

## ORNITHOLOGICAL LITERATURE

STUDIES IN THE LIFE HISTORY OF THE SONG SPARROW. I. A POPULATION STUDY OF THE SONG SPARROW. By Margaret Morse Nice. Trans. Linn. Soc. N. Y., IV, April, 1937. Pp. i-vi+1-247. Pls. I-III. Charts I-XVIII. Maps 1-14. Tables I-XXXIII. Price, \$1.50.

This is Volume I of a monograph based on eight years (1928-1936) of intensive study of *Melospiza melodia*, mostly on an area of about forty acres of Olentangy River flood plain adjacent to the author's former home at Columbus, Ohio. Its scope ranges from statistical presentation of breeding data to critical evaluation of population theory and includes significant discussions of such phases of life history as migration, territorialism, and ecological relationships. Volume II, it is indicated, will be devoted more to details of Song Sparrow behavior, with special regard to activities associated with reproduction.

The principal research technique used was that of field observation, supplemented by color banding. Little experimentation, and no collecting, was done, as it was desired to determine as accurately as possible "What actually happens in a population of wild birds."

One is impressed by the tremendous amount of data that Mrs. Nice has somehow found time to gather, practically through her own efforts alone. As might be expected of a person of her linguistic accomplishments, she has drawn from European, as well as American, ornithological literature. Of the non-English references in the 14-page bibliography, those having German and Dutch titles seem to have been most freely cited.

The subject matter, for all of its bulk and intrinsic complexity, has been clearly handled. Mrs. Nice has expressed the hope that the Song Sparrow work might stimulate further study, and it should do just that. The chapter summaries and the eight pages of index should contribute to this end, but the chief strength of the writing, in my estimation, lies in its essential simplicity of diction, its solidity of background, the trends of thought it reveals, and the questions it raises. Not only has it been the author's evident intention to supply interested readers with the basic facts and up-to-date interpretation of those facts, but she has called attention to a great many of the important hiatuses that still exist in our knowledge of the life history and ecology of vertebrates.—PAUL L. ERRINGTON.

OBSERVATIONS ON THE BIRDS OF WEST VIRGINIA. By Alexander Wetmore. Proceedings of the United States National Museum, Vol. 84, No. 3021. Washington, 1937. Pp. 401-441.

To those who are somewhat familiar with the State's avifauna Dr. Wetmore's paper will hold fewer surprises than to those who have not recognized West Virginia as an outstanding meeting place for many bird species and races. For local students, however, its value is apparent when one finds here listed the first race ever described whose type locality is in West Virginia; no less than nine races recorded from the State for the first time; and the first recorded specimens of at least one species. The present list treats 142 species and races.

Dr. Wetmore directed the Smithsonian Institution's investigation of West Virginia birds during the spring, summer, and autumn of 1936. The party's itinerary was so planned that nearly all major faunal divisions of the State were visited, the work extending from the Ohio River region in the southwestern portion of the

state, up through the rugged hills that lie west of the Allegheny ridges, and eastward to some of the highest mountain areas. Additional data at hand were used, and the specimens already in the National Museum were taken into account. No collections are recorded from that portion of the state which lies in the Shenandoah Valley, nor was any work done in the interesting region comprising parts of Preston, Grant, Mineral, and Tucker Counties which we have come to call the "Allegheny Tableland".

Most surprising, perhaps, of Dr. Wetmore's findings is that Ruffed Grouse in West Virginia are referable to the Canada race, *Bonasa umbellus togata*. This seems to hold true also for the grouse of western Pennsylvania, Virginia, Tennessee, and northern Georgia. In view of the range given for *B. u. umbellus*, the typical form might well be looked for in the extreme eastern part of the state.

Other races recorded from West Virginia for the first time are Southern Crow (*C. b. paulus*), Ohio House Wren (*T. a. baldwini*), Southern Winter Wren (*N. h. pullus*), Southern Robin (*T. m. achrusterus*), Northern Yellow-throat (*G. t. brachidactyla*), Giant Red-wing (*A. p. arctolegus*), Labrador Savannah Sparrow (*P. s. labradorius*), and Mississippi Song Sparrow (*M. m. euphonia*). Illuminating data on the recently described Southern Creeper (*C. f. nigrescens*) and the Northern Carolina Chickadee (*P. c. extimus*) are also included. Specimens of Lapland Longspur were taken, this bird having been known to the state previously only through a sight record.

Concerning the Mississippi Song Sparrow, Dr. Wetmore has determined that the type specimen of the previously named *M. m. beata* Bangs is really a specimen of the Dakota Song Sparrow (*M. m. juddi* Bishop). This leaves *beata* Bangs as a synonym for *juddi*, so *beata* is replaced by *euphonia* Wetmore, the type locality of the race being Cranberry Glades, Pocahontas County, West Virginia.

Eastern bird students will find interest in Dr. Wetmore's belief that the Golden Eagle may still nest in West Virginia. There is a seemingly remarkable coincidence in the collection by the Smithsonian group of another Swainson's Warbler, a previous specimen having been taken by P. C. Bibbee in Monongalia County (Bulletin 258, West Va. Agr. Exp. Station, p. 34).

All breeding birds of the species in West Virginia are considered by Dr. Wetmore to be Cairn's race (*D. c. cairnsi*) of the Black-throated Blue Warbler. The present writer ventures the opinion that individuals of the typical form, *D. c. caerulescens* will be found breeding in the Allegheny Tableland territory in extreme northern West Virginia.

It might be noted that in giving Wardensville, Hardy County, as the northern known limit in West Virginia for Black Vultures, Dr. Wetmore overlooks W. H. Ball's record for Harper's Ferry (*Auk*, XLVIII, Oct., 1931, p. 599). In speaking of the Eastern Purple Finch this paper represents observations on the species made at Cranberry Glades, Pocahontas County, as a considerable southern extension of its summer range. Rev. E. A. Brooks has recorded (List of Birds Found in West Virginia, Bulletin No. 12, W. Va. State Board of Agr., Charleston, W. Va., 1909) the species in summer from The Pines, Randolph County, and from Pocahontas County, near Osceola. He also quotes Thaddeus Surber's record of the summer occurrence of the species in Greenbrier County, farther south than the Cranberry Glades area. Maurice Brooks has noted previously the summer occurrence of the birds at Cranberry Glades (WILSON BULLETIN, XLII, Dec., 1930, p.

249). Throughout Dr. Wetmore's paper Kate's Mountain, where considerable collecting was done, is consistently misspelled.

When it is possible to record from an eastern state nine races of birds previously unknown, or only recently known, from the area, further emphasis is given to the need of extensive field work in West Virginia. Dr. Wetmore's collections, taken together with the excellent work on West Virginia avifauna being carried on by Dr. George M. Sutton, Karl Haller, and others, will make the work of the compiler much easier, and will add richness to the next check-list of West Virginia birds.—MAURICE BROOKS.

A SURVEY OF THE RESIDENT GAME AND FURBEARERS OF MISSOURI. By Rudolf Bennett, Ph. D., and Werner O. Nagel, A. M. Univ. Mo. Studies, XII, No. 2, April, 1937. Pp. 1-215. 8 figs. 10 maps. Price, \$1.25.

The authors of this survey have produced a report which may serve as a model for similar work in other states. The plan of the work includes some general statements as an introduction, followed by chapter discussions of selected game birds, game mammals, furbearers, and predators. Approximately half of the report is devoted to game birds. The species included are the Bob-white, Ruffed Grouse, Prairie Chicken, Ring-necked Pheasant, Wild Turkey, Mourning Dove, and a few others merely mentioned.

The Ruffed Grouse population in Missouri is reported to consist of about 100 birds. The population of Prairie Chickens is estimated at about 5,000 (as contrasted with 12,500 in 1907). The southern half of the state is credited with a population of 3,585 Wild Turkeys, which, on the whole, is decreasing. Missouri is one of the states which counts the Mourning Dove a game bird. This again brings to our mind the question of how a game bird is defined. Is it defined by its edibility? Is it defined by its abundance? Is it defined by the skill required in shooting it? Or is it merely a traditional term without exact meaning, except in a legal sense? In some not very clear way the term "game" bird is associated with the idea of sport. And, similarly, we usually think of sport as a test of skill and prowess. The estimated population of Mourning Doves in the State of Missouri in the fall of 1934 is 3,000,000. Subtracting 30 per cent for loss by predators, weather, etc. (as was done in the quail estimate, which may or may not be justified in this case) we would have a spring population of 2,100,000 birds to compare with the estimate of 1,065,000 Bob-whites for the spring of 1935. These figures would indicate about twice as many Mourning Doves as quail in Missouri. This puts the Mourning Dove in a worse position than we had supposed it to be. The Bob-white, with a higher reproductive capacity than the Mourning Dove, is barely holding a stationary population in Missouri. What can be expected of the Mourning Dove, with a lower reproductive capacity, granting two or three broods per season, and a much longer open season? The authors' comment on this is, "that any amount of dove shooting likely to occur in Missouri for the next few years will not endanger the breeding reserve". Of course, during Missouri's open season they have not only their own birds, but those from the northern states as well; unless their breeding population moves southward, in which case the hunted population would all be northern. To work out this problem one would need the full facts of migration. It seems clear enough that while any state may properly regulate its own resident game, the problem of migratory species can only be solved by considering its entire range.

The pages of this report which deal with mammals are as complete and thoughtful as those on birds. The entire case of the proper handling of our wild life is helped by just such contributions as the one under discussion. This is a fact-finding paper, and as such is entitled to serious consideration by interested students in any state. The last five years will no doubt mark the beginning of a renaissance in wild life management in this country, and work of the kind here reviewed will stand as a landmark in its history.—T. C. S.

HANDBUCH DER DEUTSCHEN VOGELKUNDE. Volume I: Passeres. By Gunther Niethammer. Pp. i-xxiv+1-474. Figs. 69 and Col. Pl. I. Published by the Akademische Verlagsgesellschaft M. B. H. Leipzig, 1937. Price, 15 RM.

As the title indicates this is a handbook of German ornithology, the present, first, volume dealing wholly with the passerine birds. While it is written in the German language, the English alphabet is used, thus facilitating translation for us. A few more than two hundred forms are treated, each under the subheads: description; field marks, including song; general distribution; distribution in Germany; migrations; habitat; breeding habits; food; parasites. The Europeans have given much more attention to parasites than Americans have done, and consequently a good list of various parasites can be given for practically every bird species treated. The paragraph on breeding habits (fortflanzung) is very fully presented, including the facts concerning the nest, eggs, care of the brood, incubation period, and nestling period. We have enjoyed going through this volume not only for the information gained by comparison of the nomenclature and other descriptions with our own, but we have found it a most profitable exercise in strengthening our reading ability in the German language. And for the same reasons we believe that many an American ornithologist would find this work a very useful addition to his library.—T. C. S.

BIRDS COLLECTED BY THE CHILDS FRICK EXPEDITION TO ETHIOPIA AND KENYA COLONY. By Herbert Friedmann. U. S. Nat. Mus. Bull. 153, Pt. 2, Passeres. xii + 506 pp., 14 pl. (1 col.), 30 figs. Washington, 1937. Price, 70 cents.

By our unofficial count this work treats of 295 species and 58 additional subspecies. Part 1, published in 1930, contained about the same, making a total of 613 forms. It is based primarily upon some 5,200 specimens collected by the late Dr. E. A. Mearns. The treatment consists chiefly of discussions of the status of the forms examined with new details of plumage, etc. The general reader will find frequent notes on habits. Common names are mentioned for many of the birds but they are not placed in the headings, except for families, nor indexed. It is always interesting to examine an account of a distant region. In this second part of the report, the weaver-birds are the most numerous family with fifty-eight nominal species. The warblers (Sylviidae), thrushes, and shrikes are next in order, with subspecies decidedly most numerous in the warblers. In the weaver-birds we find four species of *Passer*, of which *P. griseus swainsoni* in Ethiopia "takes the place of *P. domesticus* in a general way". The text figures are mostly distributional maps and the plates mostly photos of habitats. A brief discussion (pp. 3-15) of faunal areas is included. The author states that a report on the birds of the Roosevelt African expedition is in manuscript.—O. A. S.

CONCORD RIVER. SELECTIONS FROM THE JOURNALS OF WILLIAM BREWSTER. Edited by Smith O. Dexter. Pp. i-x+1-259. Harvard University Press, Cambridge, Mass. 1937. Price, \$3.50.

Concord River is a companion for October Farm, which was published last year. The notes in Concord River begin with 1879 and extend to 1918, though the bulk of those selected were written in the 90's. This is a larger book than October Farm, and it seems to us that it contains more bird material; though we do not find it any more interesting. Concord River is enhanced, however, by having a detailed map of the October Farm region. Many of the bird notes scattered in this diary have quotation value, such as, for instance, the whisper song of the Brown Thrasher (p. 37), the flight songs of the Flicker and the Pine Warbler (p. 196), the eating of petals of apple blossoms by the Cedar Waxwing (p. 188), and many others. Brewster also witnessed the very extraordinary incident of a male Downy Woodpecker attacking and killing a female Downy. On several occasions, Brewster relates, he saw a hawk or a shrike capture its prey, and was so vexed that he was tempted to shoot the predator on the spot, but refrained. The illustrations are for those who like that kind.—T. C. S.

FLIGHT SPEED OF BIRDS. By May Thatcher Cooke. Circ. 428 U. S. Dept. Agric., May, 1937. Pp. 1-13. Price, 5 cents.

A useful brief discussion of bird flight as affected by body weight, shape of wings, and wind currents, together with a very full list of birds with determined flight speed. A good bibliography of eighty-six titles is also given.—T. C. S.

FLUCTUATIONS IN NUMBERS OF RUFFED GROUSE *BONASA UMBELLUS* (Linne) with Special Reference to Ontario. By C. H. Douglas Clarke. Univ. Toronto Biol. Studies No. 41. Univ. Toronto Press, 1936. Pp. 1-118.

A paper which discusses especially population numbers, life history, cycles, parasites and diseases in the Ruffed Grouse species.—T. C. S.

VERTEBRATE ANIMALS OF POINT LOBOS RESERVE, 1934-35. By Joseph Grinnell and Jean M. Linsdale. Pub. 481 Carnegie Inst. of Washington. Washington, 1936. Pp. i-vi+1-159. Pls. 1-39. Fig. 1.

The Point Lobos Reserve is a state park located near the middle of the California coast line. The body of this report includes annotated lists of amphibians (five in number), reptiles (five in number), birds (147), and mammals (19), which were found in the park during the period of study. In their listing of species the authors use the binomial nomenclature, since no specimens were collected upon which to base subspecific determination. The authors advocate the administration of this park in such a way as to preserve its natural conditions intact, and a strong plea is made for this policy.—T. C. S.

NATURAL HYBRIDIZATION AND GENETICS OF FLICKERS (*COLAPTES*). By Alan Deakin. Amer. Nat., LXX, Nov.-Dec., 1936, pp. 585-590.

A study of the genetics based on two families. We have long wished to know something about the chromosome count in such closely related forms as the flickers, and especially in the hybrids.—T. C. S.

The *Chat* is a new mimeographed periodical issued by the North Carolina Bird Club, and published at Raleigh, N. C., at \$1.00 per year. The editor is John H. Grey, Jr., 1719 Park Drive. In the March number (I, No. 1, 1937) one writer tells of having seen a Ruby-crowned Kinglet with a yellow crown patch instead of a ruby-colored one. This variation in color may be a local strain, since very little has been written about such a color variation in the general literature. The April number (I, No. 2) has an important article by C. S. Brimley on "Additions, Corrections to North Carolina Birds" as developed since the "Birds of North Carolina" was published in 1918. There is also a report of the nesting in North Carolina of the Prairie Horned Lark. The May-June number (I, Nos. 3-4) prints an article by Editor Grey on birds to be seen on the Atlantic Ocean. This number also reports 101 charter members of the newly organized society. The July-August number (I, Nos. 5-6) presents an article by Dr. T. Gilbert Pearson reviewing the present status of bird protection in South and Central American countries. Another writer records the decrease in numbers of Purple Martins, and believes the cause to be the use of a poisonous spray used by the Brazilian coffee growers. Another paper on the breeding habits of the Least Tern reports many eggs on the North Carolina coast as early as May 18.

The *Nebraska Bird Review* for April (1937, V, No. 2) carries a suggestive article by Prof. O. A. Stevens on bird banding, and also a very complete biography of the late Professor Lawrence Bruner, with a portrait and list of published works. The July number (1937, No. 3) presents another instalment of Professor Swenk's history of Nebraska ornithology. This instalment deals with the several small expeditions up the Missouri River which followed the one by Lewis and Clark. Previous instalments covered fossil birds (April, 1933), aboriginal man and bird life (October, 1934), early Spanish explorations (April, 1935), the Lewis and Clark expedition (July, 1935).

The *Redstart* for April (1937, IV, No. 7) presents an article by Dr. George M. Sutton on available problems in West Virginia ornithology, which may be of interest to others also. We note with appreciation the very nice compliment from the editor of the *Redstart*. In the May number Mr. Maurice G. Brooks calls attention to a list of about seventeen species of birds which might be found nesting in Preston County. Such suggestions promote ornithology by stimulating those who have the opportunity to investigate.

*News from the Bird Banders* for August (XII, No. 3, 1937) lists the banders who participated in the work of the W. B. B. A. for 1936. It shows that 37,951 birds were banded by 122 banders. This issue reproduces a comment from the WILSON BULLETIN, evidently with approval.

The *Inland Bird Banding News* for June (1937, IX, No. 2) gives a historical account of the campaign of gull banding in the Great Lakes region. M. J. Magee reports having banded 28,424 birds (3,141 of which were Evening Grosbeaks) during the fifteen years (to May 28, 1937) of his banding activities.

The *Game Research News Letter* for August, 1936, issued at Madison, Wisconsin, carries a supplement which gives very full information concerning the game management training work as offered at the University of Wisconsin under Professor Aldo Leopold. The August, 1937, number introduces the four leading

graduate students of the department, stating their present employment; and also enumerates six of the research projects now being worked on.

The *Chickadee* for December, 1936 (VI, No. 1) contains a composite list of the birds found in Worcester County during the year 1936.

The *Prothonotary* for June, 1937 (III, No. 6) includes a composite one-day list of 184 species of birds. There is also an eye-witness account of the way young Wood Ducks leave the nest. In this case, at least, the young birds tumbled out of the nest and fell to the ground without any assistance from the parents. The July number is devoted mainly to nesting records. The August number is devoted to brief records.

The *Migrant* for June, 1936, reports two colonies of Cliff Swallows in Tennessee. One colony is on the Cumberland River at Dover. The nests were cemented to the concrete wall of a dam. Later nests were added below the older ones. One nest had a bottle-neck entrance which "hung down for more than a foot". Another colony was found on the Tennessee River thirteen miles below (north of) Savannah, Tenn. These nests were attached to a natural rock cliff. The authors suggest that these colonies are the "most southerly breeding sites of this species at the present time". Mr. Weakly continues the topic in the September *Migrant* and reports several other small colonies along the Cumberland River in Tennessee and Kentucky; and also along the Tennessee River, one of these being in northern Alabama. Two of the mud nests were occupied by snakes, each one of which contained an adult swallow. The December number (VII, No. 4) has an article by Mr. Coffey on the Chimney Swift migration at Memphis, which describes another banding project on a large scale. In the number for June (VIII, No. 2) Mr. Ganier records a list of sixty-nine species of birds for the Pickett Forest, wilderness area in the northeastern part of the state.

The *Cardinal* for July (IV, No. 6, 1937) contains a paper on the breeding birds of unglaciated Ohio, by Lawrence E. Hicks, and notes from West Virginia, by Maurice G. Brooks, as well as many short notes and reviews.

The *Raven* for April-May (1937, VIII, Nos. 4-5) contains a report of the Seventh Annual Meeting of the Virginia Society of Ornithology, and an intimate account of the flight song of the Woodcock. The June number (VIII, No. 6) has for its leading article a description, by Dr. J. J. Murray, of the birds found on Cobb's Island on a June visit.

The *Journal of Minnesota Ornithology* is published by the T. S. Roberts Ornithology Club as an annual. The number for April, 1937 (I, No. 2), contains an article by Cyril J. Rosenberger summarizing noteworthy discoveries of birds during 1936. A Magpie invasion is described by J. P. Jensen. There is also a short paper reporting the Whooping Crane near Wolsey, S. D., on July 30, 1936.

The *Flicker* is published quarterly by the Minnesota Bird Club. Beginning with the March number for 1937 (IX, No. 1) it appears in printed form, with an attractive cover design. This number gives a ten-year list of winter birds in Minnesota as compiled from the literature by E. D. Swedenborg. The May number (IX, No. 2) contains a list of the summer birds of Cook County, also by Mr. Swedenborg. The *Flicker* is edited by George N. Rysgaard.

The *Wildlife Review* for July (No. 9, 1937) contains just a hundred abstracts of papers dealing with wildlife, and classified under the usual headings.

The *Bird Calendar of the Cleveland Bird Club* for April and May (July, 1937) gives a list of unusual birds observed locally during the spring; and also a list of spring arrival dates.

"Cleveland's Nature Trails" is the title of a booklet prepared by Dr. Arthur B. Williams and published by the *Cleveland Press*. These pages give a descriptive account of a number of natural history aspects of the Cleveland area, for example, the park areas, birds, trees, woodland flowers, mammals, plant growth, etc. Besides being of local interest, this booklet is very suggestive to other communities which might wish to plan something of a similar kind. A copy may be had by sending ten cents to the Cleveland Press, Public Service Bureau, Cleveland, Ohio.

The *Bulletin of the Schools* of the University of the State of New York uses one issue each year as a Bird Day number, and this year it was the March number. In it we find twenty pages of popular reading matter on bird life, including a paper on the movements of birds by Dr. Dayton Stoner.

The Outdoor Nature Club, of Houston, Texas, has issued a 4-page spring (1937) *Bulletin*. Further information concerning it may be secured by writing Mr. Chas. B. Boone, 2524 Cragmont St., Houston, Texas.

"Fuertes and Audubon, a Comparison of the work and personalities of two of the World's Greatest Bird Artists" is the title of an article by Dr. Frank M. Chapman in *Natural History* for March, 1937, a reprint of which was kindly sent us by the author.

Donald J. Boror has prepared a mimeographed report on the migration dates for the birds of central Ohio, issued in March, 1937.

The *Bluebird* is the new name for the News Letter of the Audubon Society of Missouri, beginning in February of this year. The February number (IV, No. 2, 1937) has a good article on the winter food of birds. In the March number (IV, No. 3) a writer tells of a House Wren's nest built on the rear axle of an automobile. When the car was used the nest and mother bird went along, being twice gone all day. The five eggs were successfully hatched. In the June number (IV, No. 6) the Editor offers some comments on the growing use of poisoned bait for the destruction of certain animals which come under human ban. The question is raised whether these burrowing rodents may not perform some beneficial service in soil development. Mankind has made some costly blunders in draining away the surface waters and loosening the top soil—all due to haste and ignorance. It may later be discovered that much of the poisoning work is in the same category. This periodical has been running a good deal of discussion on the extent to which birds eat butterflies. Other discussion considers the good and bad points of the English Sparrow, and of the grackle and bluejay (mostly bad points in these two cases). In the August number (IV, No. 8) Mr. G. E. Moore advocates the inclusion of introduced wild species in our daily lists.