

## RETURNS AND SURVIVAL RATE OF WINTERING TREE SPARROWS

BY GEORGE J. WALLACE

TREE Sparrows (*Spizella arborea arborea*) arrive at Pleasant Valley Bird and Wild Flower Sanctuary, Lenox, Massachusetts, in great numbers in late October or early November, linger for two to three weeks, and then depart, leaving behind a small group of winter residents. Banding the fall transients, as might perhaps be expected, has yielded only negligible returns, an experience likewise applicable to the many migrants passing through in March and April; but the few strictly winter resident individuals repeat and return again and again.

Of the eight Tree Sparrows wintering at the Sanctuary in 1937-38 seven were back the following year, a seemingly astonishing return percentage (87.5%) for a highly migratory species (slightly higher returns—90%—were secured that year for one flock of more or less sedentary chickadees). Seven newcomers eventually joined the oldtimers, raising the second winter's total population to fourteen, although three of the new ones were not noted until rather late (January 30, February 4 and 10) by which time two of the older birds seemed to have disappeared.

That such high returns (seven out of eight) may be somewhat exceptional is at least suggested by the significantly lower return figures for the two succeeding winters. In 1939-40 only five of the previous year's 14 returned (35.75%) and in 1940-41 only three out of nine (33.3%).

The accompanying chart, drawn by the Sanctuary hostess, Miss Helen Gay, graphically shows the return and survival rate of winter resident Tree Sparrows over a period of three years, from the end of 1937 through 1940. The small number banded (4) during the extremely severe winter of 1939-40 and the fact that none of them returned in 1940-41 has apparently not seriously altered the total population as the number of newcomers (7) seems to have built up the wintering group to its normal level.

One of the Tree Sparrows, banded here December 15, 1932 by S. Morris Pell and now in its ninth winter, is in the upper brackets of recorded age limits for this species. It has been a winter resident at least for the past four years, if not since the original banding date, the Sanctuary being a winter haven to which this individual un-failingly returns year after year.

Not included in the above accounts is F76454, banded here February 17, 1933 and retaken December 13, 1937. Though in the banding trap only a short time and not appearing unduly alarmed or injured in any way, this bird died in the hand without a struggle



when removed from the trap, the only instance of such an occurrence in the similar handling of hundreds of specimens. Subsequent dissection disclosed no trace of external or internal injury. The bird was an adult male, at least five and one-half years old.

Thus the Sanctuary's winter population of Tree Sparrows appears to be a relatively stable group, the same individuals returning year after year if survival permits, with losses in the ranks being filled by new individuals. They appear to be distinct from the hordes of spring and fall transients, which as far as banding evidence can disclose, rarely return via a Sanctuary route. The only apparent exception to the separateness of transients from the winter residents is of a bird banded March 29, 1939 and retaken two winters later on January 24, 1941. Otherwise, aside from an occasional February influx from unknown sources, the wintering group arrives in late fall and remains into April, forming a loose association whose individuals (unlike chickadees) apparently stray far and wide, often disappearing for days at a time, but eventually reappearing at the Sanctuary feeders, sometimes all together, more often as small separate segments of a larger wintering group.  
Pleasant Valley Sanctuary, Lenox, Mass.

---

## A TRAP FOR BANK SWALLOWS

BY WILLIAM A. MORRIS

BANK Swallows (*Riparia riparia riparia*) afford good opportunities for banding because they nest in colonies which frequently can be reached without much difficulty. However, banding large numbers of them by using hair nets or large traps let down from the edge of the bank is a tedious chore, and most of the birds escape. To overcome these disadvantages I have used individual traps consisting of cellophane bags attached to ends of cardboard tubes. These are placed at the entrance of the nesting holes, preferably just before dawn, before the birds have emerged.

The trap consists of three parts, namely, a cellophane bag, (two-pound size) a piece of thin cardboard about five by seven inches, and a small elastic band. The bags can be obtained at small cost from wholesale grocers. Cardboard of the thickness used for corn flakes boxes works well because it can be rolled into a tube without cracking. It can be obtained at paper box factories in pieces about five feet square for practically nothing and cut into the desired size. The elastic bands should be small, about the size of the thumb nail.

To assemble the trap roll a piece of the cardboard into a tube seven inches long and about two inches in diameter. Insert this into the mouth of the bag about three inches. Now fasten the bag to the tube with an elastic band. If too tight a band is used the opening of the tube may become too constricted for a swallow to pass. On the other hand, if too loose a band is used the bag will