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The number of Starlings banded from 1927 to April 1, 1934, in Central Ohio, totals 30,151. As 6215 birds were banded last winter, it seems probable that about 17,000 living Starlings today carry bands placed in this locality. This preliminary report is made now in the hope that banding operators will be encouraged to make a special attempt to trap breeding and migrating adults during the coming summer and autumn. It would also be of tremendous value in the study of the Starling, if a considerable number of nestlings and juvenile birds could be marked. The writer would be pleased to hear from banders interested in this species.—LAWRENCE E. HICKS, Department of Botany, Ohio State University, Columbus, Ohio.

## RECENT LITERATURE

# (Reviews by Margaret M. Nice)

# MIGRATION STUDIES

Bird-Migration at Rossitten.—In "Rossitten"<sup>1</sup> we read of the experiences of the Vogelwarte during thirty years on the Kurische Nehrung, and particularly of his studies of migration. A thrilling picture is given of the marvellous flights of waterfowl, passerines, and raptores. Professor Thienemann was one of the pioneers of bird-banding, starting in 1903, and he recounts some of the absurd misunderstandings that arose in the early days and also the opposition of some misguided bird-lovers, one of whom stated that "a single Stork in a meadow is more beautiful and more useful than all the ornithologists and all ornithology!"

When the first banded gull was found in France there was much debate as to what the ring could possibly mean; one person suggested it had been attached by a shipwrecked sailor from a ship named "Rossitten," but another said it must have been a sentimental maiden sending a bird to her lover who kept a bird-shop. A Bulgarian, after shooting a Spotted Eagel with the number 1285, wrote to the paper saying he had killed a bird 726 years old!

The author writes feelingly of the marvel and poetry of bird-banding and ends the book with a plea for the revival of the noble art of falconry.

A later book<sup>2</sup> by the same author is a more technical and detailed study of migration on the Nehrung, giving a migration calendar, and discussing the speed of flight, height of migration according to weather, migration of particular species, etc. It describes experiments in removing parent Martins (*Delichon u. urbica*) from the nest and their return from seven miles distance in forty minutes. Much space is devoted to the experiments with Storks, including an account of how the Vogelwarte induced these birds to nest again in Rossitten after an absence of twenty years.

Both books are delightfully written, well illustrated, and full of valuable information for the bird-student.

The Migration of the White Stork.—The majority of European White Storks (*Ciconia ciconia*) migrate to the southeast through Transylvania and the Balkan Peninsula, thence through Asia Minor to the Delta of the Nile, their objective being South Africa. Birds breeding west of the Weser River fly southwest through France and Spain to Gibraltar. Europeans have debated the question whether the migration-route is in-

<sup>1</sup>J. Thienemann. Rossitten. 1930. [3d edition. J. Neumann, Neudamm. 332 pp. 9 RM. <sup>2</sup> Vom Vogelzuge in Rossitten. 1931. J. Neumann, Neudamm. 174 pp. 8 RM. herited or the young are led by the adults. Thienemann attempted to answer the question by taking young Storks from the nest and keeping them in captivity until all of their kind had migrated; the three sets migrated in the normal direction as far as Roumania, but then apparently deviated from the proper path, as two were taken in Greece and one in Crete.

In the meanwhile several writers<sup>1</sup> have gathered statistics on whether young or old Storks migrate first, and the consensus of opinion seems to be that it is the young. Might it be that the old birds overtake the young in the Balkans and then lead them across the Dardanelles?

Last fall a different experiment was decided upon. Large numbers of young Storks were taken from their nests in East Prussia (where happily they have recently increased),<sup>2</sup> and were raised in Rossitten; 73 were released in Rossitten, 20 from Frankfurt am Main, and 144 from Essen, near the western border of Germany. Each set was colored in a distinctive manner to facilitate "sight returns," and the widest publicity was given to the matter through the newspapers and radio. All the birds went south or southeast (except three released at Rossitten that wandered to Italy), the second and third lots going by the way of Switzerland-"important evidence for the inheritance of the migration direction and its effectiveness even in a locality where the native birds migrate in another direction."<sup>1</sup>

Finnish Migrants from English Eggs<sup>2</sup>.—An extraordinarily interesting experiment carried out in coöperation with the Zoölogical Museum of the University of Helsingfors by Karl Fazer, who unfortunately died in 1932. In the spring of 1931 a number of eggs from English Mallards (Anas p. platyrhynchos) were sent to Taubila, between the Gulf of Finland and Lake Ladoga; 86 hatched and grew up in freedom on the lake with tame and wild ducks. Regular feeding kept them half-tame, and on August 7th, 62 were banded. The wild Mallards left the middle of October, except for six that remained with the experimental birds; all became restless the middle of November and soon flew south. Eleven were recovered, nine in the winter, all the way from Holland to southwestern France and Jugoslavia, as shown on a map. One duck was found in Holstein in May, 1932, on a nest with twelve eggs; another was found dead July 5th in Baden. In the spring of 1932 no less than 34-36 returned to Lake Ladoga and nested there! The percentage of recoveries-18 is high, and that of returns-55-58 exceedingly high.

English Mallards are strict residents, but these birds behaved like typical Finnish migrants, the recoveries all falling within the regular migrationroutes of Finnish Mallards. It will be noted that the birds returned to Finland to nest and not to England.

So here we have a case where "the same individuals in a different locality would have behaved entirely\_differently." "Hence we can conclude that the migratory instinct in the English Mallard is not lost, but merely greatly weakened or entirely inhibited through climatic influences.'

Similar experiments should be tried with other species and in other localities; in particular Finnish Mallard eggs should be hatched in England.

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<sup>&</sup>lt;sup>1</sup> W. Rüppell, Vogelzug, 1931, p. 119; 1933, p. 166. A. Ohlendorf, Vogelzug, 1933, p. 118.

<sup>&</sup>lt;sup>a</sup> F. Hornberger, Ornithologische Monatsberichte, 1934, 42, pp. 26-27.

<sup>&</sup>lt;sup>1</sup> E. Schüz. 1934. Vom Storch-Versuch 1933 der Vogelwarte Rossitten. Vogelzug, 5, pp. 21-25.

<sup>&</sup>lt;sup>3</sup> I. Valikangas. 1933. Finnische Zugvögel aus englischen Vogeleiern. 159-166. Vogelzug, 4.

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Russian Banding Papers.-G. Doppelmair<sup>1</sup> reports on the ringing of Mallards and Black-headed Gulls near Leningrad. From 185 of the former banded on the Ilmensee in July of the years 1925-1929, there have been 51 recoveries and 2 returns—28 per cent in all. Most of these ducks migrated southwest, a few as far as Italy and Jugoslavia, but five recoveries were made in England and Scotland, while two were found in the opposite direction-one three hundred miles east of the place of banding and another on the Volga-far to the southeast.

Sixteen recoveries have been reported of the 344 young gulls ringed on Lake Ladoga. These show two migration-routes-one along the coast of the Baltic Sea, the other directly south to the Black Sea. A number of these birds were also taken in north Italy and Dalmatia.

The Bird-Preserve of the Volga Delta2 .-- Vast numbers of waterbirds nest here and are banded in large numbers—adult ducks and geese being caught with nets during the molt and young of various Herons, Cormorants, Spoonbills, and Glossy Ibis banded in the nest. Some of the ducks and Gray Lag Geese (Anser anser) and Night Herons (Nycticorax n. nycticorax) have returned to the Delta, but others have been recovered during the breeding-season in western Siberia and central Russia.

Belgian Banding.—Each year M. Ch. Dupond issues a report on the returns and recoveries of birds ringed in Belgium and birds ringed elsewhere taken in Belgium; these are published in "Le Gerfaut" and reprinted as bulletins of the Musée Royal d'Histoire Naturelle de Belgique.<sup>1</sup> It would be of interest to have in each issue a summary of the numbers of birds ringed and numbers retaken, and also brief mention of the more important results in that year.

Fall migration is usually to the southwest, so that the capture of a Belgian-raised Red-backed Shrike (*Lanius c. collurio*) in Italy is noted as of especial interest (4, p. 31). The House Sparrow (*Passer d. domesticus*) is ordinarily retaken within less than a mile of the place of banding, but one bird was captured seven miles away (1, p. 11), and another—an adult when banded November, 1927—was taken four years later at a distance of ten miles (4, p. 24). The Great Titmouse (*Parus major*) is usually resident, but a few have been found as far as three hundred miles from the place of birth (3, p. 32; 4, p. 73). A pair nested two years in succession in the same hole, raising five young the first year and nine the next (4, p. 30). Another bird was found nesting four yards from its birthplace. A Siskin

<sup>1</sup> Ergebnisse der Beringung von Stockenten (Anas platyrhyncha [sic]) am Ilmensee. 1933.

Vogelzug, 4, pp. 149-153. Ueber Beringungsergebnisse von Lachmöwen (Larus ridibundus) des Ladoga-Sees, 1934. Vogelzug, 5, pp. 18-21.

<sup>2</sup>K. A. Worobiew. 1932. Das Staatliche Naturschutzgebiet im Wolgadelta bei Astra-chan. Kocsag, 5, pp. 1-11.

1 (1) Oeuvre du Baguage des Oiseaux en Belgique. Exercice 1929. 1930. Gerfaut, 20. pp. 56-76.
(2) Oeuvre du Baguage des Oiseaux en Belgique. Exercice 1930. 1931.
pp. 59-98.
(3) Oeuvre du Baguage des Oiseaux en Belgique. Exercice 1931. 1932. Gerfaut, 21, Gerfaut, 22,

pp. 41-90. (4) Oeuvre du Baguage des Oiseaux en Belgique. Exercice 1932. 1933. Gerfaut. 23.

(5) Que nous a appris jusqu'ici le Baguage des Oiseaux en Belgique? 1930. Gerfaut, 20,

(Carduelis [-Spinus] spinus) banded October 6th was captured seventyeight miles away the next day.

A considerable amount of data has been collected on the return of Swallows (*Hirundo r. rusica*) and Martins (*Delichon u. urbica*) to their homes, and this has proved the rule with adult birds. In the former species four adults were found nesting in the same place four years in succession (4, p, 40). As to the young, three nested in the next village, five from a half-mile to four miles from the birthplace, and sixteen in the same farm or village, five of these returning to the very nests where they were hatched. Of the Martins ten nested in the place they were hatched, three in the same nest. One of these, banded in the nest in 1928, was retaken there in 1929, 1931, and 1932 (4, p. 45).

Besides these annual reports M. Dupond is the author of an interesting pamphlet (5) on "What has the Ringing of Birds in Belgium taught us?" In this he answers such questions as: Where do our migrating birds winter? From where do the birds come that migrate through Belgium? Are various species partly migratory and partly resident? How much do young birds wander before migration? Do birds return to their place of nesting, etc.?

Fifty Years of Bird Migration.—William Rowan. 1933. Fifty Years' Progress of American Ornithology (Lancaster, Pa.), pp. 51–63. The author mentions many of the important American papers on migration, but unfortunately fails to present his own theories and experiments.

Papers by F. C. Lincoln. (1) A Decade of Bird Banding in America: A Review.—Smithsonian Annual Report, 1932, pp. 327-351. (2) Bird Banding. 1933. Fifty Years' Progress of American Ornithology, pp. 65-87. Excellent summaries of banding in America, in which the author discusses waterfowl-banding, particularly migration and sex-ratio, and, with nongame species, migration and life-history studies. The first paper has two maps and four tables and gives details as to the work of individual banders and stations; the second gives a history of banding in this country and concludes with a section on longevity. The total figures for banding under the United States Biological Survey from 1921 to July, 1932, are 1926 cooperators, 1,123,528 birds banded, and 63,564 returns and recoveries.

#### TERRITORY

**Territory Reviewed.** David and Lambert Lack. 1933. British Birds, 27, pp. 179–199. The authors contend "that so far sufficient evidence has not been adduced to show that territory is a general law of bird life, and that in especial there is no proof that territory is of food value, or is an mportant factor in the prevention of over-crowding."

It is undeniable that Howard and many others have applied the territorial concept too widely. The present authors point out that the same species at times may "appear territorial" and at other times nest in colonies, instancing the Great Black-backed Gull (*Larus marinus*), the Great Crested Grebe (*Podiceps cristatus*), and "many Birds of Prey" which are "normally colonial under favorable conditions."

As to the food-value of territories, the Lacks mention how "most territorial species, which are extremely pugnacious at the beginning of the breeding season, do not attempt to maintain strict territories during the feeding of the young—that is, at the very time that the territories, as food territories, would be most valuable." "Finally, it is not proved that pugnacity does limit the number of pairs in a given area." Their alternative theory is: "In fact, territory seems to be nothing more than an affair of the male bird, and its real significance seems to be that it provides

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him with a more or less prominent, isolated headquarters where he can sing or otherwise display."

My own experience, based on five years' study of a species strongly territorial in my locality, differs from that of the Lacks in many respects. In the first place, there is no doubt that with *Melospiza melodia beata* territory limits the number of pairs in a given area. When a new male Song Sparrow arrives, all the males already settled try to drive him out, even though there may still be plenty of room. The new bird responds with appropriate behavior and soon wins his place. But there is a limit beyond which the birds refuse to allow themselves to be crowded; each must have approximately two thirds of an acre for his territory, and extra males have to seek other quarters. In 1932, when Interpont was filled to capacity, several of the young resident males were driven out of their territories by adult summer residents. Again, female Song Sparrows defend their territories against both males and females of their own species and to some extent against many other species.

The Lacks say that the "earlier fighting," *i.e.* territory fighting, "apparently ceases in almost all cases when the eggs have been laid." This may be so with a single-brooded species, but is not true with the three-to-four-brooded Song Sparrow. Territory lines are maintained (more or less strictly) till nesting is practically over, and the arrival of a new male as late as July will stir up song and strife to an astonishing degree. To be sure, birds recently out of the nest may settle in a neighbor's territory and be fed there by their mother; the owners may try to drive them out, but soon give up before the passive resistance of the intruders. At any rate, the spacing of the pairs at the beginning of the season is sufficient safe-guard for the food-supply in most seasons, and the birds can afford to relax their vigilance.

As to "the great food-shortage delusion," as Tavistock (*Ibis*, 1931, pp. 351-354) describes it, it is certainly true that many birds claim far more land than is necessary for a food-supply. (This author suggests that the reason for "the pugnacity of breeding birds" is that by preventing crowding it operates "as a check on disease.")

With my Song Sparrows, although their territories under normal conditions afford ample support for them and one to two pairs of other birds and their families, yet in the case of a severe drought early in May, 1932, there appeared to be a shortage of insects, for one or more of the young in every nest died of starvation. Hence it may well be that territory with Song Sparrows does represent a safety factor in the matter of food. However, as I have pointed out in the article next to be reviewed, territory with this species in this locality "is as essential for insuring non-interference in the orderly sequence of the nesting cycle, as it is in safe-guarding the foodsupply."

The Lacks have done a service in emphasizing the mistakes of blind acceptance of an attractive theory, but their alternative suggestion is unconvincing and does not cover the facts.

The Theory of Territorialism and its Development. M. M. Nice, 1933. Fifty Years' Progress of American Ornithology, pp. 89-100. An historical review of the theory of territory, appreciating the value of the concept for some birds, but protesting against its undiscriminating acceptance for all avian life. The paper is summarized as follows: "Territory implies in the male bird isolation, advertisement, fixation and intolerance. Where these four aspects are not present, the bird does not truly hold territory. In the Song Sparrow there is a definite and elaborate procedure for establishing territory with diametrically opposed behavior in the invader and defender. It is this ceremony which precipitates the change from the prolonged, warbling song of the juvenile to the short song of the adult. It may be that the food aspect of territory has been over-emphasized, and that sex jealousy in many cases plays a definite part."

# LIFE-HISTORY

Aves. E. Stresemann. 1933. Kuckenthal-Krumbach, Handbuch der Zoologie, Bd. Vii, 2.Halite, 7.Lief. The seventh section of this monumental work treating all phases of bird-life—anatomy, physiology, behavior, etc. has now appeared. "Aves" is a mine of information to the serious student of birds, for the author has a world view of the problems, citing examples from birds from all over the world, and referring to writings from an equally wide field. He makes few generalizations, but those few are illuminating. The paper and print are good (the book is quarto size), there are many illustrations, and the style is simple and clear. The present volume is largely concerned with a masterly treatment of the subject of migration.

Advances in Life History Work. H. Friedmann. 1933. Fifty Years' Progress of American Ornithology, pp. 101–109. A brief historical sketch of life-history work in America; many important studies are mentioned, but no references are given.

Vogelruf und Vogelsang. Hans Franke. 1933. Leipzig, Deuticke, 110 p. M.2.20. This useful little book on "Bird Calls and Songs" can be unreservedly recommended to the bird-student who goes to Europe. Containing a maximum of information in a minimum of space, it deals not only with the voices of birds, but also with field marks, haunts, season, and something of the habits of each species. Calls and songs are described in great detail, in many cases with musical notation, length of songs in seconds and duration of song season being also noted.

It would be a fine thing to have several such field guides for North America, but their preparation would demand a most thorough acquaintance with, and careful study of, the subject.

### ECOLOGY

Papers by C. W. Thornthwaite. (1) The Climates of North America According to a New Classification. 1931. The Geographical Review, 21, pp. 633-655. (2) The Climates of the Earth. 1933. The Geographical Review, 23, pp. 433-440. A new classification of climates according to precipitation effectiveness, temperature efficiency, and seasonal distribution of effective precipitation. Through mathematical calculations based on mean monthly temperature and precipitation, the author distinguishes thirty-two climatic types for the earth. Thornthwaite's work is considered one of the outstanding achievements in geographical science in recent years; it is a contribution of basic importance that should prove most fruitful to the student of bird-distribution. These papers with their fascinating maps can be heartily commended to all biologists interested in the relations of animals to their environments.

# LONGEVITY

The Oldest Banded Bird. E. Schüz (Vogelzug, 4, p. 176, 1933) reports that a Herring Gull (Larus a. argentatus), banded July 5, 1910, on the coast of the North Sea with a Rossitten ring was found April 22, 1933, on the Island Terschilling (Holland). Herring Gulls of twenty-one and twenty-two years have been reported previously.

Vol. V 1934 In a review of recent articles, "Ring-Wiederfunde auswartige Stationen 8" (Vogelzug 4, pp. 168-171), Schüz mentions more than thirty-five ringed birds of twenty-one species that have reached ages from four to ten years. A nine and one-half year Starling (Sturnus vulgaris) was reported from Holland.

A Ten-Year-Old Cardinal. A. F. Ganier. 1933. Wilson Bulletin 45. pp. 152-154. A male Richmondena c. cardinalis, banded February 24, 1924, is still living in the same locality. Mr. Ganier writes me that this bird sings vigorously each pleasant morning, but that "his feathers do not lie as neatly on his body as do those of a young bird. When he leans forward to take food he appears to be bald, for the feathers do not flex and they leave the back of the neck exposed." S. P. Baldwin banded a male of this species at Thomasville, Georgia, March 28, 1921, and captured him for the last time February 2, 1930. Lincoln, F. C. 1933. Fifty Years' Progress of American Ornithology, pp. 86-87.

#### BIRDS AND THEIR FOOD

**Experiments on the Digestion of Food by Birds.** J. Stevenson. 1933. Wilson Bulletin, 45, pp. 155–167. An interesting study on the weight of stomach-contents and rate of food-passage through the digestive tract of some passerine birds, besides other related matters.

Food Preferences of the Long-eared and other Owls are discussed in a thorough-going study by N. Tinbergen<sup>1</sup>, who concludes that these birds do not have preferred prey, but specialize on whatever animals happen to be abundant, thus exerting a definite check on the increase of rodent populations.

The Feeding Habits of Four Hens were studied in detail by G. Beck<sup>2</sup>, who found among other things that his subjects ate much more when together than when apart, ate less on laying days, much less than normal during the first part of the molt, but far more during the last half. The food averaged per day from 2.7 to 5 per cent of the weight of the fowl, usually about 3.3 per cent. The weight of the water consumed about equalled that of the food.

#### CONSERVATION

**The Conservation Ethic.** A. Leopold. 1933. Journal of Forestry, 31, pp. 634-643. A thought-provoking analysis, defining civilization as "a state of mutual and interdependent coöperation between human animals, other animals, plants and soils."

Annual Report of the Hawk and Owl Society. 1933. Bull. No. 3, 36 pp. Secretary W. F. Eaton, 128 Wildwood Ave., Upper Montclair, N. J. Straight facts in regard to the precarious position of our birds of prey.

The Protection of Hawks and Owls in Ohio. S. P. Baldwin, S. C. Kendeigh, and R. W. Franks. 1933. *Ohio Jour. of Science*, 32, pp. 402-424. This excellent paper, which discusses the problem from every angle, may be obtained from Mr. Baldwin, 11025 E. Boulevard, Cleveland, Ohio.

<sup>1</sup> Die Ernährungsökologischen Beziehungen zwischen Asio otus otus L. und ihren Beutetieren, inbesondere den Microtus-Arten. 1933. Ecological Monographs, 3, pp. 443-492.

<sup>&</sup>lt;sup>2</sup> Neue Beiträge zur Zweikomponententheorie des Hungers. 1930. Ztsch. f. Psychologie 18, pp. 283-349.

Management of Bobwhite Quail in Iowa. P. L. Errington. 1933. Iowa State College Agri. and Mechanic Arts, Ex. Bull. 186, 15 p. In regard to predators the author writes, "It is a safe principle to go rather 'easy' on native species and to pay more attention to house cats and roving dogs."

The Problem of the Vagrant Cat. T. G. Pearson. 1933. National Assoc. Audubon Societies (1775 Broadway, N. Y.) Circ. No. 18. Recommends the tagging of cats at nominal cost.

In Reply to "A Plea for the Birds." S. A. Eliot, Jr., Massachusetts Audubon Bulletin, December, 1933, pp. 6–8. Sane discussion of conservation questions: suggests removing "woodcock, snipe, quail, and all whitebellied ducks from the game-bird list—leaving the pheasant for the fields, the partridge for the woods, the rails for the marshes and the dark-bellied ducks for the water-ways."

Conservation of Game or of Wild Life—Which. W. L. McAtee. 1934. Scientific Monthly, February, pp. 165–169. Only ten per cent of the species of vertebrates in our country can be classed as game: thirty per cent are sometimes called "vermin," although most of them are protected by law.

Mrs. Nice on the Song Sparrow. Reviewed by Herbert Friedmann.) Zur Naturgeschichte des Singammers. Journ. f. Ornilh., 1933-1934. We may begin with our conclusion,—that this is by far the best, most thorough, and most careful study yet made of any native North American bird (the one non-native species that is better known being the domestic fowl). Mrs. Nice's study clearly demonstrates the value of banding as an aid in field studies. as her paper teems with facts and problems that could not have been even indirectly approached were her birds not thus individualized. For this reason alone, even if the paper contained no new ideas, her study would be noteworthy as an important marker on the road of progressive bird study. The work has been patient and over a considerable span of years; all sides of the life history have been gone into in detail and adequately reported. Even such matters as inheritance of individual song variations, so conspicuous in this species, are treated with new data of great importance to our general considerations of bird song. It is impossible to summarize a paper so full of data as this one without doing it great injustice, and therefore a mere list of the topics discussed will have to suffice. They are as follows: Introduction, including a description of methods and an account of the area in which the work was done; Life History of the Individual Bird; *i.e.*, the problems and difficulties confronting the individual as distinguished from those confronting the species to which the individual belongs, including an account of voice, general habits, enemies such as man, rapacious birds, mammals, and snakes, and a particularly worth-while critical discussion of the relations existing between the Song Sparrow and the Cowbird; Problems of the Whole Population of Song Sparrows; including the highly intricate aspects of migration within the species, the habits at different seasons, reproduction with its included topics of mating, nest-building, the eggs, incubation, and care of the young both in and out of the nest; and such vital questions of bionomics as the distribution in the population of adult birds of various ages; the distribution and position in the whole population of young birds during the breeding season; the mortality rate of the young; longevity; the balance of population density among Song Sparrows in the area where the studies were made. A summary and a literature list of some 83 titles concludes the paper. It is very unfortunate that this paper could not have been published in this country and in English

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as it is now relatively inaccessible to a very large proportion of serious bird students who would otherwise have been able to use it. This, however, is another matter and one on which the paper cannot be judged.

# CORRESPONDENCE

#### VALUE OF COLORED BANDS

Editor of Bird-Banding: The unquestioned value of colored bands in bird-banding investigations was clearly demonstrated yesterday at our station in Glenolden, Pennsylvania. We had been keenly anticipating the return-5 of White-throated Sparrow (Zonotrichia albicollis) 578074, which has wintered with us for the past five consecutive years, but up to January 10, 1934, she had not put in an appearance, and we had about decided her days of usefulness were over. We had been experiencing rather severe winter weather for this region-many cold rains, one heavy snowfall followed by a bad freeze-during which time the birds must have suffered from lack of food, and we felt sure that this bird would have been trapped or observed, had she been in the vicinity, as she wears a bright pink band on the left leg. Last winter she was a "sight return" on November 13, 1932, but it was nearly a month later that she was actually trapped, on December 10th, at which time she still wore the very dull, streaked plumage of immaturity.<sup>1</sup> Confined at home with grippe on January 10th, I spent a good part of the day at a sunny window watching the birds feed at the traps, which were not set at the time. Cardinals, Tits, White- and Redbreasted Nuthatches, Black-capped Chickadees, Downies, Song Sparrows, White-throats, Starlings, and English Sparrows fed continually all day, and while about ninety-five per cent of the birds wore bands, I looked in vain for our old female White-throat, who wears a bright pink band. (No other White-throat we have banded wears a celluloid band of this color.) The afternoon was well spent and the light was beginning to fade, when a dingy female White-throat hopped into view some thirty feet distant. With the naked eye I could discern that she wore a band on each leg. With an eight-power binocular a pink band on the left leg showed plainly. Mrs. Gillespie was hastily summoned to confirm the observation, and we were both well satisfied that 578074 had returned to our station for the sixth consecutive year, our best White-throat record to date. Almost a month passed before she was seen again—on February 4th and also on the following day. In spite of a heavy snowfall on February 1st and an unprecedented sub-zero cold spell of ten days from this date, she failed to enter the traps. But, for some unknown reason, on February 11th and 13th, with the snow practically gone and the thermometer in the thirties, she was captured in the trap that she first entered February 22, 1929.-JOHN A. GILLESPIE, Glenolden, Pennsylvania, January 14, 1934.

<sup>1</sup>Mr. Gillespie in the next iss\_e of *Bird-Banding* plans to describe more fully this abnormal occurrence which appears to be that of a White-throat in first winter plumage. Editor.

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