

A Red-bellied Woodpecker Six and a Half Years of Age.—On March 20, 1932, a return was obtained on female Red-bellied Woodpecker (*Centurus carolinus*) 427557. This bird was banded as an adult on May 20, 1926, consequently it was at least a year old when banded. The known history of this bird is as follows: banded on May 20, 1926;¹ a return-1 on December 10, 1927; repeated on February 14, March 5, and March 17, 1928; a return-2 on January 27, 1929; repeated February 23, 1929; and a return-3 on March 20, 1932. On the latter date the band was found to be abraded, rendering part of the number almost illegible, so band A220175 was substituted. The above records show the bird to have been at least six and a half years old in 1932. We shall anxiously anticipate the return of this bird during another season.—PAUL A. STEWART, Leetonia, Ohio.

Known History of Eastern Robin 626740.—An Eastern Robin, a male nestling, was given band 626740 on July 18, 1928, at my station in Norristown, Pennsylvania. He was taken as a return-1 on May 14, 1930 and as a return-2 on May 28, 1932. During 1932 he raised a brood within fifty feet of the nest in which he was hatched. His mate this past season was A322102, banded as an adult June 15, 1929, and a return-1 April 14, 1930, a return-2 April 20, 1931, and a return-3 April 23, 1932. It is not known that these birds were mated more than one year, though it should be noted that a male four years old was mated in 1932 to a female also at least four years old. Band 626740 was so badly worn that it was replaced by B329638. The original nest and the one this year were about ten feet up in a wild cherry tree.—RAYMOND J. MIDDLETON, Norristown, Pennsylvania.

A White-throated Sparrow Recovered in Maryland.—A White-throated Sparrow (*Zonotrichia albicollis*) was banded as an adult with B116127 at Elmhurst, Long Island, N. Y., on November 1, 1930. It was not again heard of until recaptured on November 11, 1932, at Silver Spring, Md., by Mr. Harold S. Peters of the Bureau of Entomology, United States Department of Agriculture, Washington, D. C.—MARIE V. BEALS, 5833 85th Street, Elmhurst, Long Island, N. Y.

RECENT LITERATURE

News from the Bird-Banders, Vol. VII, No. 4. Published by the Western Bird-Banding Association, Berkeley, California. In the issue for November, 1932, of this mimeographed quarterly bulletin, appears an excellent article on "Territory,"² whose author is unfortunately hidden by anonymity. In the first paragraph of this article tribute is paid to the work of the bird-banders of to-day when the author states that "there are two ways of constructing our picture of the life of the bird—one is a mosaic, an effort to patch together a large number of fragments of observation, of many shades of significance and reliability, the other a direct and continuous drawing,

¹This record was obtained by Mr. L. B. Strabala, whose station is situated immediately adjacent to mine, the traps at times being, indeed, as close as a few feet. All other records are of my own capture.

²This article was written by Mr. T. T. McCabe, President of the Western Bird-Banding Association, who writes me that he started its preparation as "a mere editorial suggestion since our docket was quite empty at the time . . . and ended by carrying it perhaps farther than I should."—EDITOR.

in which the whole picture is at least laid in, with a necessary sense of composition and subordination. Probably the development of the latter method in the last decade has created a firmer and more rational basis for the comprehension of the minds and actions of birds than all the work that went before."

Full credit is given for the work of the British scientist H. Eliot Howard in his studies of the behavior of birds, but while Howard made many interesting and valuable observations, there is little of it that is really new, for similar studies had been made by earlier ornithologists, the results of some of them having been published as long ago as 1820. But Howard crystallized the material and brought it out in clear and understandable form. As our author states, "Howard's achievement is synthesis. . . . The facts of territory indicated separately . . . are fruitless without the final summation and coordination." And he goes on to say, "The behavior of a bird through the period of reproduction . . . must be looked upon as a 'neurally linked' series of stepped-up reactions, progressive, dependent each upon the one which went before, correlated with physiological changes, controlling and timing the stages of the process of reproduction with relation to external factors, and dependent upon stimulation from environment or mate to unlock each response at the most advantageous time and manner, — an organization of almost unlimited complexity and great perfection."

Howard's personal work was based largely upon a long and intensive study of certain species of small land-birds. He did not mark or "ring" his birds, but later Burkitt in his study of the Robin Redbreast in England, and Mrs. Nice with the Song Sparrow in Ohio, used bird-banding as an important aid in their researches. The article briefly summarizes the results of these and other studies of territory. A. H. Miller "is not inclined to emphasize the territorial instinct as primarily bound into reproductive physiology," for the fall is "the time . . . of maximum territory-seeking population," according to his studies of American shrikes. It seems probable that it may be food-supply rather than nesting suitability that governs the choice of territory, in some non-migratory species at least. On the other hand Huxley, writing of the Black-tailed Godwit in Holland, found that the birds may arrive at the breeding area already paired or otherwise; or occupy territory immediately upon arrival or after long delay. Economic necessity may govern the territorial actions of our parasitic Cowbird, according to Friedmann.

Our author concludes that "before such a formula as Howard's can be judged it must be tested by application to the facts of a great number of species. The present array of inadequately studied species is quite insufficient. . . . Howard has treated territory as a phenomenon of the reproductive cycle. Certainly it is allied by every degree of proximity with similar situations which have nothing to do with reproduction. . . . A continuous and well-nigh universal phenomenon takes on a peculiarly vivid economic and psychological significance in birds in the season of reproduction, and derives its origin or essential value from the problems of that season. . . . When a theory has become popular it behooves thinking people to hold back as much as possible and try to discriminate the grain of truth which most theories possess from the bushel of parrot-like repetition and forced application." With this in mind he prepared this paper, "the chief object of which is to induce more work on territorial problems through banding." A bibliography of twenty-four titles completes the paper, which is far too valuable and suggestive not to deserve more publicity than it seems likely to receive. Territorial questions open a field for much intensive study by bird-banders, and we urge all readers of *Bird-Banding* who are interested in this phase of the work to get a copy of the

article here reviewed, to peruse it thoughtfully, and to profit by its suggestions.—J. B. M.¹

Der Vogelzug, Vol. 3, No. 4, October, 1932.—This number opens with a paper by Geyr von Schweppenburg on the angle of migration with respect to latitude and longitude and suggests the use of more detailed and explicit compass directions in recording observational data locally.

Eisentraut writes of his observations on bird-migration in the little known Columbrete Islands in the Gulf of Valencia, Spain, and lists thirty-three species seen there.

Schildmacher made a trip to Iceland in the spring of 1932 and contributes an account of his bird observations.

Silvia von Spiess presents an abstract of two reports of the members of the ornithological section of the royal Rumanian Gamekeepers Council, which gives some local notes on birds.

Drost and Schüz describe the migration of the Red-throat (*Erithacus r. rubecula*) and present tables and a map showing the dispersal of birds banded at Rossitten and at Helgoland.

Drost writes on the wanderings of German breeding individuals of the Great Titmouse (*Parus m. major*) and the Blue Titmouse (*Parus c. caeruleus*). These wanderings are not real migrations, but local movements, ranging from fifty to six hundred kilometers in extent.

Schuz continues his compilation of recoveries of birds banded in foreign (that is, non-German) stations.

The usual assortment of short notes and an index to the whole volume complete the number.—H. F.

¹News from the Bird-Banders is published by the Western Bird-Banding Association Museum of Vertebrate Zoology, Berkeley, California.—Error.