

BULLETIN
OF THE
NORTHEASTERN BIRD-BANDING ASSOCIATION

BANDING AT THE SARAH A. McCARTHY BIRD
SANCTUARY WITH ESPECIAL REFERENCE TO
PURPLE FINCHES AND CHIPPING SPARROWS

BY DANIEL W. SHEA

TWENTY-THREE years ago the writer's general interest in birds became more specific through putting out a few bird-houses for some Bluebirds, Tree Swallows, and Woodpeckers that had been deprived of their natural nesting-places by tree surgery done on the apple orchard and shade-trees of a little summer place at Greenland, New Hampshire. More birds sought these boxes than could be accommodated. The interesting ways, beauty, and song of these and other birds and their help against objectionable insects made them desirable. The attracting of birds therefore became an object. A cousin of the writer, Miss Sarah A. McCarthy, of Portsmouth, New Hampshire, had the leisure and the inclination for the work. She developed attractions at the summer place during a period of twenty years to such an extent that thirty-five to forty species now visit the place annually, while fifteen or more species nest there and the number of birds of each species has increased manyfold. Some notes that are to be printed in the January issue of the *Bulletin of the Audubon Society of New Hampshire* will give an account of these attractions and the results obtained through them.

When, in 1920, the Bureau of Biological Survey, in the administration of the migratory-bird treaty between the United States and Canada, took over the systematic banding of birds, Miss McCarthy made preparation for doing much banding. She was entering enthusiastically upon this work when her health failed. She died July 23, 1925. The little summer place where she had learned how to attract and how to tame the wild birds has been made a bird sanctuary in her memory. It is the intention to maintain this sanctuary and provide for it as a perpetual memorial to her. The banding which Miss McCarthy intended doing was begun by the writer in the summer of 1926. This sanctuary comprises about five acres

of nearly level land, at the south edge of Greenland Village, on the west side of the highway leading from Greenland to North Hampton. Nesting-boxes to the number of about fifty are located chiefly on poles eight feet high along the boundaries and in the fruit-tree rows of the western part of the area, and a few nesting-boxes are placed on fruit and shade-trees themselves. A half-mile east of the sanctuary there extends north and south for several miles a broad cedar swamp with a large variety of trees and bushes. A quarter-mile to the west there extends north and south for a mile or more a broad belt of white pine and several kinds of hardwood, with an undergrowth of many varieties of shrubs.

Bird-traps are located at favorable points throughout the five acres. These traps now include, for use in the summer of 1928, two Government sparrow-traps made by Jacobs, three pull-string, four automatic, one top-door trip for dripping water, one tree trap, several shelf, and thirty-eight nesting-box traps, all made by Higgins, of Rock, Mass. In the first period of banding, the summer of 1926, only four traps, two pull-string and two automatic, were in use regularly. In the second period of banding, the summer of 1927, there were in regular use the seven pull-string and automatic, the top-door trip, and one nesting-box trap. The two Government sparrow-traps were used occasionally.

The bait used contains hemp and sunflower seed for Purple Finches; white and golden millet and canary-seed for Chipping, Fox, Song, and Vesper Sparrows; lettuce-seed for Goldfinches; baking-powder biscuit crumbs for Chipping Sparrows, Blue-birds, and Robins; ground raw peanuts, raisins, and pieces of fresh fruits. The systematic feeding of birds which was begun as one of the attractions in 1905 revealed in the course of a few years that these foods were most attractive to the birds, respectively, during the spring, summer, and fall. The large proportion of Purple Finches and Chipping Sparrows among the birds captured was due, no doubt, to the sunflower and hemp seed for the Purple Finches and the biscuit crumbs for the Chipping Sparrows.

The first period of banding extended from June 27, 1926, to September 18, 1926, inclusive; the second period from June 19, 1927, to September 17, 1927, inclusive. The number of new birds banded in the first period was 264, representing eight species. Of this number, 146 were Chipping Sparrows, and 101 were Purple Finches. The number of new birds banded in the second period was 657, representing thirteen

species. Of this number, 212 were Chipping Sparrows, and 349 were Purple Finches.

Of the new birds banded in the season of 1926, there were captured as returns in the season of 1927 twenty Chipping Sparrows and twenty-seven Purple Finches. The details concerning the returns are as follows:

CHIPPING SPARROWS		PURPLE FINCHES	
<i>Banded, 1926</i>	<i>Returned, 1927</i>	<i>Banded, 1926</i>	<i>Returned, 1927*</i>
July 1, ad	Aug. 18, ad	July 1, im	June 29, ad ♀*
16, "	Sept. 17, "	1, im	Aug. 6, ad ♀
17, "	June 19, "	1, ad ♂	July 15, ad ♂
17, "	July 24, "	10, ad ♂	5, ad ♂
18, "	8, "	10, ad ♂	10, ad ♂
21, "	2, "	10, ad ♂	11, ad ♂
23, "	Aug. 14, "	10, im	15, ad ♀
23, im	June 22, "	10, ad ♂	7, ad ♂
Aug. 15, im	Sept. 2, "	13, im	25, ad ♂
26, ad	July 24, "	14, ad ♂	11, ad ♂
27, ad	8, "	14, im	June 21, ad ♀
28, ad	22, "	14, im	Aug. 20, ad ♀
Sept. 2, im	Aug. 19, "	15, im	July 5, ad ♀
2, "	July 13, "	17, im	10, ad ♀
5, "	June 19, "	17, im	2, ad ♂
14, "	July 1, "	17, im	Aug. 9, ad ♂
14, "	14, "	18, im	July 21, ad ♀
15, "	Aug. 24, "	19, ad ♂	June 28, ad ♂
15, "	July 17, "	19, im	July 14, ad ♀
17, "	10, "	19, im	June 27, ad ♀
		19, ad ♂	July 20, ad ♀
		20, im	2, ad ♀
		20, im	10, ad ♀
		20, im	Aug. 7, ad ♀
		Sept. 10, im	June 29, ad ♀
		12, im	June 27, ad ♀
		13, im	July 22, ad ♀

One of the Chipping Sparrow returns built its nest at exactly the same place in a grape-vine where the nest was in which it was hatched the year before. Its young were banded on leaving the nest. Another Chipping Sparrow taken from a nest in a grape-vine and banded in 1926 returned and built its nest in a climbing rose vine at a distance of about two hundred feet from the grape-vine.

Although the Chipping Sparrows build numerous nests at and near the sanctuary, and nest both early and late in the

* The sex of the birds in this column marked "females" could not be positively determined at the time of year they were taken as returns.

season, the number of these sparrows banded in 1927 could scarcely all be accounted for by the nests at or near the sanctuary. I am inclined to think that many of those banded were migrating. An analysis of the repeats indicates that very much migration or movement was occurring from early in the season.

Practically all the Purple Finches must come from nests outside the sanctuary. There is but one conifer among the trees of the sanctuary. In occasional years a pair has had a nest in this tree. The Purple Finch does not nest in the other trees of the sanctuary. My thought is that they nest in the coniferous trees to the west of the sanctuary. Nevertheless, I have not been able in any year to find even one nest of Purple Finches in that belt of trees. I do not know where they nest. An analysis of the banding-records indicates that the adult Purple Finches have disappeared by the middle of August, and that the young are in migration from very early in the season.

We had always supposed that the adult birds which came to us in the spring and nested remained in our immediate neighborhood with the young they produced until the customary time for the fall migration of the various species, respectively. Consequently, at closing the place late in September, leaving it in charge of a caretaker, we suffered pangs of conscience in the feeling that we were deserting feathered friends that we had taken care of all summer, which had acquired confidence in us, and which had become in some degree dependent on us. But two summers experience in banding with many sight observations, indicates that we were wrong in regard to those two matters.

The adult and young Tree Swallows of the sanctuary migrate, or leave together, as soon as the young can leave the nests. This movement begins early in July and is over by the middle of July. In the summer of 1927 the adult and young Tree Swallows of twenty-five nesting-boxes departed within a week, the last leaving on July 15th.

The adult and young Kingbirds keep together in separate families at the sanctuary, and migrate late in August. All are gone by September 1st.

The young Goldfinches come from the nests in the last week of August and the first week of September. They and the adults are still feeding on the green sunflower and other flower seeds when we close the place. Apparently the young and adult migrate together in October.

Some Robins and Chipping Sparrows nest as late as the

middle of August. Therefore there are usually adult and young together of these two species at the sanctuary as late as the end of September.

It is a very different story concerning the Purple Finches, Chipping Sparrows in general, Song Sparrows, Vesper Sparrows, Baltimore Orioles, Yellow Warblers, and Cowbirds. As we were banding these species at an average rate of eight a day we expected that we could band all the individuals of each species in a week or two. But we were surprised very early in our work of banding to note that, on any day, very few of the many birds at the sanctuary wore bands. Search made all through the neighborhood for a half-mile around disclosed very few birds wearing bands, and none farther away than a quarter of a mile. Thus it was indicated that there are no great numbers of these species remaining all through the season. Analysis of the banding-records indicates that the adults of these species go to parts unknown as soon as the young can take care of themselves, which is late in July or early in August. The few adults that come after early August are migrating. The young hatched on the place leave very early. Other young that come are in continual migration, remaining scarcely more than two weeks at the mid-season, and only a few days in the latter part of the season. Perhaps the sanctuary is too small and my banding experience too little to permit drawing any definite conclusions concerning the early departure of the adults and the briefness of the stay of the young.

The following analysis of the 1927 banding-records for the species named in the preceding paragraph, considered in ten-day periods, shows how the proportion of adults and young changes with the progress of the season:

NEW BIRDS, RETURNS, AND REPEATS

1927 Inclusive	Purple Finch		Chipping Sparrow		Vesper Sparrow		Song Sparrow		Balti- more Oriole		Cow- bird		Yel- low Warb- ler	
	<i>Ad.</i>	<i>Im.</i>	<i>Ad.</i>	<i>Im.</i>	<i>Ad.</i>	<i>Im.</i>	<i>Ad.</i>	<i>Im.</i>	<i>Ad.</i>	<i>Im.</i>	<i>Ad.</i>	<i>Im.</i>	<i>Ad.</i>	<i>Im.</i>
June 19-30	46	1	10	1	1	0	0	0	0	0	0	0	0	0
July 1-10	43	27	17	7	0	2	1	1	0	0	0	1	0	0
“ 11-20	16	62	6	24	0	8	0	1	0	3	2	3	0	0
“ 21-31	7	110	14	49	0	11	0	5	0	2	0	2	0	0
Aug. 1-10	8	126	7	57	0	0	0	19	0	1	0	0	0	0
“ 11-20	5	73	18	62	0	0	0	23	0	0	0	0	0	5
“ 21-31	2	72	15	74	0	2	0	30	0	0	0	0	0	0
Sept. 1-17	0	116	10	261	0	1	0	9	0	0	0	0	0	0

The following analysis of the 1927 repeats by the young of the species in the preceding table, considered in fifteen-day periods, indicates that the average length of stay is scarcely more than two weeks. The number of days between the banding and the last repeat for many birds, was only one, two, three, four, or five. For a few birds the number of days was about fifty. One bird repeated seventy days after being banded. The averages made up from so widely differing lengths of stay may have very little value, but I have thought it worth while recording them.

1927 Banding dates	Average number of days intervening between the banding and the last repeat	Days
June 17-30		15
July 1-15		17
" 16-31		18
Aug. 1-15		13
" 16-31		11
Sept. 1-17		3

We have been surprised to find that the young birds coming to the sanctuary for the first time are very tame and behave generally as though perfectly at home there. We have also wondered that in the two summers we have taken no bird banded at any other station. It has been suggested that the inexperience of young birds probably explains the first of these two facts, and that the remoteness of other stations and their small number explain the other fact.

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BIRDS SEEN IN A TRANSATLANTIC VOYAGE

BY CHARLES W. TOWNSEND

ON ocean voyages bird-lovers may always find something of interest. In a dozen separate voyages in a recent journey around the world it was rare for a day to pass without some birds being in sight. Occasionally a bird would alight on the deck or in the rigging of the vessel, and some of these might have been caught and banded, but the majority of ocean wanderers seem beyond the reach of the bird-bander, although a knowledge of these birds gained by banding would be of great interest. Possibly the ingenious bird-bander will some