

Returns of Tree Swallows at East Westmoreland, New Hampshire.—In 1931 four adults and sixteen young swallows that had left the nests were banded, making twenty birds that might return another year.

All four of the adults banded in 1931 were returns in 1932. During the 1932 breeding-season four new pairs nested. Seven new adults were banded, and four escaped capture. (One male, having lost his first mate, remated.) Thus, at the end of the breeding-season nine banded adults and twenty-eight young, successful in leaving the nest, were tagged, giving thirty-seven birds of the 1932 season available to return in 1933.

Owing to tragedies at the station in 1933, and with another increase of two pairs of birds (one pair at substation C later disappeared), not all nine pairs of the 1933 season were captured to learn their status and incidentally determine their band-numbers. But six birds were known to be returns—five returns-1 and a return-2. Two of these returns were a brother and sister from a 1932 brood, the first young reared here known to return to nest. This year-old male, F60913, nested twenty yards from the place of his birth and where his mother again nested in 1933. His sister, F60911, nested four tenths of a mile to the southwest at substation B. Of the young banded in 1933 only one station brood lived to leave the nest—five birds from Box 2.—LEWIS O. SHELLEY, East Westmoreland, New Hampshire.

Starling Banding in Central Ohio During the Winter of 1933-1934.—During the winter of 1933-1934, 19,557 Starlings were captured in Central Ohio on 32 banding expeditions. Of this number 14,549 were banded, 1686 were released as repeats, 638 were released as returns, and 2522 were kept as specimens in special studies being made. Of the 6215 birds banded last year, 10.1 per cent returned. George Wolfram and C. Conklin banded 2145 of the total in 4 bandings in cupalos of barns near Canal Winchester, and 909 others at Columbus. The remainder, or 11,455, were banded by the writer with the assistance of two students, William Ireland and Harry Fabert, during 28 bandings in or near Columbus. In all, 13,669 birds were captured in 9 towers at the Ohio State Hospital, 2460 in towers and steeples in the downtown district of Columbus, 2390 in the Canal Winchester region, and 1083 at distances of 15 to 60 miles from Columbus. In addition about 200 nestlings, immatures and adults were banded during the summer of 1933, mostly by C. Conklin in the Canal Winchester region.

The 13,669 birds handled at the Ohio State Hospital averaged 10.6 per cent repeats and 3.6 per cent returns; the downtown Columbus birds, 4.9 per cent repeats and 1.4 per cent returns; the Canal Winchester birds, 4.5 per cent repeats and 3.1 per cent returns; and those outside of Franklin County, 1.6 per cent returns. The percentage of repeats at the various bandings ranged up to 46 per cent and the percentage of returns as high as 14.6 per cent. In addition numerous recoveries have been received of birds banded during the last three winters. During the height of the spring migration, 1736 birds were captured on March 16th and 2550 on March 17th, at the Ohio State Hospital.

A brief summary of the 1933-1934 winter banding may be made as follows:

Month	No. of Bandings	No. Birds Handled	No. Birds Banded	No. of Repeats	Percent of Repeats	No. of Returns	Percent of Returns
December	3	1530	1266	30	2.2	154	10.1
January	9	3587	3144	174	4.9	131	3.6
February	8	3901	3098	310	7.9	138	3.5
March	12	10539	7041	1172	11.1	215	2.0
Totals	32	19557	14549	1686	8.6	638	3.3

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"¹ 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 raptors. 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 Egrel 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 book² 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-

¹ J. Thienemann. *Rossitten*. 1930. [3d edition. J. Neumann, Neudamm. 332 pp. 9 RM.

² *Vom Vogelzuge in Rossitten*. 1931. J. Neumann, Neudamm. 174 pp. 8 RM.