

ORNITHOLOGICAL LITERATURE

THE WARBLERS OF AMERICA. By Ludlow Griscom, Alexander Sprunt, Jr., and many other contributors. Devin-Adair Co., New York, 1957: 8 × 10 in., xii + 356 pp., 33 color plates, 3 figs., 51 range maps and many black and white drawings by John Henry Dick. \$15.00.

This work evolved from the gradual fulfillment of the artist's desire to paint all the warblers of the United States and Canada. The senior authors, Griscom and Sprunt, agreed to prepare or accumulate the accompanying text. As the project neared completion, it was decided to portray also those species which occur in Mexico, the West Indies, and Central and South America, thus including in one volume every species of the Parulidae. This was a fortunate decision, indeed, for the text embracing the North American species adds little to the published knowledge and would not justify another expensive bird book. The informative chapters on and the plates of the neotropical species, however, are definite contributions to American ornithology. The extension of scope resulted in a change of title from "The Warblers of North America" to the present name, a change that will be welcomed by all who are familiar with Chapman's "Warblers of North America" and resent the all too frequent use of the original titles of classic works for new books published by different authors years later. The title on the jacket, unfortunately, was not changed.

A publisher's preface is followed by "An Introduction to the Warbler Family," reprinted from Alexander Skutch's "Life Histories of Central American Birds" (*Pacific Coast Avif.* No. 31, 1954). There are chapters by Griscom on classification, the techniques of warbler study, songs, and geographical distribution. One by W. W. H. Gunn and Donald J. Borror analyzes the songs of 39 North American species. A final introductory chapter is a tabular comparison of warbler foraging ranges.

The bulk of the book comprises the individual write-ups for the warblers breeding in the United States. The hybrid Brewster's and Lawrence's are included in the 60, and Sutton's is here considered a breeding warbler. Sprunt has written 31 accounts, and the balance has been contributed by various experts familiar with the subject species. That more of them were not so assigned to experts familiar with a species on its breeding ground is a major shortcoming of the book. Descriptions are limited to field characteristics. In conformity with the A. O. U. Check-list, subspecies are "generally suppressed," but the old subspecific common names are listed as "local names." If such names are to be used, would it not be better to call them "regional names" and limit the term local to names which have always been considered local, such as Golden Swamp Warbler, Summer Yellow Bird or Yellow-rump?

Seven excellent chapters briefly described the resident and migrant warblers of Mexico (by Emmet Reid Blake), the West Indies (James Bond), Central America (Skutch), Panama (Eugene Eisenmann), and South America (Blake). The behavior of the family north of the United States is ably discussed in chapters on Alaska (Frederick C. Lincoln), British Columbia (J. A. Munro), the Prairie Provinces (W. Earl Godfrey) and Eastern Canada (Roland C. Clement and Gunn).

There is a biographical sketch of each contributor. Appendix A is a classification of the Parulidae, but no author is credited with the compilation. Appendix B is a suggested reclassification by Griscom. I find it confusing to find him lumping *Myiothlypis*, *Idiotes* and *Phaeothlypis* into *Basileuterus*, yet do not find these three discarded genera in the supposedly present classification of Appendix A. Appendix C, "The Gulf Migration

Routes of 38 Eastern Warblers," is an excerpt from Henry M. Stevenson's migration paper in the March, 1957, *Wilson Bulletin*.

Two chapters conclude with short bibliographies, and it is regrettable that this is the extent of the practice, particularly inasmuch as the text contains innumerable references to other authors by name and with date of publication. There is an index.

The plates are generally attractive, and the artist has made his warblers lifelike in proportions and actions. His choices of backgrounds are pleasing, and the North American species are usually depicted with not more than one or two species to a plate. Most warblers seem to be about three-quarters natural size, but the caption pages do not give any scale. Scientific names are lacking on the caption pages for the North American species but are present for the neotropical. A lack of liaison between text and plate is apparent when we read (p. 186) that the name, Palm Warbler, is a misnomer and then find (Plate 22) the individuals of that species superimposed upon the fronds of a palm.

The six-color offset process leaves much to be desired. Many plates appear to reproduce in paler tones than normal. Reproduction varies from copy to copy. I know of one volume in which the Blackburnian Warbler is hopelessly off color. In mine it is excellent. My Worm-eating Warbler (Plate 2) and Northern Waterthrush (Plate 23) have green backs which in no manner approximate the true colors of these species. The immature Black-throated Green Warbler (Plate 18) has a chestnut stripe on crown and back, and the male Yellowthroat (Plate 25) also has a chestnut crown which, while probably intended simply as highlights, have reproduced poorly. The male Prairie Warbler (Plate 21) is badly out of register in my copy. The publisher's comment (p. x) that Chapman's work has "inferior plates" will not sit well with those of us who are admirers of the artistry of Louis Agassiz Fuertes, including even his earlier works. Small in size, perhaps, but not inferior.

Careful editing would have called for a more standardized form in the individual accounts and the summaries which conclude them. Many write-ups give valuable descriptions of nesting habitat and breeding behavior. Some describe but a single type of habitat. Others ignore breeding altogether and are devoted to observations during migration. Egg measurements are given in only four summaries. Length of bird is omitted in one. Material is repeated in the summaries which also appear in the narrative. The useful breeding range maps do not always agree with the ranges given in the text. The map for the Black-throated Blue (p. 123) indicates that Cairn's Warbler breeds north to New York State; that for the Myrtle (p. 126) does not indicate that Myrtles breed south into Pennsylvania; that for the Louisiana Waterthrush (p. 199) does not recognize that this species breeds abundantly in Delaware and on the Eastern Shore of Maryland.

Careful editing would have called for a more standardized form in the individual accounts and the summaries which conclude them. Many write-ups give valuable Sprunt's use (p. 172) of the figure 10,225. Careful editing and proof-reading would have caught many of the errors of punctuation and such unnecessary mistakes as the use of the date 1955 on page 15, when the correct date is obviously 1957, and the inexcusable line transposition in the Eisenmann biographical sketch on page 340.

Its sub-title calls this "A Popular Account of the Wood Warblers." Instead, the final result is a hybrid between popular and technical. Griscom's proposed reclassification does not belong in a popular book. The account of John Bachman does not belong in either a popular or technical bird book when, according to the publisher, "our biggest task has been to keep the number of pages down to reasonable length." I would hazard the guess that the "meat" in this volume could have been condensed into one-quarter less page space than was used, and the space thus freed could have been utilized to excellent

advantage by adding information which would have made this a more truly definitive work. One of the reasons given for this publication (p. x) is that Bent's "Life Histories" is out of print. Yet (p. xi) we are told to consult Bent when further data are required! There would be less need to consult Bent (and Chapman) if the space in this volume had been used more judiciously.

In striving to be both popular and technical, the books falls short of its true potential in either category. If I seem unduly critical, it is because I thought this long-awaited book would be the new definitive warbler work. Instead, it has its place along with Chapman and Bent in my library and contributes much which they do not offer, but it does not supercede them.—PHILLIPS B. STREET.

VERTEBRATES OF THE UNITED STATES. By W. Frank Blair, Albert P. Blair, Pierce Brod-korb, Fred R. Cagle, and George A. Moore. McGraw-Hill Book Company, New York, 1957: 6¼ × 9½ in., ix + 819 pp., illus. \$12.00.

This important book is intended to replace the old familiar manuals of Pratt and Jordan as a basic text and reference "for courses in vertebrate classification, ecology, and natural history." This aim has been kept in mind when studying the book preparatory to review.

Since the names of the authors as listed above are in a different sequence from their contributions, it may be noted here that Frank Blair wrote the introduction and the section on mammals, Moore the fishes, Albert Blair the amphibians, Cagle the reptiles, and Brodkorb the birds. The introduction is a brief but well-written survey of the history, characters, classification, nomenclature, and North American distribution of the vertebrates. In the latter connection, I feel that it would have added much in value and relatively little in bulk (and gained additional purchasers for the book) had the northern limit not been set at the artificial border between Canada and the United States. I find that widening the scope of the book to include Canada and Alaska would have necessitated the addition of only 29 species of birds, less than 40 of mammals (authors disagree on species limits here), and *no* species of reptile or amphibian; I made no attempt to count the fishes.

By far the most valuable single contribution of the book to the current literature of the vertebrates is the section on fresh-water fishes by Moore. Keys and descriptions of the other groups are widely available, but Moore's chapter represents the only complete and up-to-date reference for the fishes. The phrase "up-to-date" is used advisedly; for example, *Notropis callitaenia* Bailey and Gibbs is in its proper place in the text although described as late as August, 1956.

Since *The Wilson Bulletin* is an ornithological journal, only the chapter on birds by Pierce Brodkorb will be reviewed in detail here. This is the only chapter of the book lacking a bibliography, but I have learned that one was prepared and somehow omitted during the course of printing. This unfortunate accident will undoubtedly be rectified in any future edition.

Perhaps it is because I am an ornithologist and can thus read the bird chapter more critically than I can the others, but I feel that the quality of this section is not up to the standard set by the rest of the book. Certainly the illustrations are inferior; they are fewer (key characters in the other groups are excellently illustrated) and in many cases are downright crude, contrasting strongly with those of the other chapters. The introductory section dealing with birds in general seems too brief, and is heavily weighted in favor of those aspects of anatomy which apparently interest Dr. Brodkorb most. Thus, of a total of nine introductory pages (½ illustration, ⅔ text), more than two full pages

are devoted to the classification of the loops of the small intestine, while the taxonomically important anatomy of the syrinx and its muscles is disposed of in four lines. A serious omission from the student's viewpoint is any discussion or illustration of the external features of a bird or the nomenclature of the wing feathers.

The most serious shortcoming of Brodkorb's work, and one which so irritated this reviewer as to blind him temporarily to the good features, is in the handling of classification and nomenclature. This purports to be that of the fourth edition of the American Ornithologists' Union Check-list, with supplements through 1956 (the last supplement issued). According to Brodkorb, "in the few cases in which the nomenclature of the manual differs, the A.O.U. name is supplied in a footnote." I have found no less than three regroupings at the family level, 11 changes at the generic level, 12 changes at the specific level, and a number of rearrangements of genera within a family. And I undoubtedly missed some. The question is *not* whether I, as a taxonomist, agree with the changes from A.O.U. usage introduced by Brodkorb. Some of these are widely accepted elsewhere; others appear to be first introduced into the literature here. On these matters, more later. But it cannot be emphasized too strongly that a college text is *not* the place to indulge in taxonomic innovations. Most of the intended users of this book will expect to be able to correlate this chapter with other bird literature in their possession, and will not be taxonomic ornithologists. It is unfair and confusing to these students to depart from what is generally regarded as the standard classification of North American birds. Even in those cases in which Brodkorb has added an explanatory footnote (and this was *not* done in every case of departure from A.O.U. nomenclature), space does not permit him to present anything like an adequate justification of the change from the viewpoint of the taxonomist. If Dr. Brodkorb feels strongly about some of these taxonomic matters (and his wording in several cases suggests that he does), he should have published papers presenting his views in accepted taxonomic fashion. As it is, he has imposed his own ideas (some of which will find little acceptance among taxonomists) upon a captive audience, few of whom will be competent to judge for themselves the merit of the changes.

As it is, Brodkorb has been quite inconsistent in his selection of changes (predominantly "lumpings"). At the generic level, for instance, he suppresses several widely-accepted genera but continues to maintain *Mareca*, *Spatula*, *Rhynchophanes*, *Chlorura*, etc. Some of the taxonomic changes suggested, and some of the diagnoses of families and genera, give evidence of a lack of familiarity on the part of the author with the birds of the rest of the world. Brodkorb states that the monotypic genus *Leucophox* cannot be maintained for the Snowy Egret, but merges it with *Florida* without a word to indicate how he believes *Egretta*, *Mesophox* or *Demigretta* fit in. The genus *Baeolophus* is unaccountably revived for the four A.O.U. species (reduced to three by Brodkorb, following Dixon) of crested titmice, with a generic diagnosis completely meaningless if the titmice of the world are considered. The "differences" cited between *Chamaea* and the "Timeliidae" [*sic*] do not hold; Brodkorb could not have compared *Chamaea* with *Chrysomma*. The swallow genera *Hirundo* and *Petrochelidon*, linked by intermediate Old World species and thus lumped by many authors, have been placed at opposite ends of the family by Brodkorb.

There are numerous errors of fact of various degrees of importance. The Northwestern Crow, stated by Brodkorb to be "*Corvus brachyrhynchos caurinus* Baird of A.O.U.," was raised to specific status in the 1945 Check-list supplement. All parrots are not hatched naked. The Poor-will is not the only goatsucker that lays unspotted eggs; the western race of Whip-poor-will sometimes does so. The nuptial plumage of the male Bobolink is acquired by a complete prenuptial molt, *not* by wearing off the tips of the female-like

winter plumage. The key to genera of Corvidae includes both *Xanthoura* and *Cyanocorax*, although both names apply to but a single U. S. species, the Green Jay.

As for the keys themselves, only actual use by students will determine their value. Making such keys is a difficult and thankless task, and Brodkorb has done, by and large, an excellent job in making his keys valid for birds in any adult plumage stage by concentrating on structural characters. This can be overdone, however, as in separating the two North American pipits by a hind toe and claw/tarsus ratio rather than by the immediately obvious difference in streaking on the crown (which is not even mentioned in the text). A number of Brodkorb's keys, in fact, remind me of the old story of the "two little morons" who worried for days about how to tell their respective horses apart, until they finally discovered that Blackie was an inch taller than Whitey!

Having had experience with steering students through ornithological keys, I noted a few characters which I can confidently predict as troublemakers. In the key to orders, the Psittaciformes are defined as possessing a cere, and so they do. But in the two North American species the cere is feathered, and it will be difficult to demonstrate to students that these parrots have "a membranous swollen covering of the base of the upper bill, through which the nostrils open" (glossary definition). In the key to families of the Charadriiformes, the student is asked whether his specimen has the anterior toes "fully webbed" or "with only basal webs or none." I sympathize with the instructor who must explain to a student why the Black Tern belongs with the former and the Avocet with the latter.

Brodkorb is guilty of occasional irritatingly authoritarian pronouncements. On p. 520, for instance; "To make the divisions of the Passeriformes the equivalent of the divisions in other orders, it would be necessary to reduce the 4 commonly recognized suborders to family status." This is an unwarranted exaggeration. Granted that several currently recognized families of Passeriformes are poorly defined and merge into one another, there are others which are decidedly more distinctive than some families recognized by most authorities (including Brodkorb) within such orders as Procellariiformes, Galliformes, and Charadriiformes.

A few errors of omission have been noted. The Spotted-breasted Oriole, European Goldfinch, and the eastern introduced colony of House Finch are not mentioned, although their status in our avifauna is similar to that of the two *Streptopelia* doves, which are included in the book. Some plumages are omitted; eclipse plumages of the ducks and winter plumages of some of the warblers, for example. The Dusky and Cape Sable Seaside sparrows, carried as full species in the A.O.U. Check-list, are not mentioned at all. Presumably Brodkorb lumps these with *Ammospiza maritima*, but the description for the latter would certainly puzzle a student with a specimen of *A. nigrescens* in hand.

Unquestionably the most valuable contribution Brodkorb has made is the series of modern summaries of the characters, particularly anatomical, of the orders and families. Minor faults can be found with some of the non-anatomical generalizations, but a real service has been done for students of ornithology by assembling this material in such convenient form. Many of the generic diagnoses are equally valuable, but suffer to some extent because of controversies as to generic scope in some groups. And occasionally the generic diagnoses depend too much on one another, resulting in chains of "Like —, but . . ." See especially the family Icteridae in this regard.

The book as a whole has a combined glossary at the end; this may be a slight inconvenience, but has probably saved space by avoiding duplication of definition which would occur with sectional glossaries. A spotcheck showed a few ornithological terms which should probably have been included in the glossary, but in general it appears quite thorough.

In summary, then, the book as a whole will undoubtedly prove to be an exceedingly useful text for students, and reference for vertebrate zoologists in general. The section on birds has some decided faults and weaknesses, and should be rather thoroughly revised for any future edition, but it contains much valuable material not readily available elsewhere.—KENNETH C. PARKES.

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