

FEW ROBINS RETURN TO THEIR HATCHPLACE

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The subject of how many birds return to the site or vicinity of their hatchplace has long captured the attention of bird banders. Its solution comes not from conjecture but only from a percentage study of birds banded as nestlings and subsequently trapped within a short distance of their place of hatching. Since birds are not born, they have no birthplace. The ability or habit of return is not shared equally by different species, but generic comparisons may be interesting. The robin offers an excellent opportunity for such a study because of the ease of determining the four age groups which are encountered during the breeding season—nestling, fledgling, juvenile and adult. Unfortunately the robin is not as easy to trap as some other birds whose age periods are less easy to recognize.

In attempting to determine the proportion of birds which return to their location of hatching, the number of birds of the species hatched within the area and banded as nestlings, and the number of these individuals which return during some future year must be reported; the numbers banded as adults, or as birds probably hatched at a distance, has nothing to do with the compilation. Also the reporter of records should define the limits of the district regarded as the area in which the birds were hatched. Some localities have a concentration of banders within a few miles who could cooperate in reporting on a species, if they recover each other's birds. When a bander is located many miles from other trappers his nesting area of reporting is much restricted, but his conclusions no less trustworthy.

The trapping station at Harrisburg, Pennsylvania, whence these reports come, is many miles remote from any other bird bander. It is a residential yard with about a dozen traps, some with water-baths. From 1928 to 1944, I banded 647 Eastern Robins, *Turdus migratorius migratorius* Linnaeus, with 30 subsequent returns (4 per cent.) There were 187 robins banded as adults, giving 16 per cent returns at the traps; 317 banded as fledglings or as juveniles, of which only 3 returned to the traps. I banded 143 nestling robins, mostly within 500 feet of the banding station, and only two ever came into the traps in later years. Only those two banded as nestlings can be claimed to have returned to their hatch locality. If the fledglings and juveniles could be added they would not raise the ratio of returns. Other studies amply confirm the statement that birds, at least robins, banded as juveniles cannot be included in the category of hatch-returns, unless there is a definite method of checking the birds over a considerable area.

Nestling robins were given a special study in 1935 when I banded 43 in nests found within an eighth of a mile of the trapping station,

and not one ever came to the traps in any future year, although five were trapped as juveniles. During 1934 I banded 110 nestling robins within 500 feet of the trapping station; of these five were found dead that same season, five were trapped the same summer, one returned the following year and one was caught three years later in Baton Rouge, Louisiana.

It was my good fortune to be invited to participate in the J. Murray Speirs Robin Survey, 1938-1941. This activity, for me, included daily visits to the campus of the Harrisburg Academy 200 feet from my home, to include robin counts, binocular checking of color-banded robins, nestling banding and other observations. The results suggested the length of the fledgling stage, proved the rapid dispersal of juveniles and the lengthy stay of some adults. Robins color-banded as adults were known to remain the following number of days after being banded: 19, 19, 37, 46, 58, 62, 73 and 121 days. Their dates of banding extended from April 4 to June 27, and the robin banded April 4 was last seen on August 10. The juveniles did not remain so long. One nestling, banded in the nest July 6, was seen on the ground on the 12th, 13th, 15th, 17th, 18th and 23rd, and never later. Another color-banded July 17 was seen on the ground daily after the 20th until found dead July 23. Another color-banded May 24 was seen up to June 21. Another set of nestlings specially color-banded in a nest in a remote corner were daily searched for and only one was ever seen out of the nest, and on the day following the banding.

The rapid dispersal of the juveniles from this four-acres of college lawn was clearly shown by the daily counts of adults and spotted young. The number of juveniles present bore no relation whatever to the number of adults. As an example, on September 17, 1940, there were three adults and seven juveniles, on the 18th 23 adults and 12 juveniles, none of either the following day. Juvenile robins during migration do not necessarily travel with their parents: from September 8 to 17 there were counted 52 adults and 74 juveniles; from September 19 to 30, there were 120 adults counted and only one juvenile in the same area. The September daily count varied from one to 31 adults, showing there was little if any duplication, and the birds were on the move. In July the daily juvenile count, after July 26, varied as 17, 13, 31, 18, 17, and not over six on any day of the next week. These figures attest the statement that robins banded as juveniles cannot be stated to have been reared nearby.

The habits and activities of one species do not necessarily explain those of another, but comparisons of species are not always odious. In 15 years I banded 42 nesting House Wrens and only three adults returned in after years, only seven per cent. Of their nestlings I banded 77 and not one ever came back to the yard. I banded 157 adult catbirds of which 17 returned, and 101 catbirds judged as probable juveniles

with five returns, and 30 nestling catbirds giving no returns. During five years I banded 136 adult and 87 nestling Bank Swallows, *Riparia riparia riparia* (Linnaeus), at the only sand-bank within many miles. Not one of these birds were among the 49 adults caught at the sand-bank two years later, and during the four previous years only one of the 223 Bank Swallows was caught as a return. Purple Martins, *Progne subis subis* (Linnaeus), totalling 27 adults and 99 nestlings, were banded at a large colony house during three years, with no returns during those years; in later years frequent inspections revealed only one bird with a band. These records from a small banding station, although not many, tend to support the contention that returns of birds to their natal environment are actually few in proportion to those banded as nestlings, at least for the species herein considered.

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GENERAL NOTES

Recovery of Chickadee Bands from Screech Owl Pellet.—Since October 27, 1946 a Screech Owl, *Otus asio naevius* (Gmelin), has been roosting in a large bird box in our back-yard, and I have been picking up pellets beneath the box for examination. All of them seemed to contain the remains of mice, until on March 4, 1947, a small pellet was picked up which contained two bands. Upon checking my records I found that I had placed these bands on Chickadees, *Parus atricapillus atricapillus* Linnaeus, one 42-57193 on August 4, 1945, and the other 40-22749 on September 18, 1946. Just prior to this, there was a fairly heavy fall of snow which undoubtedly made the owl unable to secure mice, so he resorted to the Chickadees.—MRS. CHARLES L. SMITH, 75 Westland Road, Weston 93, Mass.

A New Species is Added to North American Bird Banding.—On January 18, 1947, I had the good fortune to add a new species to bird banding history. The bird that had its name entered for the first time in banding records was first observed on January 12th within the Toronto area. On January the 14th a second of the same species put in its appearance within two hundred yards of the first one's territory. On this date both birds were observed in flight at one time. The birds were none other than one of our apparently decreasing species: the Great Grey Owl, *Scotiaptex nebulosa* (Forster).

The successful day was clear, cold, and the newly fallen snow made our footing silent. We arrived at our destination armed with a caged rat in a sack, a number of padded and weakened muskrat traps, our usual pocket full of various gage nooses, and general banding equipment. After an hour's search our quarry was sighted, perched ten feet from the ground in a large willow. In order to put our first tactic into effect, my two assistants held the owl's attention while I set the muskrat traps on short posts plainly in view of the bird. The caged rat was then placed within the trap circle and I retreated, taking with me the sack. Immediately his interest centered on the rat, and the thought of a very hearty meal. However, after watching him turn on the perch a dozen times and seeing him almost strike over and over again, our patience became exhausted. This called for tactic number two. A long willow sapling was secured and a sturdy copper noose affixed to the small end. The first try to slip the noose over the owl's head failed and he glided away. After an hour of try after try, however, the feat was successful and the bird was toppled from his perch, and in a split second was firmly held