

ORNITHOLOGICAL LITERATURE

THE AMERICAN WOODCOCK. By Olin Sewall Pettingill, Jr. Vol. 9, No. 2. *Memoirs Boston Soc. Nat. Hist.* Boston (234 Berkeley St.), 1936. Pp. 168-391, Pls. 13-21. Price, \$3.50, paper.

Dr. Pettingill's conclusion of his work on the Woodcock now adds a most important monograph to our ornithological literature. One of the directions of progress now open in general is the collection of scattered facts and their compilation into monographs of single species, with such factual contribution as the author may be prepared to make. Being a monograph this paper discusses every aspect of the species, so far as we can judge.

There have been a number of debated points concerning certain habits of the Woodcock. In the past some have thought that the call note of the Woodcock has been made by the voice apparatus; while others have claimed that it is made mechanically by the wing or other structures. Pettingill concludes that sounds are made in both ways. The author discounts the claim that the Woodcock carries the young away in the event of danger. The peculiar anatomy of the Woodcock bill, which adapts it as a probing and prehensile organ, is described. The structure, distribution, breeding habits, and ecological relations are fully considered. An extensive bibliography is given. Ten plates of photographs and a colored frontispiece are the illustrations. Only one thousand copies of this work were printed, which, we trust, will be sufficient to meet all demands.—T.C.S.

THE NORTHERN BOB-WHITE'S WINTER TERRITORY. By Paul L. Errington and F. N. Hamerstrom, Jr. *Research Bull. No. 201, Ia. Agric. Exp. Sta. and Ia. State Coll.* Pp. 301-443. Ames, Iowa, 1936.

While this report deals primarily with the problems of game management, yet it is based on a native species and contains a considerable amount of life history material. The report is based upon studies in Wisconsin and Iowa, and is limited to the winter season, which is the critical season for this species in the northern part of its range.

Part I of the bulletin deals chiefly with field methods. It has been shown that a given Bob-white cover has a fixed "carrying capacity", meaning that any given area will support a definitely limited number of birds, and any number over this becomes an excess population subject to predation and starvation. The carrying capacity must be determined by the census method. One of the important contributions in this paper is the discussion of census technique on winter Bob-white populations. In the main there are two census methods, one called the "track count", the other called the "flush count". Of these the authors find the method of counting the number in a covey by tracks in the snow to be the most serviceable and reliable. In all methods of census-taking much skill may be developed; in fact it seems to require the highest type of woodcraft and detective skill. This discussion is instructive and entertaining.

Part II is a lengthy presentation of fundamental data. Part III is entitled "Analysis of Carrying Capacity", while Part IV deals with management. The conception of carrying capacity is a truly important one. And there probably is a limited carrying capacity for every kind of living thing on the earth—not alone for game birds. It is embodied in the idea of the struggle for existence. In the older biological phraseology the individuals in an excess population are presented

with the alternatives of surviving, perishing, or emigrating. The present day study of game birds is prone to leave out of consideration the latter alternative. And the practical argument is that if these excess populations are to die anyway (because the land carrying capacity will not support them) they may as well be utilized for sport. Of course, if the Bob-white population on a given tract is kept down to the land carrying capacity by shooting the excess, there will be no necessity for emigration, and there will probably be little, if any. This program is all right for the particular tract, but makes no provision for increasing the population beyond that tract.

In this study attention is focused on the Bob-white as a game bird, even though it may be an impartial study from that point of view. The study of the winter life of the Bob-white is probably not the place to expatiate on the many virtues of this bird. But the point is that this report will be used as justification for at least controlled shooting of the Bob-white. Reverting, it seems to us that any program for the management and controlled hunting of the Bob-white should make ample provision for areas on which these birds may propagate beyond the carrying capacity of the land, thus making range extension possible. In this way the larger area, such as county or state, may derive some benefit from the state-supported game management program.

There is another angle to the game management program. Many of the plants which furnish a splendid food supply for the Bob-white also furnish allergens (in the form of wind-borne pollen) to be wafted hither and yon for miles, to the great suffering of allergic patients. Such plants, for instance, as the ragweeds (*Ambrosia*), hemp (*Canabis*), and lamb's quarters (*Chenopodium*), are among the numerous causes of hay fever, asthma, and other allergic diseases of the human body. Many sufferers from these allergies will prefer to have such plants eradicated, rather than encouraged for the immediate benefit of Bob-white or ultimate pleasure of the hunter. This line of thought only emphasizes the web of life, because it may be pointed out that sick people make a living for the doctors and raising food for the Bob-white adds to the income of the farmers.—T. C. S.

ETHICS OF EGG-COLLECTING. By Eric Parker. Published by The Field, London, E. C. 4. Not dated, but "Foreword" dated April 30, 1935. Pp. 1-20+i-vi. Price, 5/-net.

This book has been sent to us by an American with the request that it be reviewed. We do not know how much of a problem egg-collecting may be in this country. We had supposed that it had been brought under sufficient control. We had merely taken it for granted that the craze for egg-collecting by the school boys in the 80's and 90's had been eliminated by the process of education. The widespread prevalence of this hobby was, in those years, doubtless more or less of a menace even to the common species. But, nowadays it is probable that the danger, if any, lies in the collection of the eggs of rare species. This danger is probably greatly increased by an existing market. It may become necessary to prohibit the importation and commerce in the eggs of wild birds, as is now done in some countries for feathers.

However, reverting to the book under discussion we find that it is a record of a local controversy, rather than a presentation of the general problem. The sportsmen's magazine which sponsored the controversy may be suspected of being motivated by the complaints of a wealthy clientele against the trespassing

nuisance of egg-collectors. So, to the outsider, there seems to be some of the spirit of the "pot which calls the kettle black". The "keepers [of the private estates] were on the lookout for all trespassing egg-collectors", who were seeking the eggs of "green-shanks, crested tits, and dotterels". But the same keepers were accused of shooting all the "hobbies" and other hawks, because of their supposed depredations on the game of the premises.

Nevertheless, the letters brought out evidence of the audacity of certain egg-collectors. It was reported that a certain collector visited the coastal cliffs in search of "erythristic" guillemot eggs. Finding none he swept all the existing eggs into the sea in order to induce the birds to lay again, with the possibility of obtaining the desired variation.

An interesting question raised during the debate was whether "it is more of a crime to take eggs from a peregrine nest than to take the young birds for falconry purposes". The egg protectors devised the scheme of marking eggs with an indelible pencil to make them worthless to collectors. It was intimated that in reprisal the collectors would pin-prick such marked peregrine eggs to prevent their development for the benefit of the falconers. Several persons even defended egg-collecting as a field sport pure and simple.

On the other hand, a good deal of emotionalism and false reasoning was indulged in by both sides. At the conclusion of the discussion one can hardly decide that a clear-cut verdict has been reached, at least on the basis of the arguments. However, it is clear that the egg-collectors are in the minority, and are likely to lose all privileges when it becomes evident that they are exceeding the bounds of propriety. The problem will be vastly simplified with the elimination of commercialism.—T. C. S.

VANISHED HOSTS. By E. D. Nauman. The Palimpsest, XVI, No. 6, June, 1935. Pp. 169-173.

In this article the late Mr. Nauman says: "The rule with wild pigeons was to lay only two eggs at a nesting, but to nest three or four times a year." In another place he says: "They would form in great 'windrows' of pigeons across the sky from horizon to horizon sometimes in lines not so long, but always at right angles with the direction in which they were flying. Between these windrows of pigeons a strip of sky could usually be seen. The flocks were frequently so dense they obscured the sun like passing clouds. When the weather was calm, the pigeons maintained a very nearly level and uniform elevation throughout their lines, but in windy weather the lines would twist and writhe like huge serpents in the sky. At such times one could best see their remarkable colors scintillating in the sunshine." This description is of the birds as migrants in southeastern Iowa, Keokuk County. No nesting colony in Iowa was known to Mr. Nauman. With this article there is a reproduction of Sawyer's painting of the Passenger Pigeon. So far as we have traced this portrait it appeared first in the April-June number of the *Iowa Conservation* for 1923 (VII, No. 2); next in *Wildways* for April-June, 1928 (VIII, No. 2); next in *Iowa Bird Life* for December, 1933 (III, No. 4); then in the magazine article here reviewed. This Sawyer portrait was probably not produced until after the publication of the list of Passenger Pigeon portraits (*Sci. Month.*, May, 1921), at any rate it is not included.—T. C. S.

STUDIES ON THE BANK SWALLOW *RIPARIA RIPARIA RIPARIA* (Linnaeus) IN THE ONEIDA LAKE REGION. By Dayton Stoner. *Roosevelt Wild Life Annals*, Vol. 4, No. 2, May, 1936. Pp. 126-233.

Some of the New York habitats of the Bank Swallow, as shown in the photographs, could easily be mistaken for the eroded banks of the Missouri River or numerous cut-off lakes, where the same species breeds in great numbers. In the study of weight some comparisons are made of the same bird on different dates; and between individuals of the same species in New York and Iowa. An extensive study of body temperature was made, and it is reported that the average temperature of 603 Bank Swallows was 107.1° F. The temperature of the burrow in which young were reared was found to vary from 51° F. to 87° F., and seemed to vary with the temperature of the outside air, depth of burrow, etc. The digging of the nest hole, nest building, egg and egg-laying, behavior of young birds, food and feeding of adults and young, are among the topics discussed. The subject of predators and parasites is also discussed. The paper contains a large amount of original data.—T. C. S.

THE AUDUBON YEARBOOK, 1936. Published by the Indiana Audubon Society. Vol. IX, pp. 1-56. Price \$1.00 (Mr. Harold Zimmerman, 915 W. Gilbert St., Muncie).

This Yearbook is dedicated to George S. Clifford, whose biography is written by Dr. A. W. Butler. In addition this number contains several other sketches of other Indiana bird lovers, namely, Mrs. Etta S. Wilson, Miss Mary Louise Carmichael, and Mr. E. B. Williamson, noted authority on dragon-flies. Dr. Butler also gives a review of the Black Vulture records in Indiana. By far the most arresting fact in the booklet is the brief mention of the death of a lad in Indianapolis who, in befriending a bird, was pushed into a river by a bully. This is a new phase of the conservation problem, and we would like very much to know what the public authorities do under the circumstances. We understand that the Indiana Audubon Society raised a small fund and is planning some sort of a memorial. Something of a permanent and public nature might help to convert many a boy to the finer opportunities of life. There might be a possibility of interest outside of Indiana in a matter of this kind.—T. C. S.

FOOD HABITS OF COMMON HAWKS. By W. L. McAtee. Circ. 370, U. S. Dept. Agric. 1935. Pp. 1-36. Price, 5 cents.

Consisting of an introduction with general remarks on the habits of hawks in general, and a body of specific discussions of range, recognition marks, and food habits.—T. C. S.

THE CRESTED MYNAH, OR CHINESE STARLING, IN THE PACIFIC NORTHWEST. By Theo. H. Scheffer and Clarence Cottam. *Tech. Bull.* 467, U. S. Dept. Agric. 1935. Pp. 1-27. Price, 5 cents.

The report given herein is a most interesting one, concerning the appearance of a new and picturesque bird in the Pacific Coast avifauna. This Chinese Starling is said to be as offensive toward native birds as the European Starling is on the eastern part of the continent. Thirty-five titles are listed in the bibliography, and most of these relate to the Chinese Starling on the West Coast.—T. C. S.

MORE SONGS OF WILD BIRDS. By Albert R. Brand. Published by Thomas Nelson & Sons, 381 Fourth Ave., New York, N. Y. 1936. Pp. 1-116. 3 records. Price, \$2.50.

We have here a second instalment of the previous "Songs of Wild Birds", published in 1934. (For review of the latter see WILSON BULLETIN for June, 1934, p. 129). The present book consists of four features, viz.: Two chapters of general discussion of bird song, covering nearly half of the pages of the book; detailed information about each of the birds whose songs are given on the records, about a page to each species, making up the other half of the book; an index; and three double-faced phonograph records, which are carried in the pocket on the inside cover. Of course, it is the records which furnish the *raison d'être* of the book. On the six faces of these records there are recorded the songs of forty-three American birds. The two preceding records contained thirty-five songs.

We wish that we might give these records our unstinted praise. Their great novelty and the inventiveness and skill back of them make them unique and interesting in the extreme. A number of songs come out clear and loud, notably the Pileated Woodpecker and the Chuck-will's-widow. Some others are scarcely audible in the ordinary home phonograph. So, it may be that our criticism should be directed at the amplifying mechanism of the reproducing phonograph, rather than at the records. On the whole they are good, and could furnish several evenings with program and discussion.—T. C. S.

OCTOBER FARM. By William Brewster. Edited by Smith O. Dexter. 1936. Pp. i-xv+1-285. Harvard University Press, Cambridge, Mass. Price, \$2.50.

The book is composed of extracts from Brewster's diary, the first one being dated 1872, the last one, 1919. The diary is full of Mr. Brewster's field notes, mostly on birds, but frequently on reptiles and mammals. In simple language he tells of his observations and experiences in the fields and woods. On page 6 we find a note entitled "Snake Charms Thrush", and Mr. Brewster writes that "the Thrush was beyond question in a fascinated and semi-unconscious condition". It would thus seem that Mr. Brewster accepted to some extent the notion that birds may come under the hypnotic influence of snakes, although in the next sentence he disclaims any belief that the snake was knowingly exercising such an influence. In another place (page 129) a description is given of the egg-laying of a "painted tortoise", which is doubtless one of the common "mud" turtles. The eggs were deposited one at a time and covered with dirt which was tightly packed down. A careful description is given of the turtle covering the spot with dry leaves and bits of grass, but no mention is made of urination on the spot by the mother turtle. Crows (page 194) and Bluejays (page 163) are reported as nest robbers. It is the diary of one of America's well known ornithologists. Brewster's farm, near which most of the observations were probably made, was called "October Farm"; hence the editor chose this as the title for the book.—T. C. S.

BIRDS. By Gayle E. Pickwell. Science Guide for Elementary Schools. I, No. 9, April, 1935. Calif. State Dept. Educ., Sacramento. Pp. 1-51. Price, 15 cents.

A pamphlet on the structure and behavior of birds, for the schools of California. Much information suitable for class teaching is presented in available form. It is freely illustrated.—T. C. S.

1. A LAST PLEA FOR WATERFOWL. By Irving Brant. (January, 1934).
2. THE WILD DUCKS' WATERLOO. By William T. Hornaday. (September, 1934).
3. SAVE THE BALD EAGLE. ANONYMOUS. (January, 1935).
4. THE WHITE PELICANS OF GREAT SALT LAKE. By Rosalie Edge. (May, 1935).
5. THE COLLAPSE OF WATERFOWL PROTECTION. By Irving Brant. (June, 1935).
6. THE FUTURE OF WATERFOWL PROTECTION. By Irving Brant.
7. THE WATERFOWL ARE YOURS. By Rosalie Edge. (January, 1936).
8. "FRAMING" THE BIRDS OF PREY. By Davis Quinn. Revised Edition. Pub. No. 55. (April, 1936).
9. THE MIGRATORY BIRD TREATY WITH MEXICO. By Rosalie Edge. Pub. No. 56. (May, 1936).

All of the papers listed above have been published by the Emergency Conservation Committee as separate bulletins. We have selected for mention only those which deal with birds. Many other pamphlets have been issued which relate to mammals, to parks, or to general conservation problems. The serial numbers suggest that fifty-six such pamphlets have been issued by this organization since it began work about seven years ago. These bulletins may be obtained free or for about ten cents apiece from the Emergency Conservation Committee (734 Lexington Ave., New York, N. Y.). One of the early pamphlets was called "Framing" the Birds of Prey". Recently a new and revised edition has been issued and widely distributed. It includes a brief account of the enterprise at Hawk Mountain and a short discussion of the evil of the pole trap. Some doubt has been expressed as to the identity of one of the illustrations, but even if an error has been made on this point it can not lessen the general effectiveness of this literature. It must be remembered that these publications are not presented as scientific literature, but as propaganda directed toward the salvation of wild life. It has not been shown, we believe, that this literature has deviated in any consequential way from scientific truth. On the other hand, the good it has done in public education on the matters of wild life protection, conservation of forests, parks, etc., would be beyond simple calculation. The quantity of these publications distributed to the public must have been very large. The language used has been straight forward, and from the shoulder, as is expected in debate. The fight has been waged in behalf of wild life and inanimate nature; and it is of little consequence that human toes have been stepped on, or official feelings hurt.—T. C. S.

OBSERVATIONS ON THE NOVEMBER BIRDS OF WESTERN KANSAS. By W. S. Long. Univ. Kans. Sci. Bull., XXII, No. 12, 1935.

This paper is an effort to throw some light on the shifting fall birds in western Kansas. Sixty-nine species of birds are reported upon, for most of which specimens were collected.—T. C. S.

BULLETIN OF THE ESSEX COUNTY ORNITHOLOGICAL CLUB OF MASSACHUSETTS. Peabody Museum, Salem, 1935. Pp. 1-63. Price, 25 cents.

This number contains: critical remarks by Mr. Ludlow Griscom on the Hairy Woodpeckers in New England. A record of an Ivory Gull in Essex County, by Mr. Ralph Lawson. An interesting discussion of the pros and cons of a sight record of Glossy Ibises in New England. An Easterner's account of birds seen on a western trip, by Mr. Campbell Bosson. And short notes.—T. C. S.

1. THE SHORTAGE OF WATERFOWL (Unit No. 1). March, 1934. 10 cents.
3. EAGLES (Unit No. 3). February, 1935. 10 cents.
4. FISH-EARING BIRDS (Unit No. 4). May, 1935. 10 cents.

These "teaching units" have been prepared by Ellsworth D. Lumley and published by the Emergency Conservation Committee (734 Lexington Ave., New York). They are practical guides for the school study of the forms of wild life covered. In the waterfowl unit the author states that "the word 'predator' has been substituted for the too frequently used 'vermin', an introduced misnomer of the ignorant English game-keeper." It will be well for this word to go out of use altogether with its present connotation. These pamphlets present certain pertinent information together with devices by which the pupil can reorganize the material. Each unit offers a varying number of "projects" so that different members of a class may work along different lines. They seem to be feasible from an educational point of view, and helpful to conservation at the same time.—T.C.S.

SOME NOTES ON THE 1935 SEASON, ESPECIALLY ON THE RAPTORIAL BIRDS OF THE NORTHWEST. By Warren F. Eaton. Circular No. 24, National Association of Audubon Societies. December, 1935.

A collection of facts and observations concerning the status of hawks in various parts of the country during 1935.—T. C. S.

A LIFE HISTORY STUDY OF THE CALIFORNIA QUAIL, WITH RECOMMENDATIONS FOR CONSERVATION AND MANAGEMENT. By E. Lowell Sumner, Jr. Calif.

Fish and Game, July and Oct., 1935, pp. 165-256, 277-342. (Reprint, Sacramento, 1936).

In character and extent this paper compares favorably with Errington's work on the Eastern Bob-white, reviewed elsewhere in this issue. About half of the pages are devoted to "life-history", while Part II may be said to deal with management. The author speaks of the "law of edges", by which he means that the birds tend to spend a large part of their time along the margins between food and cover. Therefore an optimum area of "edge" habitat will support more birds, provided the right amount of food is available. The water requirements of these birds is discussed. A monthly study throughout the year of the ratio between sexes showed that the males were always slightly in excess of the females, the fluctuation never exceeding four per cent. Practically the same ratio held throughout the year, indicating that both sexes are subject to the same mortality rate. It has usually been thought that an excess of the male sex exists to compensate for a higher mortality rate. If this higher mortality rate of males does not exist, some other explanation must be found for their uniformly greater numbers. The paper is accompanied by an ample bibliography, but there is no index.—T. C. S.

The *Prothonotary* for May, 1936 (II, No. 5), gives the usual list of noteworthy records. The Buffalo Ornithological Society makes occasional over-night trips to points of ornithological interest, such as a trip to the Pymatuning Swamp, in Pennsylvania. In the June number a poor flight of warblers is reported, which agrees exactly with the report from West Virginia in the *Redstart*. The August number (II, No. 8) contains a criticism of the "Migratory Bird Treaty with Mexico".

The *Nebraska Bird Review* for July, 1935 (III, No. 3) has an article by Mrs. George W. Trine on the Purple Martin which will be of interest to those who have martin houses. An exceptionally large amount of migration data, covering twenty-seven pages, makes up the bulk of the issue. Prof. Swenk continues his history of Nebraska ornithology, dealing in this instalment with the Lewis and Clark Expedition. A selection of general notes and minutes of the 1935 annual meeting complete a very sizable number. The October number (III, No. 4) contains a paper by Messrs. Swenk and DuMont on the weights of Canada Geese, giving the weights of 356 of these birds. Regardless of subspecies these weights ranged from three to thirteen pounds. The April number (1936, IV, No. 2) contains Prof. Swenk's important paper on the distribution and hybridization of the Rose-breasted Grosbeak and the Black-headed Grosbeak. A number of cases of evident hybridism are recorded. Two maps help much to visualize the distribution of the two species and clarify a great amount of data. Short notes in the July number (IV, No. 3) report the presence of Palmer's Curve-billed Thrasher and the Woodcock in different localities of Nebraska.

From the January number of the *Raven* (VII, No. 1) we learn that a September Song Sparrow taken in southwest Virginia is *Melospiza melodia beata*. And also that the Southern Robin (*Turdus m. achrusterus*) is apparently the breeding form throughout the state; while the Eastern Robin (*T. m. migratorius*) occurs in winter. The number for April (VII, No. 4) includes a biographical sketch of Mark Catesby by Dr. J. J. Murray, as the first in a proposed series of sketches on "Some Virginia Ornithologists". This first one is followed in the May-June number by one on Percy Evans Freke, 1844-1931, by the same author. These sketches are informative and are worthy of preservation and bibliographic citation. We find also an interesting note on an instance of double payment of a bounty on hawks. A paper by Prof. Freer and numerous local notes are added. Much solid material is presented in this local periodical. In the July-August number (No. 7-8) Dr. Murray has a sketch of Harry Balch Bailey, as the third in the series.

Bird Calendar of the Cleveland Bird Club for January-March, 1936, is the repository for the Club's statistics. This Club keeps accurate records of the field work of its active members during each month. They know the number of trips, observers per trip, hours per trip, total mileage on foot per trip, hours in each type of habitat, etc. The tabulations are given quarterly in this *Calendar*. Large numbers of Whistling Swans were seen during March—as many as five hundred. A new method of census-taking is used in listing the winter birds by habitats. A list of 262 species is given for the Cleveland region. The issue for April-May gives a similar statistical summary for the second quarter of the year.

Mr. William I. Lyon has an instructive paper on bird banding as a hobby in the *Rotarian* for November, 1935.

The *Flicker* for May-December, 1935 (VII, Nos. 2-4) is devoted to an annotated list of 129 nesting species of birds for Minnesota. The issue for May, 1936 (VIII, No. 2) publishes lists of birds seen at Big Stone Lake in April and at Lake Traverse in September. Mr. Erickson reported a flock of 120 Whistling Swans near Minneapolis.

The TNA Annual for 1935 contains thirty-six pages of short papers on the natural history studies of the Toledo Naturalists' Association. In discussing the "Past and Present Status of the Bob-white in Ohio" Mr. Milton B. Trautman divides the history into three periods, viz., prior to 1840, 1840 to 1890, and 1890 to the present. He concludes that during the first period Ohio was forested and hence did not offer a habitat favorable for the Bob-white. During the second period the forests were cleared away, land was cultivated though not intensively, and the Bob-white came in and reached its peak. The third period is not so clearly presented, but apparently the author considers this a period of modern and intensive farming which has removed the cover so necessary for the protection of the Bob-white from its enemies and from the exigencies of the winter season. However, we are reminded of the paper by Dr. Kendeigh (Ohio Jr. Sci., XXXIII, Jan., 1933) which showed that during a period from 1914 to 1931 in Ohio, which probably marks the maximum of intensive farming, there was a steady increase in the estimated quail population. But, of course, during these years there was an annual closed season on the hunting of quail. So, perhaps intensive farming may not be the only, or even the main, factor of reduction. We hope that Ohio may continue to keep the Bob-white in the "song-bird list" indefinitely as an extensive experiment, if for no other reason.

The *Redstart* for February, 1936 (III, No. 5), gives some interesting observations by Charles Conrad on nest-building, both as to materials and methods of construction. In the May issue (III, No. 8) Mr. Merit B. Skaggs makes a comparison of some breeding birds in the Youngstown region. In the June number (III, No. 9) Mr. J. W. Handlan comments on the spring migration of 1936, and gives the first arrival dates for many species. Short notes are found in each issue.

The *Snowy Egret* (IX, No. 2) was issued for the summer of 1934, and is made up of seven bird lists—all for Michigan, except one list of breeding birds in Ohio by Dr. L. E. Hicks. The winter number for 1935 (X, No. 2) appears again in its new and attractive format. It is interesting to see how much can be done with the mimeograph process. In this issue blue print reproductions of photographs are included. We find an interesting article on the Pileated Woodpecker by O. M. Bryens; and a reprinting of notes on Indian bird lore, by the well known authority on Indian life, Dr. Melvin R. Gilmour. Various field notes covering a total of about fifty-six pages. Quarterly, \$1.00 per year. H. A. Olsen, Pippapass, Ky.

Nature Notes for May (I, No. 5) features some common wild flowers in photographs. The June number gives five splendid photographs of successive stages in the life history of the common shaggy mane mushroom, and with the usual departmental offerings. The August number (II, No. 2) records the August nesting of a pair of Mourning Doves in Oceana County, Michigan.

In the *Cardinal* for July (1936, IV, No. 4) Mr. Bayard H. Christy gives some results of a study of the life and work of Jared Potter Kirtland, an early Ohio physician and naturalist. A great deal of Kirtland material was exhibited at the recent A. O. U. meeting at Pittsburgh as a result of Mr. Christy's activities in this direction. Mr. W. E. C. Todd reports on the chickadees of western Pennsylvania.

The *News Letter* of the Audubon Society of Missouri for May, 1936 (III, No. 5) gives an account of a two-day state field meet at some time during the spring, probably May. There is also a plea against the pole trap. In the June number cats are discussed and the question asked, "Shall we license them to practice their code any more than we would license any human criminal?" In an article on "reconditioned nests" we are told how to make artificial eggs for such nests. From the August number (III, No. 7) we learn that the Missouri folks are working definitely to secure a list of the breeding birds of each county, or as many of the counties as have observers. Already twenty counties have reported lists.

The *Inland Bird Banding News* for June, 1936 (VIII, No. 2) gives a brief account of the work of banding Chimney Swifts at Beloit College. Mr. O. M. Bryens tells of his work in banding Redpolls in Michigan.

The June number of *Wildlife Review* (No. 4) contains the usual abstracts of literature under the heads of Conservation (5 abstracts); Control (2); Cycles (1); Disease (4); Ecology (6); Food Habits (7); Life History (5); Management (21); Propagation (8). There is also a continuation of the listing of periodicals (printed and mimeographed) which deal with various phases of wild life. In this issue are listed the periodicals dealing with ornithology, among others. The September number (No. 5) contains about ninety abstracts of papers classified under the same headings as given above. This mimeographed publication is issued by the United States Biological Survey.

The *St. Louis Bird Club Bulletin* for March-April, 1936 (V, No. 3) discusses "Methods of Attracting Birds" and the value of birds to mankind in comparison with other groups of vertebrates.

The *Chickadee* for December, 1935 (V, No. 2) presents a unique plan for establishing the rank of "Forbush Ornithologist" for those of its members who can meet a list of specifications. About twenty-three tests (listed in nine groups) are given which the candidate must pass in order to write "F. O." after his name. The tests are real, and anyone who passes them will be truly entitled to some distinction. As members qualify we would be glad to assist in making the announcement.

News from the Bird Banders for May, 1936 (XI, No. 2) lists a total of 39,347 individual birds, of 176 species, banded during 1935 in the ten states and provinces which comprise the region of the Western Bird-Banding Association. Numerically, the Pintail stands first on the list with 8,372; the Mallard is second, with 5,224; the Cedar Waxwing is third, with 5,150 individuals banded. There is also an interesting note on sterilizing weed seeds by heat when they are to be scattered as food for birds. The August number (XI, No. 3) gives a too brief account of an experiment in Arizona. Birds, chiefly Gambel's Sparrows, being trapped and banded in the spring months at Casa Grande Monument, were carried north and released at one-mile intervals. Fourteen of these were again trapped at the home station, showing that they had reversed the direction of their migratory flight for short distances.