

ORNITHOLOGICAL LITERATURE

CHECK-LIST OF NORTH AMERICAN BIRDS. Prepared by a Committee of the American Ornithologists' Union [Witmer Stone, Chairman]. Fourth Edition, 1931. Pp. i-xix+1-526. Price, \$4.

At last the Check-List has made its appearance, after more or less impatient anticipation. In its mechanical make-up we think the new Check-List surpasses its predecessors, chiefly because of the grade of paper used.

The new Check-List contains twenty orders and seventy-five families—the species and subspecies included number 1420 as compared with 1200 in the previous edition. These groups are arranged in the order worked out by Wetmore and Miller in 1926 (*Auk* XLIII, 1926, 337-347). The changed sequence of certain of the larger groups has become more or less familiar by previous announcements and various published lists. Considerable change has also been made in the order of the genera and species within the families. The forms are no longer numbered, as they were in the first and second editions; but the old numbers are retained in brackets following the names—this primarily for the convenience of egg collectors. While this is undoubtedly an important concession to egg collectors, both individuals and museums, it is just as certainly a hardship for all who keep a card index to have no fixed numerical order for the arrangement of the cards.

In this Check-List the subspecies has become more than ever the taxonomic unit. There are comparatively few instances of binomial species, and these are listed in sequence with the trinomial forms. Of course, the difficulty here is that subspecies have very little meaning to any but museum men.

The vernacular names have been applied to the subspecies, leaving no vernacular name for the species. It does seem useless and pedantic to concoct a vernacular name for every subspecies, for instance, for each of the sixteen subspecies of the Horned Lark. Vernacular names are supposed to originate with the *hoi polloi*, who know nothing of subspecies. There is something unbecoming and ludicrous in a committee of scientists, ornithological taxonomists, exerting themselves to apply a "common" name to something which the common people have not heard of. And when, at the same time, the effort robs a common object of its common name the incongruity is made all the more apparent. The Check-List should have listed species independently, with Latin and vernacular names; subspecies need only the Latin name.

Nomenclature is, doubtless, the chief function of a check-list. But the statement of distribution is scarcely less important and useful. Since the Biological Survey has published so little in recent years on the distribution of North American birds, we had hoped that the new A. O. U. Check-List would be generously complete. But we find that brevity has been the aim. Where a form is limited to an island, its range may be briefly stated. But where the range is well distributed over a continent an official statement of distribution should be in such detail that one might trace, with some degree of satisfaction, its range area.

However, while we make these criticisms we recognize the Check-List as an authoritative nomenclatural guide. It is necessary for us to have such a guide, and we shall follow it to the best of our ability. We have already encountered editorial difficulty in translating the "Crested Flycatcher—*Myiarchus crinitus*"

into the terms of the new edition, since the author wished to discuss the species, and not the subspecies.

In offering criticism we are not unmindful of the great labor and sacrifice in time in producing the new Check-List with its many important changes, in which the Chairman has, doubtless, shared to a greater extent than other members of the Committee. We think our criticisms arise simply from a different viewpoint, and we see no reason for suppressing it. At the same time we feel free to express to the Committee our gratitude for its long-continued effort and final achievement.—T. C. S.

AN INTRODUCTION TO THE LITERATURE OF VERTEBRATE ZOOLOGY BASED CHIEFLY ON THE TITLES IN THE BLACKER LIBRARY OF ZOOLOGY, THE EMMA SHEARER WOOD LIBRARY OF ORNITHOLOGY, THE BIBLIOTHECA OSLERIANA, AND OTHER LIBRARIES OF MCGILL UNIVERSITY, MONTREAL. Compiled and edited by Casey A. Wood, M.D., LL.D. Oxford University Press, London, 1931. Pp. i-xix+1-643, 4to. Price, \$15.

As one opens this massive volume and superficially runs through it the impression is formed that biological science has reached the period of invoicing. The literature has become so extensive and voluminous that without the labors of bibliographers we would find our science in chaos. We are all familiar with the instalments of Dr. Coues' "American Ornithological Bibliography". More recently we have the three volumes of Meisel's "Bibliography of American Natural History, 1769-1865", published five or six years ago.

There are doubtless hundreds of unpublished bibliographies of vertebrate literature in varying degrees of completeness. Many institutions and many individuals have them. But it is only at long intervals that means can be found for the publication of a valuable one.

In the present work nineteen chapters (146 pp.) are in the form of reviews of the literature of vertebrate zoology, with a very fair consideration of ornithological literature. Whoever would undertake to prepare a history of ornithology would find here the field pretty well sketched. The same might, doubtless, be said with reference to the other vertebrate sciences, viz., ichthyology, herpetology, mammalogy, etc.

Although the compiler reviews the subject of textbooks of vertebrate zoology he does not mention the works of Kingsley, Wilder, Newman, and Walter, though some of these are listed in the catalogue. Likewise, some of the best works on avian embryology are left unmentioned, for example, Lillie's "Development of the Chick", and Duval's "Atlas D'Embryologie". A serious omission is made, it seems to us, in making no mention of the work of W. T. Hornaday under the head of "Protection of Animals"; it may be that the compiler has received his impressions in the east where the heat of controversy has rendered a fair appraisal impossible.

The second major part of the book consists of the annotated catalogue of titles on vertebrate zoology which are contained in the libraries of McGill University. This includes books and periodicals, but not titles in periodicals; and, of course, it includes titles in various languages other than English. A great many entries are annotated by the compiler, usually in sufficient detail to be in-

formative. Most, if not all, periodicals devoted to ornithology are listed herein, with cross references to the societies by which they are published. In this connection we should probably call attention to the fact that the annotation concerning the Wilson Ornithological Club is erroneous in giving the date of founding as 1858 (instead of 1888) and in remarking that it has had an existence of "over 70 years". Such an error is easily accounted for in the transcription of figures.

The work is a splendid and useful contribution to the literature of vertebrate zoology. It will be indispensable to institutional libraries and will be very desirable in private libraries where the cost is not prohibitive. Works of this kind are always labors of love, and the scientific world owes its gratitude to the author and publisher.—T. C. S.

CHECK-LIST OF BIRDS OF THE WORLD. Volume I. By James Lee Peters. Harvard University Press, Cambridge, Mass. 1931. Pp. i-xviii+1-345. Price, \$3.50

Previous to this publication the only current world check-list of birds has been Sharpe's "Handlist of the Genera and Species of Birds"; and this is a generation old, while many changes have developed in the science of ornithology during that time. The basic scheme of classification in this work is that of Gadow, and promises to follow closely the arrangement as outlined by Wetmore in the "Proceedings of the United States National Museum", in 1930 (Vol. 76, pp. 1-8). Since the new A. O. U. Check-List is based on the same scheme of classification there will be essential harmony in these two important lists.

The entire work is projected in ten volumes, of which the first is now ready. Volume I, following the new classification, covers the first eighteen orders, through the Falconiformes. Very brief statements of distribution are given for all forms listed. Only Latin names are given; vernacular names are omitted, since no single set of vernacular names would be acceptable in all languages. A work of this kind is a big undertaking, for the publishers as well as for the author. The need of it and the convenience of it are apparent. It is to be hoped that ample support will be given to the publishers in order that succeeding volumes may appear as rapidly as the author can produce them.—T. C. S.

SYSTEMATIC REVISION AND NATURAL HISTORY OF THE AMERICAN SHRIKES (*LANIUS*).

By Alden H. Miller. Univ. Calif. Publ. Zool., Vol. 38, No. 2, pp. 11-242, figs. 1-65. Berkeley, 1931. Price, \$3.

Quantitatively, this paper is about evenly apportioned between taxonomy with distribution (112 pp.) and natural history (108 pp.). Two forms of *Lanius borealis* are recognized, viz., *borealis* and *invictus*, and in this paper specifically called *excubitor*; the former has an eastern and the latter a western range, separated roughly by the Mississippi Valley. The variable species is *L. ludovicianus*, of which this author lists eleven races. Of these eleven, six are recognized by the 1931 A. O. U. Check-List, viz., *ludovicianus*, *migrans*, *excubitorides*, *nelsoni*, *gambeli*, and *anthonyi*. *L. l. mexicanus* and *L. l. grinnelli* do not occur in the Check-list because they are extralimital. *L. l. sonoriensis* and *L. l. nevadensis* are new forms proposed in 1930 by Alden H. Miller. *L. l. mearnsi* is a permanent resident of San Clemente Island, California, and was proposed in 1903 by Robert Ridgway.

The natural history of shrikes is discussed under the following topics: molt, migration, habitats, territory, courtship, nest building, eggs, incubation, growth of young, second and third broods, food, foraging, impaling instinct, digestion, preening and bathing, modes of progression, vocal notes, causes of death, age. A great amount of interesting "life history" material is gathered under these heads. We believe that this second half of the paper, especially, would be of great interest and value to most of our readers, who are primarily concerned with the life and habits of the bird. The illustrations are numerous and consist of halftones from photographs, maps, ideograms, and graphs. A bibliography is appended, but there is no index.—T. C. S.

VERGLEICHENDE UNTERSUCHUNGEN UBER DAS GONADENSYSTEM WEIBLICHER VÖGEL.

Teil I *Columba livia domestica*. By Hans Kummerlöwe. Zeitschr. für Mikr.-anatom. Forschung 21, Bd. 1./3. Heft. 1930. also Teil II *Passer domesticus* (L.). Ibid. Forschung 22. Bd. 1./3. Heft. 1930.

Part I includes a general introduction, a review of the literature, an outline of materials and methods, and the results of personal investigations of the development and anatomy of the female reproductive system in *Columba livia domestica*. The presentation includes a number of excellent figures.

In the introduction Kummerlöwe states that we can separate birds into two groups with respect to bilateral development of the female reproductive system: (1) A large group, which according to our present experience includes the majority of species; in which except for possible exceptions the development of the female reproductive system is unilateral (absent on the right side of the mid-line). (2) A relatively small group in which bilateral development of the ovaries is at least not exceptional.

The results of personal investigations are presented in the form of records involving cases of individual pigeons indicated as A to N inclusive. These varied in age from a six day embryo to an adult eight years old. The six day embryo showed bilateral development of the young ovaries, as did an eight day embryo. Two days after hatching another individual exhibited a rudiment of a right ovary. This rudiment disappears as a macroscopic structure in the older specimens.

Part II includes a general introduction, a review of the literature, a description of materials and methods, and the results of personal research. An excellent bibliography of the subject is appended.

The species reported in Part II is *Passer domesticus* (L.). Specimens A to Z inclusive are described. These range in age from a nine day embryo to the adult female. A rudimentary ovary is present on the right side of the mid-line during the earlier stages, but it tends to disappear as the individual grows older. In the adult female macroscopic evidence of the right ovary is absent, but a few follicles appear in cross-sections.

Both papers discuss late embryonic development as it concerns the female urinogenital system. The development of several structures not mentioned in the review is included. In the opinion of the reviewer these two papers constitute an interesting and an important contribution to the literature of embryology and the literature of ornithology.—F. L. FITZPATRICK.

THE AVIFAUNA OF THE GALAPAGOS ISLANDS. By Harry S. Swarth. Occasional Papers, Calif. Acad. Sci., No. 18. Pp. 1-299, figs. 1-57. San Francisco, 1931. Price, \$3.00.

This critical work deals mainly with the systematic account of the 108 forms of bird life now known to inhabit the Galapagos Islands, and is based on a collection of 5800 skins obtained in 1905-06 by an expedition of the California Academy of Sciences; though in this connection it is necessary to state also that the author made a trip to England in 1930 for the purpose of examining the large collections in the British Museum and the Rothschild Museum at Tring. The leading collections in this country were also examined. Under each species we find, besides the synonymy, a specific description and a discussion of the habitat (local distribution). The first thirty pages are devoted to a philosophical discussion of systematic relationships. A useful bibliography of 138 titles is appended, with a complete index. The illustrations consist of distributional maps, and graphs and outline drawings dealing with the beaks of the numerous birds.

The animal life of the Galapagos Islands has been of general interest ever since Darwin's visit to the Islands in 1835. Perhaps the most interesting feature of Mr. Swarth's paper is the discussion of the new family Geospizidae, proposed two years ago by the same author, which unites several genera of ground finches with the Certhidea, the latter usually being assigned with the Mniotiltidae. Mr. Swarth says that the Certhidea are well distributed throughout the Galapagos Archipeligo, and that, "Island variation affects color and pattern almost entirely, structural differences being very slight." There is not only individual intergradation, but also complete intergradation between Certhidea and Camarhynchus, or small finches, so that the author confesses "an almost total abandonment on my part of any attempt at expressing relationship through names". This is splendid evidence for evolution. This paper is another example of Mr. Swarth's remarkably careful and analytical faunal studies; it is more than a check-list.—T. C. S.

A STUDY OF BRANTA CANADENSIS (LINNAEUS) THE CANADA GOOSE. By P. A. Taverner. Annual Report, 1929, Nat. Mus. of Canada. Pp. 30-40.

Mr. Taverner has made a very careful study of the Canada Goose in its various forms. He concludes that there are five namable forms, in three species and three subspecies, viz.,

Branta canadensis canadensis (Linnaeus), the Common Canada Goose.

Branta canadensis occidentalis (Baird), the Western Canada Goose.

Branta canadensis leucopareia (Brandt), the Lesser Canada Goose.

(=*B. c. hutchinsi* of previous authors)

Branta minima (Ridgway), the Cackling Goose.

Branta hutchinsi (Richardson), Richardson's Goose.

This group of geese has proved to be a very difficult problem for systematists, and probably has not been solved yet.

In the WILSON BULLETIN for 1926 (pp. 181-183) a survey is given of the diverse views of Messrs. Figgins, Swarth, and Brooks on the matter. The new A. O. U. Check-List (4th ed.) has continued to assign subspecific rank to the four forms listed in the Third edition, and has added one more, viz., *leucopareia*. Mr. Taverner points out that the bird now called *leucopareia* is the one which

by many recent authors has been called *hutchinsi*, and that the bird which Richardson described in 1832 as *hutchinsi* is a very small one, and one not now commonly referred to under this name. The latter should be given the vernacular name Richardson's Goose, Mr. Taverner thinks, in order that the vernacular name Hutchins's Goose may be dropped.

If we understand the matter, then, Mr. Taverner's paper is in agreement with the new Check-List (4th ed.) as to the identity of the five forms, but disagrees as to their specific and subspecific rank. These five forms are two large ones, two small ones, and one of intermediate size. The two large ones are *canadensis* and *occidentalis*, the former migrating chiefly through the interior of the continent and the latter being found on the west coast with very restricted migration. The small ones are *minima* and *hutchinsi*, the former migrating along the Pacific Coast and the latter migrating through the Mississippi Valley. The form of intermediate size is *leucopareia* (= *hutchinsi* of previous authors), whose migratory route seems to spread from the Great Lakes to the Pacific Coast. The migratory routes of all these forms converge in the far north, and a more precise knowledge of the boundaries of the breeding ranges may have a definite bearing on their systematic arrangement. Copies of this report, Bulletin No. 67, may be obtained on application to Dr. W. H. Collins, Acting Director, National Museum of Canada, Ottawa, Ontario.—T. C. S.

MEASUREMENTS OF BIRDS. By S. Prentiss Baldwin, Harry C. Oberholser, and Leonard G. Worley. Sci. Publ. Cleveland Mus. Nat. Hist., II, pp. i-ix+1-165, figs 1-151, 1931.

If we have counted correctly this treatise describes 176 different measurements of the bird's external body form and structure. Of the bill alone 51 measurements are described. It is not claimed that all these measurements are essential in the description of any single species, but merely that all of them are useful for one purpose or another in various kinds of birds. Of the 176 measurements, 151 are illustrated by figures, drawn by J. M. Valentine; each figure shows the body (or part) of the bird with dividers in position to indicate the method of taking the measurement. While a great many of these measurements will be seldom used, it is important that when used they be used in a uniform way. The present work seems to be a successful attempt at standardizing bird measurements. To indicate the importance of uniformity let us consider whether a measurement of toe-length includes the claw, or not. Or, in measuring the length of a nuchal hair, should one select the longest, the shortest, or one of medium length? Or, should the length of a feather be taken from its point of emergence from the skin, or from the inferior umbilicus of the extracted feather? Etc, etc. We hardly know what to expect of the splitters now, with this encyclopedia of new measurements at hand. Standardization is, however, a good thing under most circumstances. A bibliography and a very complete index are provided.—T. C. S.

BIRD SANCTUARY SUGGESTIONS. By S. Prentiss Baldwin. Ohio Jr. Sci., XXXI, 1931, pp. 172-176.

Mr. Baldwin gives some practical suggestions in the management of bird sanctuaries, in which work he has had a wide experience.—T. C. S.

SOME NESTING HABITS OF THE CARDINAL. By Jesse M. Shaver and Mary Barry Roberts. Jr. Tenn. Acad. Sci., V, 1930. (Reprint unpagged).

The authors record various detailed observations on the behavior of the two sexes in nest building, and on the position and structure of the nest. One female Cardinal was observed to pick green leaves and use them in nest construction, and the authors believe that this aided in the concealment of the nest. A male once assisted very slightly in shaping the nest, but did not bring any material. It was found that a pair of Cardinals often build five nests, and successfully rear four broods during a season. This probably helps to account for the marked success of the Cardinal in new territory.—T. C. S.

THE BIRDS OF DANE COUNTY, WISCONSIN. Part II. By A. W. Schorger. Trans. Wis. Acad. Sci., Arts, and Lett., XXVI, 1931. Reprint, pp. 1-60.

The first installment of this report was published in 1929 (*op. cit.*, XXIV, 457-499), and treated the water birds, birds of prey, ending with the woodpeckers. The present installment deals with the Passeriformes, including the Tyranni (Flycatchers) and the Oscines, or singing birds. This paper presents a record of the author's extensive field work, and brings together many local notes scattered in the ornithological literature. Two hundred and sixty-five species are listed, including four that are accidental or extirpated.—T. C. S.

THIRD BULLETIN OF THE INTERNATIONAL COMMITTEE FOR BIRD PRESERVATION. By T. Gilbert Pearson. Nat. Ass'n Aud. Soc. 1931. Pp. 1-63.

This Bulletin presents a report of the fourth meeting, at Amsterdam, of this International Committee, together with numerous reports by members of the Committee on the status of bird protection in their respective countries. Twenty portrait illustrations help to make us visually acquainted with the European workers in this field.—T. C. S.

MY NATURE NOOK. By W. S. Blatchley. Nature Pub. Co., Indianapolis, Ind. 1931. Pp. 1-302, pls. I-XV. Price, \$2.00.

Dr. Blatchley is well known as a writer on the natural history of Indiana—his books on the weeds and on the beetles of Indiana are widely used. While his specialty is entomology, he is a naturalist of the old school, which means that he is acquainted with the fauna around him. His latest book, under the title given above, recounts his observations on the natural history of his winter home on the west coast of Florida, in Pinellas County. The book is written in diary form, and while the author rested in the crotch of a great oak tree—his "nature nook". The record starts in 1913 and ends in 1931, but the entries after 1921 are few and far apart. It is very significant that when Dr. Blatchley selected his home site in 1913 he purposely chose a virgin wilderness, not too far from the city markets. Within a very few years his property was surrounded with the bustle and activity of a real estate boom. We are sorry that he did not add a chapter summarizing the changes consequently brought about in the plant and animal life. His story may be read not only for the natural history which it holds, but also for the human interest.—T. C. S.

THE HARRIS'S SPARROW'S EGGS. By George Miksch Sutton. The Carnegie Mag. (Pittsburgh), V, No. 4, Sept., 1931, 105-106.

In this short paper Mr. Sutton gives the first account of the discovery of the eggs of Harris's Sparrow. This discovery was made by a party sent out by the Carnegie Museum and led by Mr. John B. Semple; it included Mr. Sutton, Mr. Olin S. Pettingill, Jr., and Mr. Bert Lloyd. On June 16, 1931, at 8:35 A. M., the first nest was found by Mr. Sutton in the vicinity of Churchill, Manitoba. The nest was located in a mossy hummock surrounded by water, in a spruce woods. The four eggs were fresh, and pale, blue-green in color, spotted and blotched with brown. All told, ten nests were found. The materials collected are to repose with the Carnegie Museum.—T. C. S.

The *Cardinal* for July, 1931 (III, No. 2) contains an article by Carl W. Schlag on "The Struggle for Existence". It deals with a pair of Tufted Titmice which nested in a Bluebird box. After the birds had started incubation they suddenly deserted the nest. Investigation revealed an empty nest and egg shells on the ground. Then the author goes on to say: "While the building of the nest was still in progress, and again after the nest had been deserted, House Wrens (*Troglodytes aedon*) were observed throwing out tufts of material; and on both occasions we drove the wrens away." Of course, this is circumstantial evidence; but it will be of interest to many.

The *Indiana Audubon Year Book* contains a paper by Dr. Amos W. Butler on the history in Indiana of the Carolina Paroquet and the Passenger Pigeon; and a valuable bibliography of early writing is subjoined. Reminiscences of days afield with Fuertes are given by Alden H. Hadley. Dr. Earl Brooks has been giving special attention to the Robin, and in this number of the Year Book he presents a very interesting résumé of miscellaneous information about this species. Some of the questions discussed are, unusual nests, albinism, can the Robin hear a worm?, banding, migration, enemies, slaughter in the south, etc. A number of rare birds for the state are listed in various articles. Fred Hall reports several for the Crawfordsville region. The Blue Grosbeak is reported near Mooresville, while a flock of Lazuli Buntings is reported near Terre Haute. A good report on banding operations shows that the thirteen most active banders in the state have banded, up to December 31, 1930, a total of 18,210 birds of 144 species. Numerous illustrations help to make this a most interesting annual, and larger than its predecessors.

Bird Banding Notes (Aug., 1931, II, No. 4) of the U. S. Biological Survey shows many interesting facts relating to banding. The reports from about 400 banding stations show an investment of \$20,000 in equipment, and an annual expenditure in time and bait of \$44,000. The amounts for time and bait should have been itemized separately, since the reader will suspect that the overwhelming proportion of the amount is for "time" in watching the traps. During the fiscal year ending June 30, 1931, 169,279 birds were banded; 12,329 returns were reported; and 1869 cooperators were licensed. The total number of birds which have been banded in this country up to this time exceeds 900,000.

The July number of the *Florida Naturalist* holds an article by S. A. Grimes on the nesting of many species in the Jacksonville region. One interesting note tells of the cutting of two trees so they would fall against a large cypress tree in which was located a Barred Owl's nest. By means of the smaller trees it was hoped to secure a view of the contents of the nest; but success was not attained. A Blue Jay is also reported to have destroyed the nest of a pair of Blue-gray Gnatcatchers. We need an up-to-date appraisal of the good and the bad of the Blue Jay. The issue for October contains an appreciation of Mr. William Dutcher by Mrs. Kingsmill Marrs. We have never heard or read anything of Mr. Dutcher but the highest of praise. His great work in organizing the National Association of Audubon Societies and directing its policies for twenty years is well known. Too much praise can not be accorded to his memory.

The August number of the *Gull* contains a very useful list of "plant indicators" for the life zones of the San Francisco Bay region. "Bird Habitats" is a topic discussed in the September number. The leading article in October is an analysis of Barn Owl pellets. The *Gull* is a printed four-page leaflet issued by the Audubon Society of the Pacific, 1695 Filbert Street, San Francisco.

The *Raven* is mimeographed on letter-size paper, and issued monthly by the Virginia Society of Ornithology. The June and July numbers contain ornithological notes from localities of the state. The August and September number contains the membership roll and local notes.

The *Migrant* is the quarterly organ of the Tennessee Ornithological Society. The number for September, 1931, contains an article on the sparrows of Tennessee by Dr. George R. Mayfield, and several observations by F. M. Jones on the breeding of the Parula Warbler in the mountains of eastern Tennessee.

Inland Bird Banding News (III, No. 3, Sept., 1931) indicates that an effort has been made to have a line printed on state hunting licenses requesting that all banded birds killed be reported to the Biological Survey at Washington. Many states received the idea favorably, others want the report to go first to the State Fish and Game Department, to be forwarded to Washington. Possibly the latter desire arises from curiosity. An effort is also being made to have ammunition manufacturers place in each box of shells a similar request that all banded birds taken be reported to the Biological Survey.

News from the Bird Banders (VI, No. 2, July, 1931) contains a remarkably clear and forceful editorial on the relation of the Western Bird Banding Association to the U. S. Biological Survey, and to the latter's campaign of exterminatory poisoning. Its conclusion is that "we have no choice but vigorously to condemn the ten million dollar program and to strain every effort, corporately and individually, through our correspondents, our congressmen, our local influence and the societies to which we belong to bring about a fundamental reorganization of the methods, plans, and viewpoint of the Survey in respect to the branch in question."