

### ORNITHOLOGICAL LITERATURE

**BIRDS OF THE EURASIAN TUNDRA.** By Theodore Pleske. *Memoirs Bost. Soc. Nat. Hist.*, Vol. 6, No. 3, Boston, 1928. Pp. 107-485. Pls. 16-38, six in color. Price, \$5.00 in paper, \$5.75 in cloth.

This paper by Prof. Pleske is one of the most elaborate among the faunal lists which have appeared in recent years. It is based upon the collections of the Russian Polar Expedition of 1900-1903. The history of the expedition is given in detail at the outset, and forms Part I. The ornithological work in the field was done by Dr. H. Walter, who was also the physician of the party, and by A. Bialynicki-Birula, zoologist of the St. Petersburg Academy of Science. Dr. Walter died during the second year in the field.

The tundra is defined as the alpine zone of the holarctic region. The polar region is divided into the Sylvan Zone (forests), the Subalpine Zone (brush), and the Alpine Zone (tundra), or barren lands. The Eurasian tundra described in the present work extends from the Kola Peninsula of Russia eastward over the Taimyr Peninsula to the eastern limit of Siberia. Many islands north of the mainland are included in the area of study. Seventy-one species of arctic birds are listed in Part II of the paper, which covers 231 pages. For further convenience the entire area is subdivided into twenty-one smaller portions which are treated in detail in as many sections, which form Part III, covering 76 pages. For each of the sections a list of the birds is given, and a bibliography of the literature. Part IV is a further distributional study in summary.

The plates are splendidly done by the heliotype process. There is one colored plate showing the nest and young of the Snowy Owl; another of the adult and young of the Sanderling; another of the adult and young of the Knot; another of the adult Rock Ptarmigan; all from water color paintings by B. Watagin. It is a great privilege to have such a valuable foreign work translated and published in English.—T. C. S.

**THE HEATH HEN.** By Alfred O. Gross, Ph. D. *Memoirs Boston Soc. Nat. Hist.*, Vol. 6, No. 4, 1928. Pp. 487-588. Pls. 39-50. Price, \$2.25 in paper, \$2.90 in cloth.

Dr. Gross has been engaged for several years in a field study of the Heath Hen on Martha's Vineyard Island, Massachusetts. According to most accounts this species is on the verge of extinction, though Dr. Gross has rather an optimistic paragraph in his introduction. We have seen and heard during the past year considerable criticism of the Massachusetts authorities for their attitude toward the protection of the Heath Hen. For instance, it has been stated that more recently the authorities refused to grant a permit to the warden to kill birds of prey found in the Heath Hen refuge. It is hard to believe that such a statement would be made unless true, and still harder to believe that it is true. Without more complete information at hand we will refrain from expressing any further opinion.

Dr. Gross has had the very rare privilege of studying a species on its death-bed—perhaps for the first time in history. The inimical factors involved in the progressive decline in the Heath Hen population are enumerated by Gross as man, predaceous animals (cats, rats, hawks, owls, crows), diseases

and internal parasites, external parasites, excess males, sterility of males, and prairie fires.

The Heath Hen was first recognized as distinct from the Prairie Chicken by William Brewster in 1885, at which time it had become restricted to Martha's Vineyard Island. Its exact range prior to this time is not definitely known. The history of the species on Martha's Vineyard is one of constant decrease. In 1898 two mated pairs of Western Prairie Chickens were liberated to intermingle with the Heath Hens. About 1906 a closed season was put on the Heath Hen, and \$100 fine fixed for violation. In 1907 a Heath Hen reservation was established near the center of Martha's Vineyard Island. In 1916 a prairie fire swept over the island destroying much of the cover and perhaps many of the birds.

Dr. Gross began his investigations in 1923 on the basis of a fund raised privately under the leadership of Dr. John C. Phillips. In 1925 a Heath Hen conference was held and plans were formed to continue the effort to prevent extinction. Additional money was subscribed and a warden was put to work. The report of Dr. Gross shows that the wardens did destroy some "vermin," including five owls and forty-four hawks. From 1907 to 1926 more than \$60,000 has been expended in an effort to save this species from extinction. In March of 1927 it was estimated that there were less than thirty birds in existence, only thirteen being counted.

From such information as we have, from Dr. Gross' paper and other sources, we have formed the impression that the State Division of Fisheries and Game of Massachusetts has been very niggardly in its financial support of these efforts. And we do not find that the wealthy National Association of Audubon Societies has participated in the effort at all. The coming season may add an important chapter to the history of the Heath Hen. A very extensive bibliography is a valuable feature of Dr. Gross' paper.—T. C. S.

FIELD BOOK OF BIRDS OF THE PANAMA CANAL ZONE. By Bertha Bement Sturgis. Published by G. P. Putnam's Sons, New York, 1928. Pp. i-xxxix+1-466. Pls. I-XIV (8 in color). Figs. 1-107. Price, \$3.50.

This work is a carefully prepared descriptive catalogue of the birds which inhabit the Canal Zone and a few neighboring islands, including approximately 434 species. The book may probably be regarded as a popular handbook of American tropical birds. Perhaps there has been no treatise previously available to the amateur ornithologist on the bird life of the American tropics which is so clear and comprehensive.

To illustrate the richness of this region we note that twenty different hummingbirds are described; twenty-two warblers; nineteen tanagers; fifty-two flycatchers; while, on the other hand, only sixteen finches are listed.

The book belongs to the series, and has the same compact format, which began with Mathew's "Field Book of Wild Birds and Their Music." The colored plates are reproduced from paintings by Mr. F. L. Jaques. It has not been our privilege to see any other work by this artist, but we feel sure that his skill in portraying birds will receive wider recognition as it becomes better known. Several of the plates are from the excellent photographs by Dr. Willard G. Van Name.—T. C. S.

THE STATUS OF THE GREAT WHITE HERON (*ARDEA OCCIDENTALIS* Audubon) AND WURDEMANN'S HERON (*ARDEA WURDEMANNII* Baird). By Ernest G. Holt. Sci. Pub. Cleveland Mus. Nat. Hist., Vol. I, No. 1, 1928. Pp. 1-35. Pls. I-VI.

The long discussion concerning the status of *A. occidentalis*, *A. wurdemannii*, and *A. wardi* is an interesting history. The gist of the discussion is pretty well stated by the author in the opening paragraph, where he proposes three questions, viz., a) is *occidentalis* a distinct species, or only a white phase of *wardi*; b) is *wurdemannii* a colored phase of *occidentalis*, a light phase of *wardi*, or a hybrid between the two; c) must *wardi* be retired to the synonymy of *occidentalis*? After reviewing very carefully the history of the discussion, beginning in Audubon's time, and examining the evidence from animal behavior, study of eggs, plumages, and distribution, the author concludes that *A. occidentalis* is a distinct species, immaculately white, and without a colored phase; that *A. herodias wardi* possesses no white phase; and that *A. wurdemannii* is a hybrid of the other two, which is found only in the restricted area where the breeding ranges overlap. It is a scholarly paper of fascinating interest.—T. C. S.

WILD ANIMAL INTERVIEWS AND THEIR OPINIONS OF US. By William T. Hornaday. Published by Charles Scribner's Sons, New York, 1928. Pp. i-xiv+1-310. Price, \$2.50.

Another volume by Dr. Hornaday! And this time he chooses the medium of humor with which to convey the lessons on animal protection. He knows about as well as anyone does what his animal friends would say if they could talk, and these fictitious interviews are not only good fiction, but are prepared in good Hornaday style. Interviews are given with thirteen species of birds, four of reptiles, and twenty-four of mammals. It makes very pleasant reading for the naturalist as well as others.—T. C. S.

AN INTRODUCTION TO THE BIRDS OF PENNSYLVANIA. By George Miksch Sutton. Published by Horace McFarland Co., Harrisburg, 1928. Pp. i-x+1-169. One colored plate, 153 text figures. Price, \$1.00.

We are glad to welcome another piece of work by Dr. Sutton and another state catalogue of birds. Two hundred and twenty-nine species are described in the text proper, but a number of other less common ones are mentioned under related forms. The account of each species includes a Description of Plumages, Range in Pennsylvania, Nest and Eggs, and general remarks which usually contain some description of song or call. The book is illustrated by one colored frontispiece of the male and female Baltimore Oriole and 153 pen sketches of 197 species. The printers have not produced a good color in the male Baltimore Oriole, we think. Such a list is convenient in form, complete and up-to-date, concise and inexpensive, and will, without doubt, be of great value in assisting beginners in bird study, and will promote the science of ornithology by stimulating a wider interest and activity in the subject, and by guiding it along safe lines. Every state needs some such authentic list, and the more description which can be included, the better.—T. C. S.

OUR GREAT OUTDOORS: MAMMALS. By C. W. G. Eifrig. Published by Rand, McNally & Co., Chicago, 1928. Pp. i-xiii+1-257. Figs. 1-177; 2 col. pl. Price, \$1.25.

Professor Eifrig, our fellow-member, has prepared a most excellent brief textbook on mammals, and we understand that a book on birds is to follow in the series. Typical representatives of all the important groups are discussed. And the material is so arranged that the reader is given a comprehensive survey of the mammalian group as a whole. It tends to unify the beginner's knowledge of natural history rather than scatter it. It is a book that should be added to the library of every school.—T. C. S.

THE RING-NECKED PHEASANT—ITS HISTORY AND HABITS. By Dana J. Leffingwell. Occasional Papers, No. 1, of the R. Conner Museum at the State College of Washington. April, 1928. Pp. 1-35.

This is a paper which deals with the distribution, life-history, incubation, young, calls, habits, enemies, food, and economic importance of the species in question. And it makes a valuable contribution, the collection of which must have afforded the author much pleasure.—T. C. S.

BIRDS OF THE WILD. By Frank Chapman Pellett. Published by A. T. De La Mare Co., Inc., New York. August, 1928. Pp. 1-118. Price, \$1.75.

We are here presented with a new and delightful book by Mr. Pellett, in which he recounts in his usual interesting style his intimate acquaintances with birds. The greater part of the book deals with the habits and behavior of wild birds in relation to human habitations. The last chapter discusses plants that are useful in attracting birds. Many original photographs are used for the first time.—T. C. S.

AN ORNITHOLOGICAL SURVEY OF THE SERRA DO ITATIAYA, BRAZIL. By Ernest G. Holt. Bull. Amer. Mus. Nat. Hist., Vol. LVII, Art. V. Pp. 251-326. New York, 1928.

This paper is a list of 187 species of birds found by the author during a period of four and a half months on Itatiaya, the second highest mountain east of the Andes. Especial attention is given to the plant regions and life zones, which are given as three, viz., tropical, subtropical, and temperate—all being defined by altitude and forest.—T. C. S.

VARIATIONS IN THE FOX SPARROWS (*PASSERELLA ILIACA*) WITH REFERENCE TO NATURAL HISTORY AND OSTEOLOGY. By Jean M. Linsdale. Univ. Calif. Pub. in Zool., Vol. 30, No. 12. Pp. 251-392. Pls. 16-20. Price, \$1.85.

This paper is an elaborate study of the variation in the species and subspecies of the Fox Sparrow. The variations especially considered were in the osteological system. The author did not find that enlarged bill and skull had particular survival value; but that a longer sternum seemed to have such value. Much natural history of the various races of Fox Sparrows is included in the paper.—T. C. S.

PRACTICAL COLOR SIMPLIFIED. By William J. Miskella, M. E. Published by the Finishing Research Laboratories, Inc., Chicago, 1928. Pp. i-xiv+1-114. Figs. 1-20. Col. Pls. I-VII. Price, \$3.50.

The biologist and ornithologist can not be disinterested in color. The title of this book first suggested to us that it might be of some service to the biologist

in color nomenclature, or to the lantern slide colorist, or in color photography. It does not give much help directly in these fields. It is, nevertheless, a book which makes very clear many fundamental principles of color. Until we began to look over this book we did not know that the old seven-color spectrum, so necessary a part of our college physics, had become obsolete. Now, with a six-color spectrum the author of this book presents some very simple rules for color and shade combinations. Artists will probably find the color charts for complementary color mixing very unique and useful.—T. C. S.

**BIRD RHYMES AND FIELD SONGS.** By Bert Dayton. Published by The Palisade Press, 125 Church St., New York, N. Y., 1928. Pp. 1-47. Price, 35 cents.

We are not a connoisseur of poetry and therefore hesitate to undertake a review of this pamphlet. We are quite willing, however, to accept this literary work as "rhyme." Though not indicative of the author's best lines we select the following to the Bobolink:

"Be careful in the rice fields, that you're not shot by foe"

[By edict of the United States Biological Survey]

"As over the Carolinas, you passing on will go."

We know of two or three of our W. O. C. members who give themselves up now and then to the jingle fever, and we think that all such will enjoy these verses by their fellow amateur.—T. C. S.

**NATURAL HISTORY NOTES ON THE JOURNALS OF ALEXANDER HENRY.** By Russell Reid and Clell G. Gannon. No. Dak. Hist. Quart., Vol. 2, No. 3, April, 1928.

Alexander Henry was a trapper in the north country in the early part of the 19th century. He kept a journal and made incidental references to the mammals and birds, many of these notes being now referable to North Dakota. The authors have republished many such notes in the present paper.—T. C. S.

**NOTES ON BIRDS OF LAKE MAXINKUCKEE REGION.** By Samuel E. Perkins III. Proc. Ind. Acad. Sci., Vol. 37, 1927. Pp. 461-466.

The author presents a list of fifty-nine species, of which nineteen are reported as additions to the Everman and Clark list of 1920.—T. C. S.

**RETURNS RECEIVED PRIOR TO JANUARY 1, 1927, UPON BIRDS BANDED BY MR. JACK MINER AT KINGSVILLE, ONTARIO.** Reprinted from the Can. Field Nat. for November and December, 1927, and January, 1928.

This report includes a great many records of banded ducks and geese taken, but many of the records are indefinite as to time, place, or species.—T. C. S.

**BIRD BANDING IN AMERICA.** By Frederick C. Lincoln. Separate from the Smithsonian Report for 1927. Pp. 331-354. Pls. 1-9. Washington, 1928.

A history of banding in this country, and a statement of the results of this method, with a resume of what has been learned concerning the migration of certain species.—T. C. S.

**WILD BIRDS INTRODUCED OR TRANSPLANTED IN NORTH AMERICA.** By John C. Phillips. Tech. Bull. No. 61, U. S. Dept. Agric., Washington, April, 1928. Price, 10 cents.

This pamphlet gives a very valuable history of the intentional and accidental introduction of exotic birds into this continent, recording successes and failures. Cases of transplantation of native species are also presented. Practically every exotic species is discussed more or less fully.—T. C. S.

THE MOLTS OF THE LOGGERHEAD SHRIKE, *LANIUS LUDOVICIANUS* LINNAEUS. By Alden H. Miller. Univ. Calif. Publ. Zool., Vol. 30, No. 13, pp. 393-417. Berkeley California, 1928. Price, \$1.85.

This paper makes a valuable contribution to the discussion of the phenomena of molt which is not easily condensed in a few lines.—T C. S.

A DISTRIBUTIONAL SUMMATION OF THE ORNITHOLOGY OF LOWER CALIFORNIA. By Joseph Grinnell. Univ. Calif. Publ. Zool., Vol. 32, No. 1, pp. 1-300. Text figures, 1-24. Berkeley, California, 1928. Price, \$3.75.

The paper here listed is essentially a catalogue of the birds of Lower California, with a bibliography. The list includes 475 forms, of which 354 are full species. A check-list of all the forms is first given (pp. 33-52); then follows the annotated list, making up the bulk of the paper (pp. 53-246), including a hypothetical list of 53 forms. An extensive bibliography of 461 titles (pp. 247-286) would seem to be exhaustive, though the author modestly fears he has missed some. The usual complete index concludes the paper. Those who are interested especially in the Pacific Coast avifauna will undoubtedly find this careful work of great interest and value. Our interest is chiefly one of admiration.

We do find in the introduction a few comments of general interest wherein Dr. Grinnell expresses himself in the matter of subspecies. Since these remarks probably represent a pretty full and authoritative defense of the subspecies concept, it will be of sufficient interest to many of our readers to present them here in full.

"Much objection has been registered of late from many lay, and curiously some professional, sources against the recognition of subspecies in nomenclature, on the ground that they are difficult of discernment; and their recognition, it is urged, is therefore of no practical utility. But, I ask, is the histologist, or the embryologist, or the bacteriologist expected to confine his labors within limits easily comprehended by the laity? Why, then, should the faunal zoologist be expected to keep *his* investigations within any such bounds? Personally, as a student of vertebrate speciation I am only mildly interested in the full, Linnaean species, because the full species has passed the really significant stage in its career; I am intensely interested in the barely discernible subspecies, because *it* is in the critical formative stage, and there is a good chance that I may learn something of the causes and essential conditions of its differentiation.

"To my mind, then, in the study of subspecies as contrasted with the so-called full species we are dealing with the earliest stages in the phylogenetic process. In other words, subspecies are the fundamental elements which, in any really significant systematic and faunistic investigation, must receive primary recognition. The more accurately and acutely we can train our senses and instruments upon the detection of subspecies, the better understanding will we gain of their nature and the processes producing them." (Page 14).

On a previous page (page 2) after commenting on the "inexactness and many outright errors" often found in amateur studies, Dr. Grinnell says, "Nevertheless, it must immediately be said that without the amateur very much of the information now available in regard to Lower California would be absolutely wanting." This is just the frank concession which we would expect Dr. Grinnell to make, and which indicates that the "amateur" is entitled to consideration. We may probably assume that this is generally conceded.

Very few people are working in the fields of histology, embryology, and bacteriology other than those who are professionally engaged therein; these sciences

have very little to attract the layman. The embryologist goes right on with his investigation, and the question of whether he is a layman or professional is seldom asked; and we really do not see just why that should be a question in ornithology. If a man makes a *contribution* to ornithology is he not an ornithologist? Whether he makes his bread and butter by ornithology or in some other way does not greatly affect the status of his contribution. The importance of the contribution is determined in the crucible of science, which asks no questions as to caste, creed, color or servitude of the worker. Therefore, when an amateur, or layman, in ornithology makes a contribution to ornithology he is as good as other ornithologists in proportion to the value of his contribution. All of which, if true, should mean that an ornithologist's standing depends upon his research, scholarship, judgment, and other similar attributes. Well, this is all preliminary to the asseveration that a layman in ornithology should not be excluded from the discussion of the problem of subspecies because he *is* a layman.

Now, there are many other important biological problems besides evolution and the origin of species. The study of variation is important, but it need not occupy the whole stage. The thought of a good many is that trinomialism is confusing in its effect upon many other branches of biology, and upon the workers in other lines than taxonomy. This argument would not prevail against it, however, if trinomialism could be fully justified on other grounds. Trinomialism is a sign of taxonomic senescence. We will always need a few broad-minded taxonomists to "keep the books . . . in order" as Chapman once put it. But surely the job is narrowing down to a point where its results are open to question. With all of the biological problems that are still unsolved why should brilliant minds be devoted to scarcely perceptible shades of color and dimensions when the gain is so doubtful and uncertain? But we will also grant that this is a personal matter unless and until such results are published to the confusion and handicap of other workers on other biological problems. Of course, evolution is going right on at its snail pace. Some hundreds of years from now present forms will have changed, undoubtedly. But we venture to assert that the written descriptions of subspecies and the trinomial terms will play very little part in discovering the evolutionary course and results. Folks then will have to rely on comparison of specimens, just as they do today.

When Dr. Grinnell affirms that in the subspecies "we are dealing with the earliest stages in the phylogenetic process" we believe that he is slightly in error. While the subspecies may be one of the stages in the origin of species there can be little doubt that the individual is the first stage. Now if we are to study phylogenesis will we not have to take into account all stages, including the species, the subspecies, the sub-subspecies, and the individual? But, is it necessary to attach names to all these stages of variation? And is there any greater reason for naming the subspecies than for naming any other recognizable intergrading form?

We are inclined to feel apologetic to Dr. Grinnell for thus discussing at length the two paragraphs in his latest work. But we see so little good in trinomialism, and we are so very skeptical of discovering the origin of species by means of the subspecies concept, and so impressed by the current abuses, that we can not let so good an opportunity for expression pass unheeded.—T. C. S.

Bird Banding Notes No. 26 from the Bureau of Biological Survey was issued on August 10. These notes are read with much interest by all who have concerned themselves with the work and results of bird banding. Our own full set of these notes will some time be bound.