

**NOTES FROM A PETERBORO, N. H.,  
BANDING STATION****BY HELEN GRANGER WHITTLE**

For three summer seasons, 1923, 1924, and 1925, I have maintained a feeding and banding station for birds near my house in Peterboro, N. H. The house is situated on a farm, with the usual fields and pastures, and a rather abundant woodland tending strongly to conifers. These conditions are favorable to the Purple Finch, which is a numerous species in the vicinity during the breeding-season. With its usual readiness, it flocks to the station, and greatly outnumbers the individuals of all other species combined.

From about April 1st to November 15th, each year, several traps are in readiness, so that at times of sufficient leisure (chiefly over week-ends and with the cooperation of my husband) the birds may be taken with some thoroughness. On the south side of the house in an open situation (preferred by some birds) a pull-string trap about 30" x 30" is maintained. Near it is the additional attraction of a 16" circular bath. On the north side of the house, in a space closely sheltered by buildings, trees, and shrubbery, are placed a second pull-string trap on the ground, a tree trap, and a Chardonneret drip-water trap, 18" x 18" x 18". In addition, two auxiliary elevated feeding-places are provided—a 16" circular-rimmed table, on a single central leg, and a hanging Packard feeder of one quart capacity, which is suspended in the center of an 8-foot stretch of horizontal wire. These auxiliaries are practically cat-, rat-, and squirrel-proof, and are of value in maintaining a food supply in case one is absent from the house for a day or two. All these feeding-devices are within twenty feet of the windows of the house, so that observation is easy at all times. The bait used in chiefly sunflower and canary seed, cracker crumbs, and suet. Raisins are used during the Robin and Catbird seasons.

This season my traps were placed in position on April 1st. Banded Purple Finches were already present in the vicinity, and on April 3d, three were taken two returns and one return<sup>2</sup>. On April 4th at least eight banded birds were counted, including one Song Sparrow. Between April 1st and September 5th, 1925, 101 returning birds were taken as follows:

RETURNS AND RETURNS<sup>2</sup> DURING 1925\*

SPECIES	RETURNS	RETURNS <sup>2</sup>	TOTAL
Purple Finch ( <i>Carduelis p. purpureus</i> )	65	15	80
Vesper Sparrow ( <i>Pooecetes g. gramineus</i> )		1	1
Chipping Sparrow ( <i>Spizella p. passerina</i> )	0		0
Song Sparrow ( <i>Melospiza m. melodia</i> )	0	1	1
Rose-breasted Grosbeak ( <i>Zamelodia ludoviciana</i> )	4		4
Catbird ( <i>Dumetella carolinensis</i> )	1	1	2
Robin ( <i>Planesticus m. migratorius</i> )		1	1
	Total		101

The 15 Purple Finch returns<sup>2</sup> were 50 per cent of the returns of this species in 1924. A series of percentages of this sort, for a period of years, from many stations, will eventually give the average of probable mortality for various species.

The percentages of birds returning in 1925 to the whole number banded in 1923 and 1924 are shown in the following table:

## PERCENTAGES OF BANDED BIRDS RETURNING IN 1925

SPECIES	TOTAL BANDED 1923 AND 1924	NUMBER RETURNING	PERCENT
Purple Finch	230	80	33.80
Vesper Sparrow	2	1	50.00
Chipping Sparrow	46	0	13.00
Song Sparrow	88	7	7.95
Rose-breasted Grosbeak	8	4	50.00
Catbird	8	2	25.00
Robin	10	1	5.20

In 1924, fifteen Purple Finch returns were taken which have not been taken in 1925. These added to the 80 returns of 1925 make a total of 95 individuals taken as returns at this station. Of these, 28 were birds-of-the-year when banded, or 29.47 per cent of the whole number of individuals returning. Of the 28, at least 22 were taken during the nesting-season, making it a fair inference that the whole 22 were nesting in the immediate vicinity of their own derivation—an interesting development, as the tendency in the past, judging from the literature on the subject, has been to believe that the young of most species are

\*In preparing this table, the records of the Chickadee (*Parus a. atricapillus*), White-breasted Nuthatch (*Sitta c. carolinensis*), and Downy Woodpecker (*Dryobates p. medianus*) are omitted for the reason that these birds are commonly non-migratory, or resident, at least in southern New Hampshire, and therefore my records of their visits to the station are regarded as probable repeats, regardless of the elapsed time between takings. The columns marked "Returns" and "Returns<sup>2</sup>" draw a distinction between birds which have returned to the station once and those which have returned a second time, the use of the word return being that defined in The Auk, Vol. XL, p. 329 (footnote), 1921. I have already explained the use of the exponent (2) in a previous note in the Bulletin for July, 1925, p. 49, which see.

forced to the outskirts and unoccupied spaces of their breeding-ranges. The artificial abundance of food provided at a station, and the comparatively greater daily range of Purple Finches from the nest-site, might be thought to have a bearing on this large percentage of nesting second-year birds.

In the case of Song Sparrows, whose daily range from the nest-site seems not to exceed two hundred feet, the percentage of returns in 1925, as shown by the table, was only 7.95; in 1924 it was 9.3. Of the 10 individuals which returned in 1924 and 1925 the surprisingly large number of 8 were birds-of-the-year when banded. Of these, 5 were taken during the breeding-season. One can only guess why the number of returning adult Song Sparrows should have been so small.

In the case of Rose-breasted Grosbeaks, the returns in 1925 amounted to 50 per cent of the number banded in 1924. Their visits are chiefly confined to a period of one or two weeks preceding the nesting-season. An occasional visit from a single banded bird (more often a male) during the nesting-season or immediately following it, indicates that some at least of these birds are located not far from the station.

Two White-breasted Nuthatches (*Sitta c. carolinensis*), Nos. 117455 (♂) and 117456 (♀) were banded on September 6, 1924. They continued coming to the station frequently up to November 15, 1924, when observation was discontinued. During the winter, they found their way to Mrs. Dustan's feeding station one-half-mile distant, and were often observed there, constantly together. On April 17, 1925, they were again noted at my station, and thereafter repeated at intervals up to the 24th of June, when they appeared conveying a brood of young, at least six in number. The whole family fed at my station for a period of ten days to two weeks, during which time five of the young were banded. Between July 6th and 10th, during an absence from Peterboro, the young Nuthatches ceased to visit my station. Mrs. Dustan reports, however, that during that period, at least three young birds, attended by the male parent (readily identified without handling, as his hand is on the left tarsus) appeared at her station. They were observed at intervals during July and August at that station, but the young have never repeated at my station, so far as I know, excepting for a short period after being banded. The parent birds, on the other hand, are still constant visitors, and rarely does one of them come alone. These facts indicate a case of permanent mating in this species.

Peterboro, N. H., September 30, 1925