

ORNITHOLOGICAL LITERATURE

BICKNELL'S THRUSH, ITS TAXONOMY, DISTRIBUTION, AND LIFE HISTORY. By George J. Wallace, Proceedings of the Boston Society of Natural History, 41, no. 6, January, 1939: 211-402. \$1.25.

This monograph is based on three years' study of Bicknell's Thrush from the taxonomic, distributional, and life history points of view, and is, therefore, appropriately separated into these three natural divisions.

It was the original intention of the author to present a purely life history study but systematic confusion existing among the Gray-cheeked Thrushes made it necessary to make a complete taxonomic revision of the species-group before presenting the study. He finds that there are four more or less distinct phases among these thrushes, two of which—a small olive and a small brown form—occur in Bicknell's Thrush. Nevertheless there is inadequate evidence for recognizing these four color types as subspecies. The present scientific name of Bicknell's Thrush, *Hylocichla minima minima* (Lafresnaye), is declared invalid since the type specimen of Lafresnaye's *Turdus minimus* is actually the larger Gray-cheeked Thrush. Bicknell's Thrush should now become *Hylocichla minima bicknelli* Ridgway, a name once used but rejected when Lafresnaye's type was rediscovered.

Bicknell's Thrush is notably restricted in distribution, breeding in the United States only on the highest northeastern mountains, migrating along the Atlantic Coast, and wintering, so far as known, in Haiti and San Domingo. Bicknell's Thrush is also restricted by a low breeding rate. The birds "lay three eggs as often as four, and seldom attempt a second brood; the loss due to infertility and defective embryos is high; and the loss due to predators, chiefly red squirrels, is more than 50 per cent." The author believes that Bicknell's Thrush reaches its center of abundance in the Green Mountains of Vermont, since this extensive mountainous area, with the majority of its peaks wooded over the top, provide optimum breeding conditions.

The life history studies of Bicknell's Thrush were made on Mt. Mansfield, Vermont, and comprised two summers' work. The section of the monograph devoted to these studies is introduced with a discussion of climatic and ecological aspects of the region and is followed by more detailed and informative discussions under such topics as arrival on breeding grounds, food habits, songs and call notes, mating and courtship, nesting habits, a study of caged specimens, molts, and departure from the mountain. The bird is restricted to the evergreen zone, having an altitudinal distribution of about 1500 feet. Bicknell's Thrush is said to be "the most insectivorous of the hylocichlids" although no direct evidence is given to support this statement. In addition to its regular song, the bird occasionally gives a flight song that "is confined to the twilight following sunset or preceding sunrise, and lasts for only ten or fifteen minutes." Regular singing "is renewed when nests are broken up, regardless of the time, and is renewed in early July at the conclusion of the nesting period, regardless of the fate of the young." Only the female incubates, a fact confirmed by studies of nine nests. Both parents cooperate in feeding the young but the male is "irregular" and "effectively concentrates his efforts to periods of necessity such as during heavy or prolonged rains and in the early morning, at which times the female remains at the nest to brood." At one nest studied, three adults fed the young, the third bird probably being an "extra male." At another nest the male deserted, leaving the entire care of the young to the female. The female usually brings a larger load of food to the nest than the male. The remark that "the parent broods more than has been commonly observed for other passerine birds is doubtless related to the severer climate" is not convincingly supported by data. The suggestion that young in one nest were "frightened" at the sudden approach of a thunderstorm does not seem in keeping with general wild bird behavior and would be difficult to prove. Male birds are

more inclined to carry away excreta from the nest than to eat it, the explanation being that the males are "better fed."

Dr. Wallace has given us an admirable picture of the life history of Bicknell's Thrush. Considering that he has dealt with the rarest of a notoriously seclusive group of birds, that there was comparatively little information on the bird to begin with, and that only two summers were involved in the studies, his picture is all the more admirable. The reviewer feels, however, that the general discussion of material would have been greatly enhanced by a comparison of his findings with the findings of investigators on other *hylocichlids*, and by a comparison of the results of his studies with the results of other extensive life history studies, particularly of passerine forms. Comparisons of this sort would have more greatly emphasized the significance of his findings.

The monograph is outstandingly well written and there are few typographical errors. "Rectrices" and "rectrical" are consistently misspelled and a term "apterylae" is used for the correct word "apteria." A bibliography and appendix conclude the monograph.—O. S. Pettingill, Jr.

THE GOLDEN PLOVER AND OTHER BIRDS. By Arthur A. Allen. Comstock Publishing Co., Ithaca, N. Y., 1939: 8vo, xiii + 324 pp., 240 photos., 7 color pls. \$3.00.

The success of Dr. Arthur Allen's "American Bird Biographies" has resulted in the publication of this second volume of biographies done in the same manner. Its twenty-seven chapters deal with as many species or groups of species. The book is profusely illustrated with Dr. Allen's remarkable photographs and is further adorned with seven beautifully reproduced paintings by George M. Sutton. Dr. Sutton's amazing portraits of the Meadow Lark and the Golden Plovers are certainly among the finest things he has had reproduced.

Our only real criticism of this very attractive book concerns the author's adoption of the method of having the bird "tell its own story" in the first person. We feel that this technique introduces a false note which is very regrettable. Even the best passages give a false impression of the bird as a "little man" and the worst passages reach such high points of absurdity as the case of the Pied-billed Grebe that says, "I am blessed with a sense of humor," or the Indigo Bunting that speaks of Elliott Coues and aptosochromatism.

The Comstock Publishing Company and the Lakeside Press have made this a fine example of book making.—J. V.

THE JUNIOR BOOK OF BIRDS. By Roger Tory Peterson. Houghton Mifflin and Co., Boston, Mass., 1939: 8vo, xv + 92 pp., 24 colored pls. \$2.00.

When one puts down the JUNIOR BOOK OF BIRDS one has a very satisfactory feeling that Master Roger Tory Peterson was a charming young man and that Mister Roger Tory Peterson has retained that charm while adding a wide and technical knowledge of birds. Indeed, so deep is that knowledge that he can use it lightly and gracefully. He has facility in selecting and describing the characteristics and habits of birds in such a way that a novice in ornithological study can easily understand and remember.

Most of the plates in this book have been printed before in the Audubon leaflets. It is regrettable that the color work is so badly done. The plates of the Indigo Bunting and the Blue Jay are especially poor. Outstanding are the two by Louis Agassiz Fuytes, and the only one by Mr. Peterson is by far the best. Young and old alike will prefer more color plates by the author. There is a modern touch to his work that unquestionably appeals to young minds (and to some older ones, if the reviewer is typical). However the black and white sketches in the margin, which are Mr. Peterson's work, compensate somewhat for the lack of his colored sketches.—Helen Bates.

THE WATCHER AT THE NEST. By Margaret Morse Nice. The MacMillan Co., N.Y., 1939: post 8vo, 159 pp., illus. \$2.00.

If enthusiasm is contagious, readers of Margaret Morse Nice's "The Watcher at the Nest" should become ardent bird lovers. This pleasing book is written for laymen by a trained ornithologist. The lay reader who has imagination can read between the lines of this bright and popular account of bird studies, the principles which guide the scientific observer and sense, somewhat, the hours of patient work behind this pleasing exposé of the private lives of Song Sparrows, warblers and other birds. In no sense a scandal or debunking book, it reveals very clearly that it is impossible to interpret bird behaviour according to the patterns or mores of human beings.

The scientific student will be better satisfied by Mrs. Nice's technical book on the "Life History of The Song Sparrow," but he need have no hesitation in recommending this later book to his lay friends. It is a book which may gently induct them into more accurate bird study. It certainly will charm them, for it is remarkably free from pedantry, and on the whole very charmingly written. The author has an unusual vocabulary for a scientist, using a literary phraseology that is very happy. We suspect she had good training in non-scientific Latin. There are a few unfortunate passages, of which page 72 and the third paragraph on page 54, are typical. Clarification of pronouns would ease matters for the reader.

If a layman whose interest in birds is purely "sentimental" is bothered by the sentimentality of Mrs. Nice's descriptions and her tendency to place anthropomorphic interpretations upon the behaviour of her "darling" birds, still she may be excused because of the very laudable manner in which she has blended scientific knowledge and exposition for the untrained student. She has done much to further the cause of ornithology and it is to be hoped that more scientists will follow her example in interpreting ornithology to the laymen in simple narrative form. The niceties of our beautiful language are too often entirely neglected, and too many scientific treatises buried in libraries where they are used only for factual information. It is to be hoped that Mrs. Nice (or a fellow student) will write another book for the laymen explaining why ornithological study is more than just observation study. Many people would like to know why so able a person as Mrs. Nice will spend hours of acute discomfort in watching two little birds—be they ever so "darling". But let us be thankful for this one valuable addition to our list of worth while books.

The black and white illustrations by Roger Tory Peterson add much to the effectiveness of the book. We hope that the sales of this book will be great enough to induce the publishers to put out a finer edition and include some of Mr. Peterson's beautiful color work.—Helen Bates.

WILDFOWL FOOD PLANTS, THEIR VALUE, PROPAGATION, AND MANAGEMENT. By W. L. McAtee. Collegiate Press, Inc., Ames, Iowa, 1939: 8vo, ix + 141 pp., 17 pls., 4 figs. \$1.50 postpaid.

This interesting handbook, written by one of the U. S. Biological Survey's recognized authorities on the food of animals, contains in condensed form an amazing amount of useful information about the value, propagation and management of wildfowl food plants in the United States. The author discusses such pertinent subjects as the productivity, value and utilization of plants, the environmental limitations affecting their growth, the control of undesirable plants, and the establishment or utilization of suitable plant habitats in ponds, marshes and estuaries. There are chapters with adequate accounts by families of the algae and the higher plants which are eaten by ducks and geese, and the vernacular names of these plants. The four figures and many tables (only eight are numbered) give much useful information in convenient form.

The portions dealing with environmental limitations, and their discussions of the effects upon plants of different hydrogen-ion concentrations, turbidity, salinity and pollution, and the basic fertility of various soils and waters, are especially valuable and well presented. The chapters dealing with plant management should be very useful to both the trained conservation worker and those who wish to increase the food of ducks and geese upon their lands.

One of the few statements in this volume which which we do not agree is the author's assumption that the freshwater dogfish (*Amia calva*) makes shallow waters turbid and thereby destroys vegetation or prevents their restoration (pp. 71 and 109). The only faults we find are the unavoidable results of brevity. The otherwise excellent chapter on environmental limitations of plants does not discuss ice-depth and ice-push, major factors in the elimination and restriction of aquatic growth in the northern States. Failure to emphasize sufficiently that vegetable matter is not the principal food of several waterfowl species may lead the beginner to over estimate the importance of plants to waterfowl. Additional plates picturing one or more species of each of the important plant families, and a few illustrations demonstrating the diverse forms which a single plant species assumes in various habitats, would have greatly added to the completeness of the work. Likewise a larger list of recent literature references (thirty-seven are given) would have been very helpful. Despite these "sins of omission" because of brevity, we predict a wide use for this timely manual.—Milton B. Trautman.

A FIELD GUIDE TO THE BIRDS. By Roger Tory Peterson. Houghton Mifflin Co., Boston, 1939: xx + 180 pp., 22 text figs., 41 unnumbered pls. (4 colored). \$2.75.

Peterson's "Field Guide" is too well known to need any introduction. We received it with acclaim in 1934, recognizing it immediately as the handbook for identifying birds for which we had long hoped. It is a pleasure to report now a new and enlarged edition with a number of new illustrations and much additional text. The use of a more compact type arrangement has permitted the addition of brief geographical ranges, text references to all illustrations, and other new features, without the increase of more than a dozen pages of text.

We are glad to learn that the author is preparing a similar guide for the western half of the country.—J. V.

SHORT PAPERS

- CRANDALL, L. S. Notes on Plumage Changes in the Quetzal. *Zoologica*, 24, No. 4, 1939: 61-2, 1 pl.
- FLEMING, J. H. and L. L. SNYDER. On *Melospiza melodia* In Ontario. *Royal Ont. Mus. Zool. Occ. Papers* No. 5, Feb. 28, 1939 (8 pp., map).
- JUNK, W. Aves. *Scientiae Naturalis Bibliographia*, 2, 1939: 101-3.
- MAYR, E. The Sex Ratio in Wild Birds. *Amer. Nat.* 73, Mar.-Apr., 1939: 156-79.—An excellent summary of the state of our knowledge of this neglected subject.
- MCATEE, W. L. Wildlife Of The Atlantic Coast Salt Marshes. *U. S. Dept. Agri., Circular* No. 520, March, 1939 (28 pp., 6 pls., 10 figs.). \$1.00 of Supt. Doc., Wash., D. C.
- MOORE, R. T. A New Race of *Cyanthus latirostris* From Guanajuato. *Proc. Biol. Soc. Wash.*, 52, Apr. 27, 1939: 57-60.—*C. l. propinquus* subsp. nov. from Guanajuato, Mex. Arizona form must be known as *C. l. magicus* (Mulsant and Verreaux).
- PETINGILL, O. S., JR. The Bird Life Of The Grand Manan Archipelago. *Proc. Nova Scotian Inst. Sci.*, 19, pt. 4, Feb., 1939: 293-372, 3 pls., map.

- TINBERGEN, N. On the Analysis of Social Organization among Vertebrates, with Special Reference to Birds. *Amer Midl. Nat.*, 21, No. 1, Jan., 1939: 210-234.
- VAN ROSSEM, A. J. Four New Races of Sittidae and Certhiidae From Mexico. *Proc. Biol. Soc. Wash.*, 52, Feb. 4, 1939:3-6.—*Sitta carolinensis kinneari* from Guerrero; *Sitta carolinensis umbrosa* from Chihuahua; *Sitta pygmaea flavinucha* from Morelos; *Certhia familiaris guerrerensis* from Guerrero.
- . A Race of the Rivoli Hummingbird from Arizona and Northwestern Mexico. *Ibid.*:7-8.—*Eugenes fulgens aureoviridis* subsp. nov. from Chiricahua Mts., Cochise Co., Ariz.
- and HACHISUKA. A Northwestern Race of the Mexican Cormorant. *Ibid.*: 9-10.—*Phalacrocorax olivaceus chancho* subsp. nov. from Sonora.
- . Descriptions of Two New Subspecies of Birds from Western Mexico. *Ibid.*:11-12.—*Vireo solitarius repetens* subsp. nov. from Guerrero; *Vermivora superciliosa palliata* subsp. nov. from Jalisco.
- and HACHISUKA. A Race of the Military Macaw from Sonora. *Ibid.*: 13-14.—*Ara militaris sheffleri* subsp. nov. from Sonora.
- . Notes on Two Woodhewers from Mexico. *Ibid.*:15-16.—*Lepidocolaptes souleyetii guerrerensis* subsp. nov. from Guerrero; *Xiphorhynchus flavigaster megarhynchus* becomes *X. f. flavigaster* and the form hitherto known by that name becomes *X. f. eburneirostris*.
- WITSCHI, EMIL, and RICHARD A. MILLER. Ambisexuality in the Female Starling. *Jour. Exper. Zool.*, 79, Nov., 1938: 475-87.

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