

THE RESULTS FROM BANDING BARNSTABLE  
BLACK-CROWNED NIGHT HERONS

BY JOHN B. MAY

EXPERIENCE is teaching us that the percentage of "returns" or "recoveries" of banded birds depends largely upon certain definite factors. In the case of adult birds, the question of individual habits or characteristics of the species enters into consideration. Are they birds which are hunted for sport, thus furnishing fair probability that they will fall into human hands? Are they unsuspecting and easily trapped or wily and "trap-shy"? Do they travel a definite course during their migrations, so that they are likely to return to the original banding station, or are they erratic wanderers, attracted by any favorable feeding-spots such as are provided by bird-banders far and near?

If nestling birds are banded, the ratio of infant mortality looms very high. Few of us perhaps realize the tremendous mortality during the first season among small birds. The House Wren with progeny of possibly fifteen young per season, barely holds its own in most localities, and the percentage of returns from banded nestlings is small. The probable mortality can be figured pretty closely by estimating the number of young per pair per season of any species of bird.

The House Wren caught by a cat in your dooryard may be a "return" and its band recorded, but those that die from the hundred and one other natural causes disappear among crannies, drop to earth in rank vegetation, are picked up by fox or skunk or snake, and so on, but they are never seen by man. Some of the larger birds, however, are sufficiently conspicuous to attract the eye (or nose) of the passer-by, and so their records are more complete.

The Black-crowned Night Heron (*Nycticorax nycticorax naevius*) has proved an excellent subject for banding and has furnished many interesting recoveries. Nesting frequently in large colonies and in more or less readily accessible locations, it has been the object of numerous banding expeditions.

The great colony of Night Herons on Sandy Neck in the town of Barnstable, Massachusetts, has interested ornithologists for a long time and was the spot chosen by Prof. Alfred O. Gross for his intensive study of the life-history of this bird. At that time, June 22, 23, 1920<sup>1</sup>, he estimated the heron

population at about 9500 birds, old and young, there being about 2300 occupying nests.

This Sandy Neck colony was also the scene of one of the earlier bird-banding experiments in this country, Dr. Leon J. Cole banding a number of birds there in the summer of 1909. Seven recoveries were noted that year, the records being published in an interesting article by Dr. Cole in *The "Auk,"* Volume XXVII, page 160, and these recoveries are given in Table I.

TABLE I

DATE OF BANDING	DATE OF RECOVERY	PLACE OF RECOVERY
June 24, 1909	Aug. 00, 1909	Wellfleet, Mass.
June 24, 1909	Aug. 18, 1909	Minot, Mass.
June 23, 1909	Aug. 27, 1909	Holliston, Mass.
June 24, 1909	Aug. 29, 1909	Berkley, Mass.
July 8, 1909	Sept. 4, 1909	East Orleans, Mass.
July 8, 1909	Sept. 11, 1909	Cape Porpoise, Me.
July 8, 1909	Sept. 17, 190	Seabrook, N. H.

On June 17, 1922, a group of enthusiastic members of what was then the New England Bird-Banding Association visited Sandy Neck and banded several hundred nestling Night Herons. A number of interesting recoveries resulted, and the visit was repeated in June 1923, 1924, and 1925. In the last visit bands were placed on about 1500 young birds, bringing the total number banded in the four seasons to approximately 2500 birds.

At the date of writing, March, 1926, sixty-seven recoveries have been reported to me through the courtesy of the Biological Survey. Most of them were birds reported as "found dead," the large size of the bird and the conspicuous band drawing attention easily. A few Herons were shot, others were caught in muskrat traps, and at least one was caught alive and later released. By an interesting coincidence, the last record of all was given to me personally after this article was commenced, by boys who found the dead bird a few miles from my own home.

I know of no Herons having been trapped by bird-banders, in Massachusetts or elsewhere, and thus far no one has observed any bands on adult birds in the Barnstable colony, although an effort has been made to do so. If some plan could be devised for trapping adult Herons either when

<sup>1</sup> See *The Auk*, Vol. XI, 1923, pp. 13-15.

feeding or at the nesting-site, much very interesting additional data might be obtained. I suggest this as a profitable field for some of our inventively-inclined enthusiasts. It is notable that so far only two recoveries of Barnstable birds have occurred more than eight months subsequent to the date of banding. Dr. John C. Phillips has an unpublished record of an Essex County Heron recovered six years after banding, within a few miles of the place of banding.

The accompanying map (see cover plate) gives graphically the results to date of the work of ten members of the Northeastern Bird-Banding Association at Barnstable.

Of the 2500 birds of this species banded by the members of the Northeastern Bird-Banding Association from 1922 to 1925, 68 known recoveries have been made up to the present writing, March 18, 1926, the recoveries ranging, with three exceptions noted below, from Eastern Canada (Province of Quebec) along the coast States to Florida and Louisiana. The discoveries are distributed among the commonwealths as follows: Province of Quebec 7, Ontario 1, Maine 9, New Hampshire 4, Vermont 3, Massachusetts 17, Connecticut 2, Rhode Island 1, New York 6, Pennsylvania 3, Virginia 2, North Carolina 2, South Carolina 1, Georgia 2, Florida 4, Louisiana 2, Island of Jamaica 1, and Michigan 1.

While it is perhaps too early to draw any definite conclusions from the data collected, some significant facts are shown. The northward dispersal of young birds soon after leaving the nest is well indicated. Over thirty recoveries between August 5 and November 3 are from points north of Barnstable. Of these the most striking is Night Heron No. 311605, which was caught in a trap at Ste. Hedwige, about ten miles from Roberval, in the Lake St. John region of Quebec, nearly four hundred miles due north of Cape Cod, on November 3, 1924. At this date one would expect the birds to have departed for warmer climes. Two other November records, viz., Amherst Island, Ontario, and Erie, Michigan, were birds "found dead" and may have been dead some little time, hence are of lessened value.

By October some of the young birds have journeyed as far south as North Carolina and Georgia. Mid-November records them in Florida and Louisiana, and November also furnishes a recovery from the island of Jamaica in the West Indies, as well as the Quebec, Ontario, and Michigan records noted above.

The records of wintering birds show a most catholic taste. Reports come in December, January, and February from

Florida, Georgia, South Carolina, North Carolina, Virginia, New York, and Massachusetts. Three birds were found wintering within fifty miles of their place of birth. The bird reported from Hingham, Massachusetts, February 12, was picked up dead, but in perfect condition, two days after a very severe snowstorm.

The two recoveries of birds of the second summer are of little value, but we will hope for more data in the future. One record, Marshfield, Massachusetts, July 8, 1925, is probably within a day's flying range of Sandy Neck, and may mean that the second-year birds return to the natal colony, though themselves not breeding until more mature. The other second-summer record, Haverhill, Massachusetts, September 8, 1923, may indicate that these second-year birds also join the northward dispersal with the first-year young.

In conclusion I may mention briefly some recoveries of Night Herons banded in other sections of Massachusetts, which merely reinforce the Barnstable data. Of twenty-five records, all but two were made within eight months of the date of banding. One of these two I have already mentioned, Dr. Phillips' six-year-old bird recovered in May within a few miles of its birthplace. The second was a bird recovered on the island of Haiti, sixteen months after banding. As these birds will probably be reported in detail by their banders, I do not give more exact data. The only other recovery of interest that has come to my attention was a bird which alighted on a north-bound steamer about two hundred and fifty miles east of the Delaware Capes, in October.

Cohasset, Massachusetts, March, 1926.

---

## A PARTIAL HISTORY OF FIFTEEN TREE SPARROWS

BY DON V. MESSER

THE winter season of 1924 at my banding station in the Berkshire Hills at Huntington, Massachusetts, was unusual in that only one group of Tree Sparrows (*Spizella m. monticola*), fifteen in number, came to my banding station. The birds appeared on February 3d and most of them were banded on February 12th and 22d, and all by February 25th. These Tree Sparrows were all there were about the house up to April 4th, barring a single bird which appeared on March 12th,