

ORNITHOLOGICAL LITERATURE

FLEAS, FLUKES AND CUCKOOS . . . A STUDY OF BIRD PARASITES. By Miriam Rothschild and Theresa Clay. (The New Naturalist series.) Collins, London, 1952, $5\frac{3}{4} \times 8\frac{1}{2}$ in., xiv + 304 pp., 40 pls., 5 numbered and many unnumbered text figs. 21 s. (\$2.94).

Behind a rather enigmatic title we find here a work which not only answers an urgent need for the average ornithologist, but does so in a most entertaining fashion. The field of bird parasitology has but a handful of specialists; yet it is one to which many are in a position to contribute, if only their interest is aroused by more readily obtainable basic information. Though the authors may have tried to crowd too much within the space of one small volume, they have done an admirable job, supporting their fresh popular account with plenty of sound scientific fact, and abundant suggestion for work to be done. Who would not be impressed by the mite adapted for life in the white areas of a nightjar's wings, or by the quill-louse known only from the remiges of a curlew! But this is no rambling series of parasitological oddities. The bird, with its parasites, is pictured as a little world, presenting all the problems of adaptation, competition, and evolutionary convergence and divergence found elsewhere.

The first part has brief and stimulating discussions of some of the problems of parasitism in general. Then follows what is to me the best section, closely comparing the bird-lice (Mallophaga) with the bird-fleas, groups upon which the junior and senior authors are respectively authorities. The Mallophaga are seen as an ancient, closely adapted, and much diversified group; the fleas (so far as birds are concerned) as a recent one, small in number of species and still imperfectly adjusted. In looking at the problems of the two groups side by side, we gain a much greater feeling of familiarity with both. The remainder of the book is a condensed survey of all the other major groups of bird parasites, including birds themselves, with consideration of typical life-histories and of the complex faunas of bird nests. Only in a few small groups could any attempt be made even to list the British species; but some sort of skeleton classification is usually presented, and the reader would find some help in starting identification.

Ornithologists will view with mingled feelings the recurring comments on parasites as indicators of avian relationships. There is in most cases remarkable confirmation of accepted systems. But attention is called, for example, to suggestions that the ostriches and rheas must after all be closely related, and that the flamingos do in fact belong with the anseriforms; and to such absurdities as linking (if we consider Mallophaga alone) the hawks, owls, and cuckoos. The authors take a fair-minded stand on the whole matter, urging the ornithologist to "accept the evidence from this source at least as a clue to relationship," while themselves pointing out some pitfalls threatening the parasitologist.

There are some typographical errors, one or two of which involve references to plates or pages and prove a trifle annoying. The excellent plates, many of them photomicrographs, will prove helpful in many ways. The indexing seems adequate, though in some ways unnecessarily complicated. Readers inspired to extend their studies of any group will find the fourteen-page bibliographical appendix extremely useful. It gives every evidence of being critically and expertly selected.

Books thus aimed at bringing together different fields of specialization are all too few. Though dealing specifically with the British fauna, this work outlines broader principles that are just as applicable elsewhere. I hope it is made readily available in

this country, to find its way to the shelf of every bird student interested in broadening his point of view.—William A. Lunk.

BIRDS AS INDIVIDUALS, By Len Howard. Collins, London, 1952:223 pp., 32 plates. 10s. 6d. (\$1.47).

Miss Howard is an English musician and amateur ornithologist who has succeeded, through extraordinary patience and tolerance, in overcoming completely the normal fear of humans in the small passerine birds around her Sussex cottage. Not only do birds come fearlessly to her hand while out-of-doors, but they also have complete freedom of the house; some even roost in the bedroom with the author. She wisely lists the disadvantages as well as the pleasures of such a living arrangement at the start of the book. Probably no other writer has ever been so closely acquainted with so many unconfined wild birds, and Miss Howard's observations and conclusions will be of interest to all students of avian behavior.

The book is divided into two sections. The first section, of 150 pages, is entitled "Bird Behavior." In this portion the author narrates her experiences with birds of her neighborhood, particularly Great Tits (*Parus major*) and Blackbirds (*Turdus merula*). This makes pleasant reading and includes many interesting and important notes on the great differences in behavior shown by individuals within a species. One such note tells of a Great Tit which, after being seriously injured and defeated in combat with another male, recovered his territory from the erstwhile victor by improvising highly elaborate bluff and threat displays. Another is the account of a Blackbird which always used an oak leaf held in his beak as an aid in courtship and territorial activity. Observations of this sort illustrate well the intraspecific plasticity which may lead to the evolution of new and striking behavior patterns.

The first section is concluded with a chapter entitled "The Mind of a Bird" which is probably the most controversial part of the book. In this chapter the author criticizes modern behavior theory for not attributing a greater and more human degree of intelligence and emotion to birds. Miss Howard makes a good case for the intelligence of some of the birds with which she is intimately acquainted, but whether or not some of the activities she describes should be attributed to reasoning or human-like emotions is largely a matter of opinion. No ornithologist would deny that birds often seem closely attached to their mates or young ("love"), or are aggressive toward rivals ("jealousy"), etc., but it is certainly debatable that birds feel such emotions in a way similar to humans. The reader may decide for himself whether Miss Howard is correct in taking the affirmative. Beyond this, probably few biologists will agree with her proposal that birds have some system of thought transference or mental telepathy, despite the claims of parapsychologists.

The second and shorter section of the book is an analysis of technique in bird song, written primarily from the standpoint of a musician. Miss Howard's perceptive discussion will be enjoyed by American readers even though they may be unfamiliar with the songs of the species described, and the author's deep appreciation and feeling for music has moved her to some charming descriptive passages. Miss Howard is consciously anthropomorphic in some of her interpretations, but, as before, she offers reasons for her opinions.

The book is written in a clear and simple manner, but the style is marred by the

rather frequent use of comma splices and other unfortunate constructions which more rigorous editing could have eliminated. Only vernacular names of birds are used, and these are of the British *Handbook*. Julian Huxley has contributed a brief foreword, and Eric Hosking has supplied excellent high-speed photographs illustrating most of the species discussed.—Thomas R. Howell.

THE GREENSHANK. By Desmond Nethersole-Thompson. Collins, St. James's Place, London, 1951: $5\frac{1}{4} \times 7\frac{1}{16}$ in., 244 pp., with four color photographs, 42 black-and-white photographs, and 12 maps and diagrams. 15s (\$2.10).

"The Greenshank" is the twenty-second volume to be published in The New Naturalist series. As stated by the publisher the aim of this series "is to interest the general reader in the wild life of Britain by recapturing the inquiring spirit of the old naturalists. The Editors believe that the natural pride of the British public in their native fauna and flora, to which must be added concern for their conservation, is best fostered by maintaining a high standard of accuracy combined with clarity of exposition in presenting the results of modern scientific research." The success of the earlier volumes is evidence of the wisdom of this editorial policy. The Collins Press is to be commended on its awareness of the importance of having a conservation-minded public.

Mr. and Mrs. Nethersole-Thompson spent 15 years gathering the data for this life-history of the Greenshank (*Tringa nebularia*). The various aspects of breeding biology were studied thoroughly. An excellent compilation of the meager information previously published on the Greenshank makes interesting reading and serves, also, to emphasize the contribution made by the present study.

The distribution of the Greenshank in Britain and abroad, migration, habitat, population density, enemies, and food are treated in early chapters. Later chapters discuss voice, courtship, egg-laying, clutch-size, incubation, hatching, and behavior of the young. Especially interesting and pertinent are the discussions of comparative data on other species. Some of the subjects discussed are: choice of nest-site (pp. 143-146), egg-laying (pp. 151-153), "The probable existence of local strains, as evidenced by egg-types peculiar to a particular district" (pp. 158-159), behavior changes of adults when young are hatching (pp. 175-178), development of the "fear reaction" (p. 193), and "Psychology and Emotion" (Chapter 19).

In the chapter on "Nest-Hunting" the author explains why so few nests of the Greenshank had been found previously and describes the technique which enabled the Nethersole-Thompsons to find "over 150" nests. One finds little in literature which deals with the technique of finding birds' nests, although this is an important aspect of life-history study.

A chapter on "Triangles" describes, among others, the relationship of a male Greenshank mated to two females and the actual laying of these two females in the same nest. The author reports that "Over sixty normally monogamous birds, to my knowledge, have been proved or suspected as bigamists or polygamists . . ." There follows a stimulating discussion of several notable examples from literature.

The book concludes with six appendices, a bibliography, and an index. The appendices present information on the following subjects: forests "in which Greenshanks have been found during the Breeding-Season," vernacular names, "A Musical Appreciation of the Calls of the Greenshank" by M. E. W. North, egg-laying data, "Brooding Diaries,"

egg-shell disposal and hatching behavior. The admirable photographs increase one's understanding of the Greenshank and its breeding habitat.

One hesitates to criticise adversely the excellent work of the Nethersole-Thompsons, yet I cannot refrain from expressing regret that these keen field observers did not attempt to color-mark their birds. Plate 2, "Eggs laid 1921-33 by same hen Greenshank (*Elizabeth*)," would be much more convincing if "Elizabeth" had been banded. The author identified the female Greenshanks "by their eggs and behaviour." It must be admitted that people working with certain falconiform birds feel strongly, perhaps rightly so, that it is possible to identify a given female by egg color-pattern. Furthermore, anyone working intensively with passerine birds frequently has the feeling that he can identify a given bird by peculiarities of song or behavior. Nevertheless, such feeling is not proof and such an approach cannot be considered adequate in modern ornithological studies. Mr. Nethersole-Thompson himself is fully cognizant of this fact, for he stated (p. 66): "If I had my time over again I should certainly try to devise a method of capturing and marking them [i.e., hen Greenshanks] with coloured rings . . ."

There is a great need for research on the genetics of egg color-pattern in wild birds. It has not yet been proven conclusively that egg color-pattern is a reliable criterion for identifying a given female during a particular breeding season or over a period of years. Nor do we know, with very few exceptions, what influence the male has on the egg color-pattern of his female descendants. Punnett (1933. *Jour. Genetics*, 27:466-467) has shown that in the domestic chicken the male and female are of equal importance in transmitting one hereditary factor which determines one particular egg color. Chance (1940. "The truth about the Cuckoo," p. 194) assumed the same to be true of the European Cuckoo (*Cuculus canorus*), but Baker (1942. "Cuckoo Problems," pp.107-109) thought it highly unlikely that the male has any effect on the egg pattern, and (p. 179) stated: "The coloration and character of eggs are inherited from mother to daughter. The male Cuckoo cannot influence the character or colour of egg laid by its mate, nor of those laid by its progeny." For a summary of current knowledge on related problems see Chapter 11 of F. B. Hutt's recent (1949) book "Genetics of the Fowl."

The author closes his book with the following statement: "We watch birds, try to interpret their actions and behaviour, but shall we ever succeed in understanding them? I dedicate my book to those who will follow me and who will walk more steadily where I have only stumbled." How far more advanced would be our knowledge of the life-histories of birds had more us "stumbled" as intelligently as the Nethersole-Thompsons!—Andrew J. Berger.

BREEDING BIRDS OF KASHMIR. By R. S. P. Bates and E. H. N. Lowther. Oxford University Press, London, 1952:6×8¾ in., xxxiii + 365 pp., with 5 color plates, 151 photographs, and end-paper maps. (\$7.50).

It is always very satisfactory to find a book written by the greatest authorities on the subject, and such is this one. No more competent observers of the avian life of Kashmir exist than Colonel Bates and Mr. Lowther. Their photographs and shorter articles have graced the pages of the *Journal of the Bombay Natural History Society* for many years, and will, I hope, for many more to come. Their observations in Kashmir date back to 1920, a considerable span of time, but a necessary one when the large

avifauna is considered together with the paucity of previous notes or observations in so many cases.

The book considers 221 species with an additional provisional list of over 40. Many of these species have been photographed at the nest by one or other of the authors for the first time. Each species is carefully described for field identification, with references to its more detailed description in standard works. The Kashmiri name is given in addition to the English name, and a Latin name which will at least identify the bird even if it is not always entirely up-to-date. There are good notes on distribution, and—here is the meat of the book—excellent notes on habits and nesting. These last, to any ornithologist or student of Asian birds, are priceless. They are accurate, painstaking, and informative. They are models of their kind. Finally there is a detailed description of the nest and eggs.

Six illustrative colored plates of Kashmir birds by Mrs. D. V. Cowen, and clear and comprehensive end-paper maps complete the volume. This book is a mine of information for amateur and professional bird watchers or ornithologists and should be a standard reference work for any such person going to India or its neighborhood. I hope that it will achieve the greatest possible popularity.—S. Dillon Ripley.

WILSON ORNITHOLOGICAL CLUB NOTES

1953 Annual Meeting

At the invitation of the University of Michigan and the Michigan Audubon Society, the thirty-fourth Annual Meeting of the Wilson Ornithological Club will be held at the University of Michigan Biological Station, at Douglas Lake, near Cheboygan, Michigan, from Sunday, June 14, to Wednesday, June 17, 1953.

Official notification of the meeting, details of arrangements, and request for papers will be mailed to the membership in the spring, but members are urged to plan now to attend what promises to be a most interesting meeting in this northern scenic area.

Committee Appointments

The President has made the following appointments, to serve for the 1952-1953 year:

Conservation Committee, Robert A. McCabe, Chairman; *Illustrations Committee*, Robert M. Mengel, Chairman; *Investing Trustees*, A. W. Schorger, Chairman (term expires 1953), Aaron Moore Bagg (term expires 1954), Burt L. Monroe (term expires 1955); *Library Committee*, George J. Wallace, Chairman; *Local Committee on Arrangement for the 1953 Meeting*, Olin Sewall Pettingill, Jr., Chairman, Nicholas L. Cuthbert, Vice-Chairman; *Membership Committee*, Ralph M. Edeburn, Chairman; *Research Grant Committee*, John T. Emlen, Jr., Chairman; *Representative on the American Ornithologists' Union Council*, Burt L. Monroe.