The second Owl was captured on November 24, and the third on November 26.

Snowy Owls are interesting to watch on account of their fights over food, and their peculiar and laughable poses. They would sit by the hour side by side, and seemed very loving except at meal time. In the evening and at meal-time they uttered a shrill squeal, evidently a fighting-note.

Heath Hen Reservation, Martha's Vineyard, Mass. February, 1927.

## EXPERIENCES WITH NESTING CHIPPING SPARROWS AND TREE SWALLOWS

## BY HELEN J. ROBINSON

ACTING upon the invitation of the Editor of the *Bulletin* for information as to the work taking place at banding stations, I am enclosing a report covering the results of my first season's operations as a bird-bander at Brewer, Maine.

My station is equipped with a government trap, placed near my home, and with several handmade nesting-boxes usable as traps. Among the sixty-seven birds banded between April 1 and November 22, comprising eleven species, mostly ground-feeders, there are several Tree Swallows and Phoebes. In connection with my banding work, I was instrumental in dispatching one hundred and fifty-two House Sparrows and two cats.

Three pairs of Tree Swallows (*Iridoprocne bicolor*) waged a war for the possession of boxes 1, 2, 3, and 4, the battles taking place every morning for sixteen days upon the appearance of the birds. Sometimes by 10 or 11 A. M., and invariably by noon of each day during this period, all the Swallows left the premises for the remainder of the day, and this order of events takes place each season. The contests consisted of the birds screaming and flying about the nesting-boxes, creating so much commotion that none of the birds entered. Finally two pairs disappeared, and the banded pair built a nest in box 1, but about the time it was finished a pair of House Sparrows came to box 2, about sixteen feet from box 1.

The presence of the Sparrows was vigorously objected to by the first-comers, and for over a week there were daily battles, the Swallows being the aggressors. Their disapproval of the Sparrows was manifested by screaming and swooping down from above. The Swallows mounted guard over box 2, prepared to meet the Sparrows each time they returned, but finally the latter left for good, whereupon the Swallows built a second nest in box 2 and transferred the feather lining from their first nest in box 1 to box 2, where they remained and raised a family. In 1923 a similar conflict took place during which the screaming Swallows often swooped and grasped the Sparrows by the crown feathers, even bearing them to the ground, where the attack took the form of a vigorous pecking of the Sparrows' heads.

The family affairs of a pair of Chipping Sparrows (Spizella p. passerina) and a pair of the Tree Swallows, including their young, were observed in some detail. These appear in the following tabulated nesting-histories. The four adult birds were banded and all their surviving young, a total of seven Chippies and six Tree Swallows.

| Date of arrival<br>Prospecting for nesting-site<br>Building<br>Egg 1<br>Egg 2<br>Egg 3<br>Egg 4<br>Egg 5<br>Egg 6 | CHIPPING SPARROW<br>May 2<br>May 19 to May 30<br>May 30 to June 4;<br>(nest in woodbine)<br>June 8<br>June 9<br>June 10 | TREE SWALLOW<br>April 24<br>April 24 and on<br>Nest 1, May 18 to 23<br>Nest 2, May 25 to 28<br>June 3<br>June 4<br>June 5<br>June 6<br>June 7<br>June 8 |
|---|---|---|
| Brooding<br>Hatching  | June 11<br>Three young June 22  | June 9  |
| Young left nest   |   | July 10–11; banded<br>June 29   |
| Young flying  | July 2  | July 10–11  |
| Second nesting  | 3 eggs July 20; nest<br>in wistaria   | No second brood   |
| Hatching<br>Banded young<br>Young left nest   | Two young July 29–3<br>August 5<br>August 7–8   | 0   |

The above observations show that the Swallows, arriving eight days before the Chippies, waged a long war for possession of a nesting-box, and that they had finished a second nest two days before the Chippies had started to build at all; also that the Swallow laid six eggs to Chippy's three, and started to brood two days ahead of the Sparrow. In spite of all, both birds hatched their young the same day, the Chippy bringing off three and the Swallow four. The young Chippies were out of the nest while the young Swallows were still in pinfeathers, and for nine long days after Chippy's youngsters were flying, the Swallows remained in the nest. After the Swallows had left for the season, one brood having been raised, the Chippies again settled down for their second nesting. Brewer Maine, March 1, 1927.

## A RECOMMEDATION TO BIRD-BANDERS

## BY C. L. WHITTLE

IN New England in the winter-time, if we are much afield, we note about us little groups of Chickadees (*Penthestes a. atricapillus*) and Blue Jays (*Cyanocitta c. cristata*), which as species nest here, but which are also partially migratory. We have not ascertained, however, whether or not such little groups, numbering on the average say four or five individuals, are birds which nested about us or birds which are here only as migrants.

Another unknown problem regarding these little groups awaits solution; namely, are they purely accidental gettingstogether of birds in no way related, or are they organized, that is, are they families consisting of birds-of-the-year, with or without their parents?

The solution of both these problems awaits systematic investigation by banding methods, and I recommend that those of our members who are fortunately situated should undertake the work. By "fortunately situated" is meant having opportunity to band whole families of fledgling Chickadees and Blue Jays together with their parents when possible.

In order to study these problems most effectively, resort must be had to the use of colored bands, which are now easily procurable.

In order that colored bands may be used to the best advantage, it is suggested that the most easily recognized colors be employed, namely red (as near spectrum red as possible) and light blue ("baby-blue"). These colors are readily obtainable. This combination of colored bands will serve to band two families of any species, first by placing red bands on the *right* tarsi of a family of young birds and baby-blue bands on the right tarsi of their parents; and, second, by placing all blue bands on the *left* tarsi of the young birds and the red ones on the left tarsi of the adults. Of course this plan of using colored bands may be greatly extended by using colored enamels of yellow, light pink, etc.