ORNITHOLOGICAL LITERATURE

STUDIES IN BIRD MIGRATION, BEING THE COLLECTED PAPERS OF H. CHR. C. MORTENSEN, 1856–1921. Edited by Poul Jespersen and Å. Vedel Tåning. Published by Dansk Ornithologisk Forening, Ejnar Munksgaard, Copenhagen, 1950: $10 \times 6\frac{1}{2}$ in., 272 pp., with 32 photos, 12 figures, and 10 maps. Paper. Dan. kr. 18.

This publication in English of the collected papers of H. Chr. C. Mortensen honors this pioneer of bird banding on the 50th anniversary of his first intensive banding efforts. Like many European scientists, he was a schoolmaster who devoted all his spare time to research. His innovations were numerous. He was the first to band birds in large numbers for the specific purpose of studying migration. His initial attempts in 1890, with zinc bands, were unsuccessful. He then designed aluminum bands and in 1899 marked 165 Starlings (*Sturnus vulgaris*). He stamped numbers and letters on the bands so that each banded bird could be identified with certainty if retaken. He experimented with color banding and tail clipping in order to study individual breeding birds. Realizing the necessity for publicity if his work was to succeed, he corresponded with ornithologists at home and abroad, seeking their cooperation.

Many of the facts which Mortensen obtained by close observation have long since become general knowledge. The important point is that his careful observations were published for the information of other ornithologists. He recorded the following observations on subjects which now are considered essential in serious field studies: the manner of feces disposal at the nest of a Starling (pp. 26–27); the return of marked Starlings (p. 27) and White Storks (*Ciconia ciconia*) (pp. 208–216) to the same breeding areas in subsequent years; pre-migration wandering of young Buzzards (*Buteo buteo*) (pp. 39 and 59) and Kites (*Milvus milvus*) (p. 59) in different directions from the breeding area; brood size in *Buteo buteo*, and the presence of weaker nestlings "always... in the broods" (p. 108); the importance of stork pellets for food analysis. He began a skin and skeleton collection for the study of plumage and age differences. He foresaw the future need for international laws protecting waterfowl (p. 173).

His observations led him to ask the following questions about migrants (p. 45): "Where do they come from and whither do they go? How do they know their way? How high in the air do they go? How many miles do they travel in an hour? What moves them to change their place? Do the young or the old first leave the district or do they accompany each other?" In order to learn more about the status of migrants he sent well-considered questionnaires to those who found his marked birds. He soon learned that storks and birds of prey brought him more returns than did passerine birds. Through data gathered on the direction of migration from Denmark, he was able to report on the winter home of certain species, notably the Greenwinged Teal (*Anas crecca*) and White Stork.

Any field worker who has tried to trap and band adult birds at their nests will be impressed by Mortensen's ingenuity in designing self-emptying traps for Starlings (pp. 74–79). Due to his knowledge of the habits of the Starling, he trapped 160 of them in one month.

Perhaps of equal value to the scientific contribution made by a man is the philosophy which motivates him. It is fitting, therefore, in reviewing a memorial volume honoring this pioneer ornithologist, to quote two passages from him. "Every human being has the need of spiritual revival through communion with the unfalsified, Wild Nature!" (p. 228). "And when this puzzle is eventually solved, new ones will arise and stimulate the enthusiasm of those who study the manifold ways of life and seek to understand them. There is something very satisfying about getting an answer from Nature to one's questioning—if one has asked in the right way!" (p. 65).

The anthropomorphism appearing at times in Mortensen's papers is now passé, but this can be overlooked by the reader who considers the date of writing and recalls that this style has not yet completely disappeared from our own ornithological literature. The papers are primarily of historical interest—so great has been the progress in banding with its concomitant contribution to our knowledge of migration! At the same time, Mortensen's thoroughness and persistence should give encouragement to those now exploring new aspects of bird study. Students of life histories, banding and related problems will find many pertinent tips in his papers.

It is unfortunate that the translation was not into idiomatic English.—Andrew J. Berger.

BRITISH WADERS IN THEIR HAUNTS. By S. Bayliss Smith. Illustrated with 53 photographs by the author and 26 by other photographers, with three plates of waders in flight drawn by Basil Laker. G. Bell & Sons, Ltd., London, England, 1950: $7\frac{1}{4} \times 9\frac{5}{8}$ in., ix + 162 pp. \$5.25. Obtainable through British Book Centre, 122 East 55th Street, New York 22, New York.

The photographic illustrations of this book are extraordinarily good. Some of them are clear, well lighted portraits of individual birds at rest; others show pairs at or near the nest; others are of close-knit flocks feeding, preening or dozing. Very few show the birds straddling or settling over their eggs, and not one is of a parent bird standing near a tethered young one. As the author states in his foreword, "nine out of ten photographs of birds are normally taken at the nest." The trouble with so many bird-at-nest photographs is that they do not present the bird in an average attitude. In the worst of them the brooding bird is panting from the heat because the sheltering vegetation has been cut away. In many of them the feet and lower part of the body are hidden by the nest. In even the most pleasing of them the bird has an instantly recognizable broodiness which is a good deal the same no matter what the species. In this book the photographs represent almost every activity of the adult shorebird. Especially vivid and interesting is F. P. J. Kooymans' study of two Ruffs (Philomachus pugnax) on their tilting round in the Dutch polders (dike-protected areas of low land). The birds have struck quite different poses-one standing high, the other crouching-but the raising of neckplumage and the sham parrying and thrusting have obviously begun. The author's own study of a mass of shorebirds edging discreetly away from a Black-backed Gull (Larus marinus) is excellent in composition and inexplicably humorous. J. E. Sluiters' Wood Sandpiper (Tringa glareola) standing in shallow water (p. 103) is a well nigh perfect study of a wader and its distorted reflections. Experts in field identification will revel in such group photographs as that on page 117. The species have been carefully identified by the author, but no good fieldstudent can look at the picture without identifying the birds all over again—for himself.

The photographs are of considerable taxonomic value. Studying them, one senses how colorpatterns and body attitudes reveal degrees of relationship. It is highly doubtful that any ornithologist could, on examining the photograph by J. V. Vijverberg on page 104, without knowing where it had been taken, tell whether the bird was a Green Sandpiper (*Tringa ocrophus*) or a Solitary (*T. solitaria*). There are those, indeed, who now believe that these two birds actually belong to the same species. The similarity of the Common Sandpiper (*Actitis hypoleucos*) to the Spotted Sandpiper (*A. macularia*) is instantly revealed in Stanton Whitaker's excellent study of the former (p. 102). Subtle differences are revealed through a comparison of Mr. Whitaker's photograph of the Common Curlew (*Numenius arquata*) on p. 65 and T. M. Fowler's beautiful study of the Whimbrel (*N. phaeopus*) on p. 66.

The text explains in detail how Mr. Smith obtained his remarkable pictures. Placing the firmly built hide (blind) securely in an advantageous place, he remained inside it until the incoming tide drove the unsuspecting birds toward him and his camera. Some of his best photographs were made from a hide which had been in place so long that it was an accepted part of the shorebirds' habitat. He found that the size, shape and color of the hide did not

matter so much in early autumn as later in the year. He regards the wind as the greatest enemy of the estuary photographer. He recommends a reflex camera and considers a long focus lens "an absolute necessity." He likes to work in strong sunlight. Intrigued as he is by recording the "intense vivacity" of high-stepping Redshanks (*Tringa erythropus*), scurrying Dunlins (*Erolia alpina*) and restless Oystercatchers (*Haematopus ostralegus*), he seeks conditions which will make possible the snapping of scene after scene with exceedingly brief exposures.

An interesting and valuable part of the book is the brief historical account of mankind's study of the shorebirds. In the early days so little was known about the several plumages of certain species that odd, even funny, names came into wide use. There were, for example, Red, Cinereous, Lesser and Cambridge Godwits; Red-legged, Ash-coloured, Brown, Greenwich and Aberdeen Sandpipers; Purres; Gambets; and so on. Careful bird students may comment that we are not very thoroughly enlightened, even today, about certain plumages and plumage-sequences; but at least we know much more than we did a century ago about the year-round distribution of the shorebirds. Within the memory of most persons who read this review the nests of certain shorebirds were for the first time found. At least two species have kept their nesting-grounds a secret—the Sharp-tailed Sandpiper (*Erolia acuminata*) and the Gray-rumped Sandpiper or Tattler (*Heteroscelus brevipes*). The author's reference to the discovery of the eggs of the Curlew Sandpiper (*Erolia ferruginea*) in Alaska must be a mistake. This species has been recorded several times along the coasts of Alaska and British Columbia, and it has been encountered in summer on Bering Island in the Komandorski group, but its eggs have never been found in Alaska.

The book closes with three useful plates showing shorebirds in flight, and a supplement in which the length, plumage and diagnostic characters, call notes, displays, food, distribution, movements, habitat out of nesting season, habitat in nesting season, nest, eggs, and incubation of all British shorebirds are briefly discussed.—George Miksch Sutton.

AUDUBON'S BIRDS OF AMERICA. Introduction and Descriptive Captions by Ludlow Griscom. Popular Edition. The Macmillan Company, New York, 1950: $5\frac{1}{2} \times 8$ in., 320 pp., 288 numbered colored plates. \$2.95.

This is another in the series of ever smaller and less expensive presentations of Audubon's Birds of America brought out by the Macmillan Company. The plates chosen for reproduction have been decreased to 288. The reduction in number, as is pointed out in the introduction, has been accomplished by the elimination of erroneously recorded and "lost" species, as well as some others which are obscure or seldom seen. This is in line with the popular aim of the book. An innovation in this series is the arrangement in current taxonomic order of the species included.

Griscom's introduction provides a convenient thumbnail sketch of Audubon's life and work. This will prove new, however, only to readers with the barest knowledge of the subject. The introduction serves mainly as a vehicle for a 7-page discussion of conservation and ecological principles in general. Notwithstanding the fact that this is aimed at the lay reader, there are still a few statements which will not go uncontested by ornithologists. The assertion on page 23, for example, "By 1920 every North American bird was protected ..." is of course untrue. And on page 27, "The balance of nature in a natural community is such that the community continues forever. This is accomplished by keeping the numbers of each living creature in a proper proportion," is in need of clarification.

As regards the pictures, which are the primary reason for the book's existence, it is unfortunate that most of the reproductions range from mediocre to extremely poor. A definite loss of quality is to be expected with such great reduction, yet this does not excuse the complete lack of color fidelity and the poor register of many of the plates. On the publishers' jacket appears the somewhat arbitrary statement, "John James Audubon was probably the greatest of American naturalists and undoubtedly the greatest of all bird painters." Let us hope that this singular praise does not have to be substantiated by the present reproduction of his work. "The . . . work," according to the introduction, "is designed to bring a selection of Audubon's paintings within the reach of all, so that everyone, even high school students, can get a glimpse of his decorative artistry and genius." It will be unfortunate if "even high school students" come to believe, thereby, that a Wilson's Plover (p. 144) is yellow, a dowitcher (p. 163), bright pink, or a Chuck-will's-widow (p. 215), a hue best described as chartreuse to mention only a few.

The key numbers have been omitted in several cases where two or more species are shown on a single plate, so that the reader has no way of matching the birds illustrated with the numbers in the accompanying captions. In one instance (Bank and Violet-green Swallows, p. 236), numbers 1 and 2 both refer to Bank Swallows in the plate, while number 2 in the caption refers to the other species.

In all fairness it must be added that a few of the plates are quite creditable. Perhaps some readers will be stimulated by this book to learn more of an interesting and gifted historic figure.—Robert M. Mengel.

WILDFOWLING IN THE MISSISSIPPI VALLEY. By Eugene V. Connett, Editor. D. Van Nostrand Co. New York, 1949: 10¹/₄ × 7¹/₂ in., xvi + 387 pp., 87 half-tones. \$12.00.

This book is a collection of articles, essays, and stories about waterfowl along the Mississippi Flyway. Appropriately, it opens with a broad discussion of this flyway by Mr. Frederick C. Lincoln, who takes the reader from the Arctic Ocean to the Gulf of México. In discussing the decline of waterfowl, he points out that "the take of birds by the hunters of this flyway in the 1947 season had increased by nine percent, although the number of hunters had increased only two percent" (page 18). This greater efficiency of gunners in the harvest is one of the most vexing problems of our time.

A chapter, *The Breeding Grounds of the Mississippi Flyway*, by Bertram W. Cartwright is disappointing because of the way it overlaps Mr. Lincoln's discussion. Then again, here was a wonderful opportunity to present a clear picture of the breeding grounds to sportsmen in the light of new information: a challenge Mr. Cartwright did not accept.

Following these 2 chapters on the Flyway and its breeding grounds are 16 chapters on wildfowling, one each devoted to 3 Canadian Provinces and 13 states in the Flyway. Each chapter is written by a different local sporting authority, and there is a wide range of value in these accounts, as might be expected from an assortment of authors ranging from duck camp operators to professional naturalists. At least 2 chapters are valuable contributions to our wildfowl literature. Jack W. Musgrove gives us a detailed story of gunning in the old days, as this was recorded from old-timers.

The chapter on wildfowling in Missouri, by Leonard Hall, is an earnest, careful, clear statement on the waterfowl situation and a sportsman's reaction to current conditions. Here the non-shooting naturalist may inspect the temper and judgement of the gunner who takes sportsmanship to be an important part of his life and character.

The chapter on *Research on Wildfowl*, by Kenneth H. Smith, describes the work of the Illinois Natural History Survey, whose activities have had such a profound influence on waterfowl policy and management in the Mississippi Valley. It is pleasing, in this day and age when so much stress is placed on the bag, to see the last 2 chapters devoted to the arts and sciences of wildfowling, such as duck calling and decoy making. The duck hunter with a duck call, like the fisherman, has a good time practicing, even if the bag is light. Although it is something which cannot be measured, those who have made a study of wildfowling seem to agree that the man who is a careful, conservative hunter is the same man who is skilled in the crafts of his sport, the man who makes his own equipment and who calls his own birds.—Albert Hochbaum.

50TH CHRISTMAS BIRD COUNT. John W. Aldrich, Editor. Published by the National Audubon Society in collaboration with the U. S. Fish and Wildlife Service. April issue of Audubon Field Notes, vol. 4, 1950: 144 pp. (43–188), 8 half tones, 2 maps, paper cover. \$1.00. A special reprint of the section on "instructions for making bird population studies" may be obtained for fifteen cents from the National Audubon Society, 1000 Fifth Avenue, New York, New York.

On the fiftieth aniversary of the Christmas Bird Count, which was originated by Frank Chapman as a substitute for the "Christmas Hunt", appears this special issue of *Audubon Field Notes*. The issue contains not only the result of the most recent counts but also the following: a history of the Christmas Count; a summary by Chandler S. Robbins of the largest counts of individual birds; instructions for making such bird population studies as the Christmas Count, the Winter Population Study, and the Breeding-bird Census; and a preliminary bibliography of articles based on the Christmas Counts. Thus, the issue is a reference work which should be kept handy by all those interested in quantitative bird studies.

The Christmas Count has been a tremendous success if for no other reason than that it has stimulated interest in birds. Only 27 persons took part in the first Count, while nearly five thousand participated in 1949. It would be impossible to measure the interest and enthusiasm generated during these annual counts, or to estimate the number of bird clubs which have come into being as a result of them. One observer, Charles H. Rogers, has participated in all fifty counts and Harry B. McConnell in all but one. These are indeed remarkable records, and there are many other individuals who have taken part over long periods.

The scientific value of the great mass of data accumulated in the 50-year span has not been fully determined. Only a few workers, notably Leonard Wing, have attempted large scale analyses. Some attempts to make use of the data have been disappointing because of the large number of variables encountered. For example, let us assume that more Mourning Doves were reported from certain localities in Ohio in 1949, a warm winter, than were reported from the same localities in 1940, a severe winter. At first glance the significance of the figures would seem to be obvious---that there were, indeed, more Mourning Doves in certain parts of Ohio in the mild winter of 1949-50 than in the severe winter of 1939-40. But were the samples, for either year, large enough? Did large concentrations of doves unduly influence the totals? Was coverage of the areas the same in the two years, or was it much more complete in 1949 than in 1940? Was more dove habitat covered in 1949 than in 1940? And so on. Where data can be shown to be truly comparable, and where other data (banding, censuses) can be correlated, confidence may be placed in the Christmas Counts. All by themselves the Counts probably have little scientific value. Results of recent years, where percentage of habitat has been indicated and where coverage has been uniform and complete, probably will prove to be much more usable than the indiscriminate listings of earlier years. One has the feeling that there is more gold buried in the mass of data than has yet been uncovered.-Eugene P. Odum.

THE SAGA OF THE WATERFOWL. By Martin Bovey. The Wildlife Management Institute, Washington, D. C., $1949: 8 \times 10^{\frac{1}{2}}$ in., xiv + 140 pp., 3 figs., 71 unnumbered plates. \$5.00.

This attractive volume follows a number of recent books ("This Plundered Planet," Osborne; "Road to Survival," Vogt; "North American Waterfowl," Day) which have sought to point out the importance and the extreme urgency of conserving our natural resources. Unlike the first two mentioned, it is concerned primarily with waterfowl; but that all are intimately related is evident. The physical factors upon which the conservation of waterfowl is based are of far-reaching importance to mankind as a whole. Bovey's approach, unlike that of the other authors mentioned, is mainly pictorial. If the old proverb "one picture is worth ten thousand words" has validity, this becomes a book of considerable content and importance.

This, then, is a picture book. After a brief foreword by the author, a list of illustrations and credits, and three attractive scratch-board vignettes by F. L. Jaques, the book consists mainly of photographs of wildfowl, and things pertaining to the history, destruction, and conservation of wildfowl. These are accompanied by a brief, running commentary. The arrangement is such as to present a graphic, fast-moving history of the wilderness that was, of the invasion of this continent by man, of the inevitable changes which ensued, and of the disastrous decrease of the ducks and geese. Then come the beginnings of the conservation movement, a period of hope, and a protrayal of the perilous situation which still exists today.

The author has done a good job. The commentary has an attractive, rhythmic quality, and the photographs, largely by Bovey or his sons, are excellent. A number of them are superb and go a long way towards achieving the effect of "ten thousand words." The book is competently printed on paper of moderate quality. Any changes which might be made would be, I think, matters of artistic opinion. I can find little requiring criticism. The price of five dollars may be a little high for a book of this size and type.

Many students of nature will wish to possess this book simply for the beauty of its contents. All wildfowlers who give sincere consideration to the future of their sport should have it, and it is to be hoped that they will circulate it widely among their less thoughtful friends. --Robert M. Mengel.

THE WILSON ORNITHOLOGICAL CLUB LIBRARY

The following gifts have been recently received. From:

William H. Behle—8 reprints G. Reeves Butchart—1 bulletin Clarence Cottam—6 bulletins Eugene Eisenmann—1 reprint Adrian C. Fox—2 books Karl W. Haller—1 book Leon Kelso—2 pamphlets Emerson Kemsies—2 reprints Charles W. Kossack—1 reprint Ernst Mayr—3 reprints

Urban C. Nelson—3 reprints Margaret M. Nice—6 books, 24 reprints Fred M. Packard—1 book Kenneth C. Parkes—3 reprints Homer W. Phillips—2 reprints Richard S. Phillips—4 reprints J. Van Tyne—5 reprints F. A. Ward—2 magazines James B. Young—1 reprint F. R. Zimmerman—1 reprint