly needs the attention of a competent taxonomist. Taxonomic order is disregarded without comment in many places. Bustards are placed between cranes and rails, a novel approach even in so controversial an order as the Gruiformes. The owls are in a mess; the Barn Owl is sandwiched between other owls and the Tawny Owl has been separated from the other members of the genus *Strix*. *Acrocephalus agricola* comes in the middle of *Locustella*, and the *Cisticola* in the middle of *Acrocephalus*. None of these arrangements appear to have any advantages for identification purposes, in contrast to the cases of the Snow Finch and the Bearded Tit, which have been taken out of their correct order and placed next to similar-looking birds for identification purposes, and the fact is so mentioned in the text.

Not only the order is at fault. In cases of controversial genera, the authors decided that the fairest course would be to give equal time to all classifications. Thus we find the shearwaters on page 26 in the following order: *Puffinus puffinus*, *Procellaria baroli*, *Puffinus gravis*, *Procellaria diomedea*, and *Puffinus griseus*. Similarly with the small thrushes on pages 256-258, the Bluethroat is in *Luscinia*, followed by the Robin in *Erithacus*, the Red-flanked Bluetail in *Tarsiger*, and back to *Luscinia* with the Nightingale. King Solomon himself could have given no more fair a judgement.

The authors are apparently unaware that the "Rufous Warbler," placed between *Sylvia* and *Phylloscopus*, is in fact a thrush, the genus *Cercotrichas* being widespread in Africa where the birds are known popularly as Scrub Robins. And a final taxonomic point—the group treatment in the Turdinae needs to be revised. After the Muscicapinae, instead of a discussion of Turdinae we come to a major heading "WHEATEARS" (a new subfamily, Oenanthinae?); after the Wheatears we proceed without major heading change through various genera of small thrushes, such as *Saxicola* and *Phoenicurus* (which are now presumably in Oenanthinae), until finally at the genus *Turdus* we come to the heading "THRUSHES." This needs to be tightened up.

Turning to the text, I am afraid I found the game of "spot the error," popular with reviewers, to be a very rewarding one in this book. Many of these errors stem from the fact that the description of the bird does not correspond with its picture; author and artist did not get together enough here. There is only space for me to mention the principal errors here.

The labels of the immature Dalmatian Pelican and White Pelican have been transposed (p. 30). The Squacco Heron (p. 36) is said to be told from the Cattle Egret by its red bill in breeding season—but it is the Cattle Egret that has the red bill in the breeding season; the Squacco's bill is dark green and black, as illustrated. The painting of the Common Scoter (p. 62) is correctly of the European race *nigra*, but the text describes the American race *americana*. The account of the Common Crane (p. 102) contains the statement "On the ground the tail looks very bushy." This is a classic blooper (the "tail" being the elongated secondaries which droop over the tail of a standing bird.) Under Glaucous Gull (p. 142) we are told to "note in flight the translucent (*sic*) windows at base of primaries" but these are not shown in the flight illustration.

Calls are poorly described in a number of birds, and practically no use is made of the time-honored device of reducing them to a memorable phrase, nor even are they written out in full. The Woodpigeon call is inadequately rendered as "Cooing consists of five syllables, emphasis on the first." This is in any case wrong, as the emphasis is on the second syllable. The dove calls are all poor and so are the owls, to which special emphasis should have been given. All that is said of the Little Owl (p. 172) is "calls are shrill and sharp," which is completely useless—the Blackbird has some shrill and sharp calls, as do a couple of hundred other European birds.

Lastly, something has gone wrong on the Nuthatch page (p. 272). Kruper's Nuthatch has been omitted entirely from both text and illustrations, yet the map opposite Corsican Nuthatch, confined to Corsica, shows a range in Asia Minor which is about right for Kruper's Nuthatch—??

In conclusion, I may say that the above remarks show only that there has been some sloppy editorial work and some sloppy writing; they do not really detract from the overall quality of the book. With the proviso that you do something about having the book properly bound, I heartily recommend its purchase.—STUART KEITH.

ORNITHOLOGY IN LABORATORY AND FIELD, 4th Edition. By Olin Sewall Pettingill, Jr. Burgess Publishing Co., Minneapolis, 1970: 7½ × 10 in., xvii + 524 pp., col. frontispiece and 30 pl. (2 in color), many bl. and wh. figures and illustrations. \$11.95.

Since the spiral-bound first edition of 1939, Pettingill's manual has introduced a generation of college students to laboratory and field aspects of ornithology. Updating of the 1956 edition is welcome indeed.

The fourth edition is longer than its predecessor by 143 pages. There are additional black and white plates and, for the first time, colored illustrations are present. An agreeable profusion of Walter J. Breckenridge's pen and ink sketches enlivens the pages. Information-filled appendices now total 88 pages. A number of significant topics, untreated in earlier editions, has been added.

Outstanding in this edition is the revision of "Feathers and Feather Tracts" overseen by Peter Stettenheim and superbly illustrated by Robert P. Ewing. "Anatomy and Physiology" is enhanced by Berger's contribution on myology. An 18 page discussion of behavior, a section on "Ancestry, Evolution, and Decrease of Birds," and an introduction, "Birds and Ornithology," are among the added topics which give new dimensions to this work.

It is obvious that much more than updating of a laboratory-field manual has been achieved. Pettingill states (p. vii) that while no pretense has been made to cover the entire field of ornithology, added material is "possibly enough to supplant the need of an extra textbook." It would certainly seem that the broadened scope of this edition is designed to fit the work into the category of a general text. Presentation of the text's 20 sections as "more or less independent units" and the extensive lists of references with each section will allow an instructor versatility in use of the volume in a wide spectrum of approaches to teaching ornithology.

It is evident that much care has gone into all stages of preparation of this edition. The comments and few criticisms I offer are, by and large, more in anticipation of a fifth edition than in derogation of the present.

I count a total of 41 pages that require fill-ins (labels, data, migration routes, etc.) by the student. The book is not inexpensive. Some students may not elect to retain it. What of its resale value? Who would wish to purchase a used copy? I question the appropriateness of having workbook pages bound into a text.

In my opinion the colored illustrations of the digestive and urogenital systems (plates 24 and 25) contribute little except possibly added expense. Carefully executed black and white drawings can convey impressions as distinct, if not more so, than these. Furthermore, why should these (and certain other) illustrations not have labels? The student should not expend effort identifying structures in a drawing which is designed to aid him in locating these structures in the specimen itself.

Kinesis of the upper jaw, disappointingly, receives the briefest mention. In my experience students have much curiosity about this. The mechanism of upper jaw movement, then, can afford interesting introduction to many aspects of the skull.

It would be a welcome departure from traditional directions for identification and dissection if—with at least a part of the myology—emphasis were placed upon functional aspects of a muscle system such as that of the wing, leg, or jaw. Memorizing listed information about individual muscles would then be subordinated to something more meaningful to college students.

In a book remarkably free of inappropriate phraseology it is unfortunate that the following could not have been eliminated. (*Italics in this paragraph are mine.*) Birds "have radiated widely in form and action *in order to live in particular environments*"—(p. 3). Winter visitants come from northern nesting grounds "*to pass the winter in less rigorous climate*"—(p. 207). Rather than the "*Functions of Territory*"—(p. 313)—might it not have been more precise to say the "*Significance of Territory?*" The Connecticut Warbler "migrates in an eccentric manner"—(p. 285); a route eccentric in outline? Reviewers can be overly critical. But, after all, instruction is the primary purpose of this volume and the more precise the statement the more effective.

The brief review of ectoparasites (Appendix I) is excellent. A concise introduction to endoparasites of birds would be of much use to the student.

It would be convenient if all the families of the birds of the world were listed (pp.: 142–144). The Pycnonotidae, incidentally, might well have been included in the list of North American families; the Red-whiskered Bulbul has been established in the Miami area for more than ten years.

With respect to the list (p. 191) of birds known to molt remiges simultaneously, I suggest that anhingas and flamingos are "notable" too.

Polychromatism is discussed (p. 193). Might not the subject of polymorphism have been introduced?

Although the Dodo may be the first species of bird which at present is surely known

to have been exterminated by man (p. 421), there is increasing indication that at much earlier times Moas, as well as other species, may have been eliminated by man—see, e.g., P. S. Martin and H. E. Wright, Jr. (Pleistocene Extinctions, 1967).

“So far there is no evidence that the Cattle Egret has had any harmful effects on other herons. . .”—(p. 202). Lowe-McConnell (*Ibis*, 109:168–179, 1967) and Dusi (*Alabama Birdlife*, 16:4–6, 1968) have indicated otherwise.

Finally, with reference to the map of North America (p. 210), could not the southern one-third of the Florida peninsula have been indicated as something other than grassland or glacier!

Usefulness of this long-established and well-liked work has been much enhanced for both field and laboratory study by updating and by the new features it contains. Important topics added to this edition have opened new avenues for its use in the teaching of Ornithology. Students of birds, at whatever level, will find the volume an indispensable one for their shelves.—OSCAR T. OWRE.

THE HAWKS OF NEW JERSEY. By Donald S. Heintzelman. New Jersey State Museum, Trenton, N.J., Bulletin 13, December 1970: 6 × 9 in., 104 pp., 2 maps, 4 tables, 39 halftones, 47 drawings. \$2.00.

The first half of this small volume is a general ornithological introduction to hawks and falcons, with an account of the fossil record, a general ecological discussion of predation and food chains, an account of autumn hawk flights at Cape May, at the Montclair Hawk Lookout Sanctuary and along the Kittatinny Ridge. In a section on endangered species, particular attention is paid to the accumulation of pesticides in food chains leading to drastic poisoning and reproductive failure in the Peregrine Falcon, Bald Eagle and Osprey. There is also an account of habitat destruction and hawk shooting as contributory factors in the decline of hawk populations.

The systematic section covers 19 species, each accompanied by a half-tone photograph and a food habits diagram. The species accounts are brief but seem adequate for the purpose of an introduction to the life history of each, including names, field marks, range in New Jersey, nest, eggs and general comments. The incubation periods for many species seem much too short (compare Brown and Amadon, 1968) and seemingly are cited without heed to the critique published by Nice. Finally a ten page section on hawk identification includes drawings of hawks in flight, an account of hawk-watching stations, and a brief key to the species described. The diagrams of the tail shapes of Sharp-shinned and Cooper's Hawks are incorrectly drawn, while the Austing photographs show the “square” versus rounded tails nicely. It is not often noted that the square tail of the Sharp-shin is due to the prominence of the fifth tail feathers on each side, not the sixth, which is distinctly shorter, as nicely figured by George M. Sutton in *The Wilson Bulletin* several decades ago.

Easily the best part of the book is the account of hawk flights and migration points, a field in which Mr. Heintzelman has had long experience. The account of food-chain poisoning and pesticide accumulation is brief and to the point, easily read, and this book presents this information where it can be easily found and digested by people with little background or opportunity for serious study. All in all, I think this is a worthwhile addition to the general ornithological library and one that even the experienced hawk-watcher will want to have.—WALTER R. SPOFFORD

MATING SYSTEMS, SEXUAL DIMORPHISM, AND THE ROLE OF MALE NORTH AMERICAN PASSERINE BIRDS IN THE NESTING CYCLE. By Jared Verner and Mary F. Willson. The American Ornithologists' Union Ornithological Monographs, No. 9, 1969: 6¾ × 10 in., 76 pp., 4 tables. \$2.50.

Prompted by their interest in the mating systems of North American passerines, Verner and Willson have searched the books and periodicals of four of the largest American university libraries for material describing passerine parental behavior and the degree of male participation in the rearing of the young. The present work consists primarily of a long table which 1) classifies 291 species from the region north of Mexico as being either sexually monomorphic or dimorphic, 2) indicates what is known about their mating systems, and 3) reports the roles of the male during the several stages of reproduction from nest-building through the period of dependence. For each species about which there is information there are citations to the 1,585 items that constitute the bibliography, with the result that this work is an extremely useful reference to virtually all the American literature (since about 1880) pertaining to the subjects mentioned above. Also important, the table is a rough but quick indicator of the state of knowledge about each species. I counted 57 for which there is no more than one bibliographic entry, and the authors regard only 48 species as "reasonably well known" (page 31).

Other tables summarize the frequencies of sexual di- and monomorphism and of the various mating systems according to family and also analyze male participation and non-participation in the care of the young according both to mating system and to the extent of sexual variation. On the basis of these summaries possible associations between the variables under consideration, for example, between polygyny and male behavior, are tested statistically and discussed very briefly.

This monograph will be an important reference for years to come, not only to those interested in the evolution of avian mating systems and in sexual dimorphism but also to anyone seeking life-history information on North American passerines.—VAL NOLAN JR.

BIRDS OF ROCKY MOUNTAIN NATIONAL PARK. Museum Pictorial No. 18. By Allegra Collister. Denver Museum of Natural History, 1970: 6 × 9 in., paper covered, 64 pp., many photos. \$1.00.

This booklet is an annotated check-list of the 256 species of birds that have been found in the Park, in Shadow Mountain Recreation Area, and the immediate vicinity. Observations of unusual occurrence are cited. Photographs by Alfred M. Bailey, Robert J. Niedrach, Patricia Bailey Witherspoon, and others enhance the publication.—PETER STETTENHEIM.