

ORNITHOLOGICAL LITERATURE

A GUIDE TO BIRD WATCHING. By Joseph J. Hickey, Illustrated by Francis Lee Jaques. Oxford University Press, New York, 1943: $5\frac{1}{2} \times 8\frac{3}{8}$ in., xiv + 262 pp. \$3.50.

The keynote of this exciting book is given in the first two sentences of the preface: "Bird watching embraces individual enterprise on the one hand, collective effort on the other. Above all else, it is marked by a ready exchange of experience, by a high regard for truth, and by a conviction that wild birds express the most spectacular development of nature."

For the first time we have a real guide to the study of the live bird in its environment, a guide written with freshness and humor, and teeming with problems. The first paragraphs of Chapter One, "How to Begin Bird Study," are masterpieces in depicting the sheer delight of bird study—its drama, the reward of discovery. "Each species offers a new glimpse of creation, each carries its own reward." And no one should miss the fun in the section on bird names, or the excellent trick for avoiding confusion by "privately calling" one water-thrush the "white Louisiana," the other the "yellow northern."

The five chief chapters are entitled: The Lure of Migration Watching; Adventures in Bird Counting; Explorations in Bird Distribution; The Romance of Bird Banding; and The Art of Bird Watching. Each subject is treated adequately from the standpoint of the field student; a sound theoretical basis is laid, and opportunities are pointed out for both individual and cooperative study. In Chapter Two the author's examination of the recoveries of 61 fledgling Robins in subsequent breeding season shows a definite tendency towards return to the vicinity of the birth place. In Chapter Three the disposition to under-estimate the number of small birds in a flock and to over-estimate the number of large birds is mentioned. Thrilling tales are given of counts of bird roosts of many species and of migrating hawks. Changes in local bird life are discussed here while changes over the continent, due to the white man, are given in a striking table (p. 177).

One of the author's special fields of interest is that of "ecological distribution." Here there are a number of original tables: 19, "Some foraging areas of birds in the nesting season," based on over 100 pairs of 14 species; 20, showing the lowest singing perches accepted by 17 species, suggesting the intriguing problem of specific height of such perches; and 18, a comparison of Nutcracker invasions in Europe and Crossbill in Massachusetts, showing a year for year correspondence, although due on the one hand to failure of cedar nuts in Siberia, and on the other to pine-cone seeds in North America. Various factors in habitat selection are discussed, and an excellent treatment of the subject of succession given.

The "inauguration of systematic bird banding about 1920" was an even greater revolution in bird study than "the substitution of field glasses for the collector's gun, around 1900." Bird banding can be divided into three stages: the ringing of fledglings, the trapping of adults, and color banding. A survey of the results of the different methods is given, and excellent suggestions offered for making the most of the unique opportunity of banding, both by individuals and by cooperative effort. The author's organization of color banding of young Herring Gulls according to year and birth place is a fine example of collective action.

In the last chapter the author tells us: "The great mysteries of bird life still crowd our very doorsteps. We are still living in an age of wonder." The table on page 168—"Handbook Information Still Wanted on North American Birds"—is a vivid illustration of how little we yet know. The sections on "The student and his bird club," "Co-operative bird watching; research partnerships; organized inquiries" all emphasize the friendly contacts that are so characteristic of most students of birds. Excellent advice is given on publishing observations; "wordiness and insufficient data" are two of the commonest weaknesses, and a timely note

is added: "Above all, do not pad the bibliography." Finally in "Bird Watching and America" there is a straightforward statement of the responsibility of the bird watcher for the preservation of birds.

The 30 tables are well chosen and invitingly labeled "Some Examples and Results of Bird Watching." Five important appendices are included. The first is a unique contribution illustrated by sketches of models made by Charles A. Urner of shore bird tracks, as well as a detailed key to such tracks. A table summarizing the results of breeding bird censuses in North America arranged according to habitats is given in Appendix B. An exceedingly suggestive and detailed "Outline for a Life-History Study" constitutes one of the notable contributions of the book. Thirty-two pages are devoted to an annotated list of bird books in fourteen categories, and ten pages to a regional list of bird clubs in the United States and Canada; both of these sections will be of great value to the beginner in bird watching. A good index completes the volume. And in our enthusiasm over the text we must not forget Mr. Jaques' charming and spirited sketches.

Mr. Hickey has reached the goal he set himself: "It is the chief purpose of this book to show how bird watching can be made to last a lifetime, and to yield to the very end the same full measure of enjoyment."—Margaret M. Nice.

STUDIES IN THE LIFE HISTORY OF THE SONG SPARROW, II: THE BEHAVIOR OF THE SONG SPARROW AND OTHER PASSERINES. By Margaret Morse Nice. Trans. Linn. Soc. of New York, 6, Sept. 1943: viii + 329 pp., 1 pl. and 6 text figs. \$2.00 on direct order from The Linn. Soc. of New York, % Amer. Mus. Nat. Hist., Central Park West at 79th St., New York, 24, N. Y.

The second part of Mrs. Nice's "Studies in the Life History of the Song Sparrow" is a work of much wider interest and value than the first part, admirable as that one is. It is, as the author says in her foreword, "primarily a treatise on the behavior of passerine birds with the Song Sparrow as the chief example," and its initial chapter is a general discussion of bird behavior in which the approach to the particular species, *Melospiza melodia*, is outlined, and the main points of view adhered to in the analysis of the subsequent material are established. Mrs. Nice is convinced of the general accuracy and trustworthiness of Konrad Lorenz's theories and interpretations of avian activity, and arranges her data and presents her conclusions largely within the limits imposed by this conviction. If any general criticism may be made of her work it must be of the soundness of her judgment in so completely accepting Lorenz as a guide. Yet, who has so far appeared on the ornithological horizon to offer more suggestive and stimulating general concepts of bird behavior, or ones that help to clarify so many individual parts of the total picture? To the data Mrs. Nice presents on the Song Sparrow no one can take exception. No one else knows as much about the bird as she does. A large part of the material is new to ornithological literature and therefore cannot be critically compared with previous information, but there is no reason to doubt its validity. Seven years of intensive, meticulous and intelligent field and aviary studies have yielded a rich harvest of detailed, individualized, observational data both quantitatively and qualitatively incomparably in advance of what we have for any other bird species. Added to this we have in the present book a great number of interpretations and suggestive comments that are in themselves a digest of a vast and not always readily assimilable literature. In other words, Mrs. Nice's book presents more information than we have ever had about any single species, more thoroughly analyzed, and more completely integrated with current knowledge and modern concepts of animal behavior. To the serious student it will long be a basic work.

It is impossible in a short review to do more than list the main topics discussed. The book is so full of "meat" that the most that can be done here is to point out the wealth of material presented and to hope the interested readers of this notice will avail themselves of this new source of data and digest of ideas. The book is divided into 22 chapters and 5 appendices. The first chapter is a

general discussion of bird behavior, as already remarked, and treats of the pertinent observations by other students of the subject, the status of birds in comparison with other animals, the distinction between innate and learned behavior, and the Lorenzian concepts of releasers, signals, and the role of the companion. Chapter II describes the development of the young Song Sparrow in detail; chapter III takes up the discussion of the activities of the young bird, while the fourth chapter attempts to distinguish between those elements in its activities which are innate and those that are learned. The next chapter is a digression from the particular species to a comparative survey of the course of development in passerine birds generally. In the sixth chapter we return to the Song Sparrow and are given an account of the young bird after it leaves its parents, involving such topics as the postjuvinal molt, fall migration, the premature appearance of breeding behavior. The title of this chapter "The Young After Independence" might well have been altered to read either "The Young Bird After Dependence" or "The Young Bird After Achieving Independence," but this is a small matter that will not mislead the reader of the book. Subsequent chapter headings are, Song Sparrow Society in Fall and Winter (involving social integration, dominance); Awakening and Roosting; The Song of the Adult Male; Song in Female Birds; Development, Inheritance, and Function of Song; The Male and His Territory; The Function of Territory; The Male and His Mate; Relations of the Pair to Each Other and Their Neighbors; the Problem of Pair Formation; The Nest; The Eggs; Care of the Young; Defense of the Young; Enemy Recognition; and Innate and Learned Behavior in the Adult. Each chapter is divided into numerous sections, and each has a convenient summary. As an example of the detailed nature of the presentation we may transcribe from the table of contents, the arrangement of material in one of the chapters:

Chapter XI. Development, Inheritance and Function of Song.

- A. The Five Stages of Development of Song Sparrow Song
 - 1. Observations on Wild Birds
 - a. The progress of seven residents banded in the nest
 - b. Song development in some other Song Sparrows
 - c. Territory situations and song in juvenile birds
 - 2. Development of Song in the Hand-raised Song Sparrows
- B. Inheritance of Song in the Song Sparrow
 - 1. Do Song Sparrows Sing Like Their Fathers and Grandfathers?
 - 2. How Much Do Song Sparrows Imitate Each Other?
 - 3. The Case of the Hand-raised Birds
- C. Juvenile Songs of Other Species
 - 1. The Age at Which Young Birds Start to Sing
 - 2. The Character of the Song of Young Birds
- D. Inheritance and Imitation in Other Species
- E. The Evolutionary Trend
- F. A Definition of Song
- G. Function of Song in the Song Sparrow
- H. Some Theories as to the Function of Song in Birds
 - 1. Early Theories
 - 2. Advertising Song
 - 3. Song as a Signal
 - 4. Song as an Emotional Outlet
- I. The Function of Song in Birds
- J. Summary

Where in the literature of ornithology have we ever had such material so carefully assembled and so critically appraised and integrated? And, be it remembered, this is but one out of some twenty-two chapters! Each chapter would make a notable paper in itself and each could stand elaboration. As a matter of fact the one main trouble with the book is that it is too condensed. One tires of telegraphic terseness and wishes for a bit of conversational discourse.

The five appendices are concerned with the following topics: Chief Vocalizations of the Song Sparrow; Dominance, Singing, and the Challenge (Puff-Sing-Wave Posture) in Hand-Raised Birds; Behavior Upon the First Arrival of Females; Some Samples of Coition in 1929; and List of Orders and Passerine Families in which Distraction Display (Injury Feigning) has been Reported.

A bibliography and two indices, one to subjects, and one to species, complete this modestly issued but most significant book. Its author and the Linnaean Society are to be congratulated on the publication of the most searching study yet made of any wild bird.—Herbert Friedmann.

THE LIFE OF THE ROBIN. By David Lack. H. F. and G. Witherby Ltd., London, 1943: $4\frac{1}{4} \times 6\frac{3}{4}$ in., 200 pp., 6 pls., 2 text figs. 7s 6d.

No one should make the mistake of thinking that the author of this very attractive and readable little book has been forced to sacrifice clarity or scientific precision for the sake of attracting and holding popular interest. Laymen with any taste for natural history will find the book delightful and absorbing reading; on the other hand, ornithologists will immediately recognize it as a wholly dependable scientific treatise. Lack's first reports on his work on the English Robin (in the Proceedings of the Zoological Society of London, *The Ibis*, and *British Birds*) brought high praise from scientific reviewers, but those serials are not readily available to many American students. Fortunately this book provides the student with an inexpensive and amazingly complete summary of the Robin study.

Especially valuable are the chapters on song, fighting, territory, and age. The discussion of song and its function effectually disposes not only of the popular notion that the Robin sings because it is "happy" but also of the more scientifically respectable belief that the male Robin sings to please the female. Warning to rivals is, Lack decides, the principal use of the Robin's song. The male sings only on his territory, where his song advertises his presence and warns away intruders, usually obviating the necessity of an actual fight. When it does come to a fight the male on his own territory is normally victorious. As Lack puts it, victory "goes not to the strong but to the righteous, the righteous, of course, being the owner of property."

The hold of the Robin on the English people is vividly shown by a wealth of well-chosen quotations taken from an extraordinarily wide range of sources. Some of the quotations illustrate quaint misconceptions, but others give evidence of rather shrewd observation of biological phenomena several centuries ago.

In refreshing contrast to many recent popular bird books, this one is well documented. By placing most of the references, grouped according to the chapters to which they refer, in an appendix, the author avoids distracting the reader with a multitude of footnotes and yet provides the serious student with clues to the author's scientific sources.

Lack's experience should provide inspiration to any ambitious student of birds and their habits. When Lack began his investigation the English Robin was considered the best known bird of that bird-minded country, but four years of study by simple techniques, such as color banding, resulted in the discovery of a number of new and important facts and generalizations. A similarly thorough study of our even more common American Robin still remains to be done.—J. Van Tyne.

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Erratum

A printer's error in the September *Bulletin* made the first Sutton title on page 206 of the Bibliography section quite unintelligible. The correct reference is given in the same section (p. 255) of the present issue.

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- See also *Food and Feeding Habits*: Leopold.

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