

Song Sparrow in my garden at the time was a male B176573, a return-2, which arrived about March 20th, with which I believe the singing female was mated.

The early morning seemed to be the preferred time for singing, for although in April the female's song was heard at all hours of the day, later in the season it was heard only before 8 A.M. She sang at increasing intervals until about June 17th. As I was away from home from June 17th to September 3d, I have no later records.

The song was high-pitched, neither weak nor harsh, but a loud, clear series of whistled notes of varying length (usually of seven notes) seemingly all on the same key. It resembled more the song of the White-throated Sparrow than that of any other bird. The first note was longest, then came three short notes, followed by three notes, each nearly as long as the first, thus: *we-e-e, we, we, we, wee, wee, wee*. There seemed to be four beats to the first note, one beat for each of the following three notes and three beats for each of the last three notes. The time of delivering each note and the space of time between songs were similar to those of the male.

One main song of the male sounds (to my ears) thus: *zip, zip, zip, sir we-e-e, sir, sir we, sir, witz, witz*, with many variations. The females' song included only the fifth note of this male's song and the key seemed to be D of the last, highest octave on the piano. The female Song Sparrow is invariably seen close to the ground, but this female always sang from an elevation of from fifteen to twenty feet, choosing usually a branch of a poplar or the top of a peach tree near by.

Mrs. M. M. Nice in "Zur Naturgeschichte des Singammers," *Jour. f. Ornithologie*, 51, pp. 552-595, 1933; 52, pp. 1-96, 1934, disagrees with E. M. Nicholson in his book on how birds live (52, p. 51-52), who makes a distinction between the "true song" that is a "territorial song" and "invariably uttered at the top of the voice" and the "sub-song" which is "low and inward." He states that "with the possible exception of robins (*Erithacus rubecula*), where the hens keep a separate territory of their own in winter, all records of singing females appear to refer to sub-song, and not true song." Mrs. Nice feels that the female's song is a true song resembling the territory song of the male with all the music omitted, and although it may be a matter of self-assertion, in most cases it appears to be a kind of vestigial phenomenon, eliciting no response from any other Song Sparrow. I heartily agree with Mrs. Nice in this matter, for the song of my female was loud and was delivered in much the same way as the male's song. I could find no reason for her having a territorial song, as the male sang normally and no other Song Sparrows were seen in the vicinity. There seems to be no accounting for her unusual behavior.

Mrs. Nice says that Saunders suggests that singing females may be unusual individuals, that possess some trace of masculine characteristics. She states that one of her singing females had had a peculiar history of wandering from one mate to another in February and later seemed rather uninterested in her nesting, and that another singing female appeared unusually aggressive. It is a regrettable fact that I was unable to obtain any nesting data on my singing female.—Mrs. KENNETH B. WETHERBEE.

Notes on the 1934 Tree Swallow Breeding-Season.—This season with the Tree Swallow (*Iridoprocne bicolor*) has given interesting notes on the relations existant between breeding pairs, and the correlative relations to late-migrating brown, first-year-breeding females. Coincidentally, it has shown a conclusive explanation for the changing of mates and disappearances of breeding birds which occur. It has shown, too, a constancy in the incubation period; and gives probable new data on unusual nestings. The 1934 activities, in particular, with observations on a return male, give an explanation, in part, of the 1933 tragedies recorded by me in, *Bird-Banding*, 1934, p. 134.

Of five nesting return birds three were trapped: F60913 (♂) nested at Boxes 5 and 1 with his first two mates, and at Box 1 with his third, brown, mate. His mate of 1933, H49344, figuring in the 1933 tragedies, in 1934 nested in Box 10, one hundred and ten yards from Box 5, where she nested formerly. A female that nested at Substation C in 1932, F60921, this season selected station Box 13, a mile from the former site. Two females, one at Box 3 and the first seasonal mate to F60913 at Box 1, were not trapped, and their return status is unknown.

Regarding F60913 and his three mates, at two nest-boxes but twenty yards apart, at no time was there disputing between the first two mates. He spent his time about equally between the two. He showed his first noticeable pugnacity on April 17th, when an odd male flushed Box-5 female, L34877, from the ground while she was gathering hay, and as she alighted in an apple tree, tried to mate with her, F60913 giving instant pursuit. On the other hand, when, the following day I lowered Box 1 for inspection, the female repeatedly dove at me, but the male showed no such protective display. The Box-5 brood died from chilling within a few nights after the female ceased night-brooding, when the temperature dropped to 31° on June 8th. The next few days L34877 spent in examining Box 1, from which the other female had been driven away by two brown females, one of which deposited an infertile egg among the well-incubated clutch, the box not having been cleaned out since her desertion on May 23d. When it was cleaned out, and previous to her leave-taking on June 14th, L34877 had some days of disagreement with her successor, later banded 34-24376, when she had settled to nesting in Box 1. They reared one young, which left the nest July 24th.

The first Tree Swallow of the season arrived at the station on April 3d, when the migration of the species was nearly over. About May 1st brown females commenced to appear, and they were common throughout their migration, which lasted to June 16th. It was their late appearances and their actions about occupied boxes which was directly responsible for the rather unsuccessful breeding-season and constant disputing over nests. Since these unmated birds arrive to such an extent after nesting by older pairs is well under way, they are susceptible to mating, and they do mate with paired males, who often desert their former mates for the new-comers. This happened at Boxes 3 and 8 before egg-laying by the original female, and not only she but the male and his new, brown mate also disappeared from the station.

An exceedingly tame half-brown female, L34879, vainly tried for four hours to enter the nozzle of a gas-pump on May 5th. Box 12 was then placed on a near-by pole, and it was immediately taken and nest-building was begun the following morning. This female used several white inner-gum-wrapping papers in lining her nest, probably because white hen feathers were then at a premium.

The female, L34878, at Substation B Box 57, laid three eggs within a twenty-four-hour period. In late afternoon of May 19th there were no eggs in the nest, but three eggs had been laid by noon of the 20th. Two additional eggs laid in the two successive days completed the clutch. It is significant that two eggs of this clutch proved to be infertile.

Another interesting item concerns the male swallow at Box 2. On May 1st, having watched some sparrows feeding on oatmeal at a large flat trap, this swallow flew down to the ground directly in front of the door and proceeded to eat rolled oats scattered there!

Twenty nestings came under observation. Of this number but seven were wholly successful. Of ninety-one eggs laid, sixty were hatched and thirty-one birds lived to leave the nest. All nesting females, save the one from Box 8, were banded. No attempt was made to band the males. Two original mated pairs attempted second broods, at Boxes 7 and 31, the first nestings having been broken up by troublesome brown females, and this was the case with their second attempts. At eight nests eggs were not hatched, at six nests the incubation period was not determined, but six clutches are known to have had an eighteen-day period; while of one clutch of five eggs in Box 10, three eggs hatched in eighteen days and the other two in twenty days. Before leaving Substation B, L34883 female from Boxes 60 and 31, attempted to nest for a third time after twice having lost her mate to a brown female. She disappeared about June 6th, mateless.

Cats, climbing the slender ten-foot poles, were responsible for the destruction of five nests, Boxes 2, 7, 10, 11, and 13, the last at the time containing eggs; and not only pulled out the young birds but much of the nests and especially the feather linings. Brown females were responsible for causing breeding females to leave six nests, Boxes 1 (first nesting), 3, 8, 31, 60, and 71. Brown females nested at Boxes 1 (second nesting), 12, 27, and 51 and Substation C. At Boxes 27 and 51 the males were known to desert their first mates while incubating eggs,

and, although the nests were broken up by the brown females and the first mates stayed about for a few days afterward, these males mated to the brown birds and settled close to the former nests. Two brown females laid their first eggs on the bare floor of boxes, with just a nest-edging of hay.—LEWIS O. SHELLEY, East Westmoreland, New Hampshire.

Returning Chickadee Mates.—The warm weather has delayed the return of Chickadees this fall, but one pair, which reappeared at my station on October 26th, is of special interest. This pair, F23149 (male, banded January 17, 1932), and F31792 (female, banded October 24, 1932), part of whose history was given in a note in *Bird-Banding*, January, 1934, mated in the spring of 1933, having previously been together through the winter. That year their nest was not found, but as they were together on a feeding-shelf on May 10th, when the female begged, with fluttering wings, to be fed, and lunched there again in each other's company on July 9th, there was no doubt that they were a mated pair. Throughout last winter they were much together and this spring remated, raising two broods in the same hole in a birch stump, about three hundred and fifty yards south of my station.

Including their return together on October 26th, the male has been seen on nine of his visits for peanuts, on seven of which, and possibly also on the other two, he was accompanied by his mate.

The tendency of mates to keep together at other than the nesting-season was also noticed last fall. This might be supposed to result from traveling in the same flock, but the above pair is at present alone, except for one new Chickadee that attached itself to them early in the fall.

A second (probable) pair, L18935 (banded October 24, 1933) and H71312 (banded December 9, 1932), are also returns this fall. H71312 has been with its mate on eleven and possibly twelve visits out of fourteen, but L18935 has made seven visits alone (at least the other of the pair was not seen) or with other Chickadees, several of which are now flocking with these two.—DOROTHY A. BALDWIN, Hardwick, Massachusetts.

A Twelve-Year-Old Blue Jay Recaptured.—On the 17th of November, 1933, a Blue Jay (*Cyanocitta c. cristata*) bearing band number 9612, was taken in a flat trap. This bird had been banded on January 2, 1922, by Mr. Aldred S. Warthin, Jr., at a station located about three hundred yards from the site of recapture. While the numbers were entirely legible, the band had worn thin and was therefore replaced by C333993. The bird has not been retaken since.

This indicates that Blue Jay 9612 was at least twelve and a half years old when it was retaken, more than two years older than the Wren-tit recently reported by E. L. Sumner, Sr., (*Condor*, 36, 1934, p. 170) as the oldest recorded wild passerine bird.—THOMAS H. WELLER, Ann Arbor, Michigan.

An Age Record of the Common Tern.—The following recovery is of interest because of the length of life of a Common Tern (*Sterna h. hirundo*) that carried band number 674003 from July 1, 1928, until it was reported killed on September 7, 1934.

The bird was banded as a juvenile on Tern Island, Chatham, Massachusetts, and was killed on the west coast of Puerto Rico at Cabo Rajo.—CHARLES B. FLOYD, Auburndale, Massachusetts.

A Downy Woodpecker with a Broken Bill.—The inbreeding male Northern Downy Woodpecker (*Dryobates pubescens medianus*) banded A260655,¹ a permanent resident bird at our yard, coming to the food daily or nearly so over a

¹ See *Bird-Banding*, Vol. III, pp. 69, 70, 1932.