

IS BANDING BARN OWLS WORTH WHILE?
 (Paper given at 1966 EBBA Annual Meeting)
 By Mabel Gillespie

The April, 1965, quarterly issue of the Western Bird Bander includes a "Summary Report of Individual Banders" followed by a Commentary by C. H. Channing. After laying emphasis on the advisability of having projects and purpose in banding activities, he concludes with this paragraph:

"Assume you band Nestling Barn Owls in a controlled situation where you have the same nestings available each year. Is this only a chance to add numbers to your total? Do you at other seasons attempt to capture adult, free-flying Barn Owls in the same area? What provocative and valuable data might you gather by dropping all other banding efforts and becoming a year-round Barn Owl specialist? Do the same adults use the same nest year after year? Does a male mate with one of his own offspring if his original is killed or dies? Do the Owls leave the area in winter? Or migrate long distances or only locally? Etc. How many of us are truly interested enough to become scientific and productive banders; adding something to the ornithological sum total, or will we just go on 'playing golf' until the pressure of regulation takes our clubs away?"

Mr. Channing's remarks challenged me to consider the Barn Owl data in my banding files. Sixty-three of the species, all nestlings but five, had been banded by my husband, John. Since I know something of the difficulties involved in getting hold of even nestlings, I claim that an attempt to capture free-flying adults during non-nesting seasons would require aerial acrobatics beyond the facility of the average bander.

Furthermore, I claim that banding nestling barn owls in a controlled situation where you have the same nestings available each year can be most productive of valuable scientific data. I claim also that the same is true of banding nestlings wherever they can be found. To substantiate my claims I shall show briefly the results obtained from John's banding of Barn Owls, and also from a study of the same species made by Allan R. Keith.

It was in May, 1924, that the late Julian K. Potter came upon a pair of Barn Owls nesting in the upper story of an old, dilapidated water tower in a waste area near the Delaware River south of Camden, New Jersey. He enlisted John in a year-round study, the results of which were published in the Auk (Vol. XXII, No. 2, April, 1925). The men spent one entire night observing the feeding of the young, as well as parts of many other nights, and checked the site throughout the year. It was a very entertaining as well as informative experience.

The activities in the tower were observed during a two-year period. The old tower was then torn down. Six young and the female were banded in 1924. Seven young were banded in the early summer of 1925, and another five during a late fall nesting that same year. In the early summer of 1926 six more young were banded, making a total of twenty-four nestlings. The banded female mothered all four broods and, with her mate, remained in the vicinity throughout the seasons.

Of the twenty-four young, four were subsequently heard from. This is a percentage of 16.6 which is comparatively high for avian recoveries. One was taken in August, two months after banding, at Somers Point, New Jersey, fifty miles a bit south of due east from the nest site. A second, banded in November, was taken at Trappe, Maryland, the following April, ninety-five miles almost due south. The third, banded in May, was shot near Wilmington, North Carolina, the following November, some 430 miles almost due south. The fourth, banded in June, 1926, was caught on a pole trap in February, 1928, in Jasper County, South Carolina, after traveling 600 miles a bit west of south.

This Barn Owl study was a planned project, limited to a series of the same nestings. Of the other thirty-eight, four were adults brought to us now and then. The remaining thirty-four were nestlings from nests here and there, mostly within twenty-five miles of Philadelphia. Four out of a brood of ten were banded in a nest in a barn on Martha's Vineyard Island, Massachusetts, and four were banded near the Delaware Water Gap, Pennsylvania.

There were four recoveries from the thirty-four young, a percentage of a little over eleven. One was killed near its nest site a month after banding. One banded in July near Pottstown, Pennsylvania, was "destroyed" near Dorsey, Maryland, two months later, one hundred miles southwest. The one banded in May at Augustine Beach, Delaware, was reported from Chenango County, New York, three months later, at least 200 miles due north. The fourth, banded on Martha's Vineyard in August, 1938, was found dead near Teaneck, New Jersey, in November, 1941, 190 miles a bit south of west.

It should be noted that two weeks at the very least would elapse between the dates of banding and the dates when the young would become independent and would, presumably, be driven away by the adults.

In Bird Banding, (Vol. 35, No. 1, pp 22 - 31, January, 1964), is an article entitled "A Thirty-Year Summary of the Nesting of the Barn Owl on Martha's Vineyard, Massachusetts," by Allan R. Keith. Mr. Keith tabulated all nestings of Barn Owls reported on the island during thirty years. Of these nestings, 135 young were banded. A second table lists all recoveries of Barn Owls banded in the entire state. There were twenty-one, of which thirteen had been banded on the Vineyard. Thirteen out of 135 is about ten percent.

According to E. H. Forbush, "Birds of Massachusetts and Other New England States," Vol II, page 190, the Barn Owl is "a rare visitor from the south in southern New England." This was written in 1927, and since then there has been a tendency for some Carolinian species to extend their ranges further north. It is also a fact that southern species are far more apt to be found on the Vineyard than on the mainland.

Mr. Keith considers the distances traveled by young Barn Owls banded on the Vineyard are relatively short. One went to Maryland, 400 miles. Three were reported from the Philadelphia area which is over 250 miles in a straight line. Following such a course would take the owls seventy-five miles across the ocean between the Vineyard and Long Island with a possible stop-over on Hock Island. It seems more likely that they would first cross the five miles or so to the mainland, and then follow more or less the automobile route. One of the above mentioned owls was shot within two miles of my Glenolden home. The distance from Glenolden to Woods Hole, mainland terminal for the Vineyard ferry, is 370 miles clocked by automobile.

Personally, I was amazed that juvenal Barn Owls would have gone so far a-field. I look on their travels as post-natal dispersals, whereas Mr. Keith thinks of them as migrations. I think we may both be correct. Bent in "Life Histories of North American Birds of Prey" (part 2 Orders Falconiformes and Strigiformes - U. S. National Museum, Bulletin 170) wrote in summarizing migration habits: "It appears that in the eastern part of the country some young Barn Owls make extensive journeys southward that have some characteristics of true migration. This apparently is not general, however, and may be similar to the post-breeding season wanderings of certain herons, gulls, and other birds." At any rate, Barn Owls I have known in the Philadelphia area, stay about throughout the year. One assumes that these are resident adults.

Three of the thirteen Vineyard recoveries were taken on or near the Island of Rhode Island. One was reported a year and four months later in September, another a year and eight months later in March, and the third two years and seven months later in May. Do these facts indicate migration or the settling in undisputed territory? I do not know how long it takes a Barn Owl to reach sexual maturity.

Four Vineyard recoveries were reported from the island. One was found dead in November, four months after banding; one was found dead in February, eight months after banding; one was found dead less than a month after banding; and the fourth was found dead in February, four and a half years after banding. Why had they not migrated for the winter?

Brief consideration has been given to three types of Barn Owl study: the controlled situation with the same nestings each year, the banding of owls wherever they may be found; and banding in a geographically contained island population. At times there have been known to be two

or three nestings on the Vineyard at one time. In view of the queries raised from these three sets of data it seems obvious that no one person, however acrobatic and enthusiastic he may be, can possibly accumulate enough data for proven answers. Mr. Channing had a good point, but chose a poor species as illustration. Furthermore, the data here presented suggests answers to some of his queries, and raises more queries.

A solution to the problems of Barn Owl study would be for every bander to seize any opportunity to band Barn Owls. Also, and this is of utmost importance, all information gathered should be published. Inertia in publishing is surely the weak point in our procedures, far more so than the playing of ornithological golf.

As a matter of fact, the golfing bander isn't going to do much for his score by banding Barn Owls. Often it isn't possible, and seldom is it easy to band the young, let alone adults. But when there is a reasonable possibility of banding any of this species, it seems well worth while to do so, at least until we have obtained a reasonable amount of data. In order to answer more fully the questions Mr. Channing posed, and those raised in the course of this presentation, we need a wealth of further information, and especially we need to have it readily available.

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TITMOUSE POSTJUVENAL MOLT By Constance Katholi

T. S. Roberts' Birds of Minnesota states on page 642 under "Key to Minnesota Titmice (Family Paridae)": "The adults (Titmice) have a single, annual, complete postnuptual molt. . .The postjuvinal molt is partial, wing-quills and tail being retained until the first postnuptual molt. . ."

On May 26, 1966 I banded 6 nestling Tufted Titmice and on August 23 I recaptured three of them. All three birds were in the process of molting the tail. On two birds the two central pairs of retrices were missing with the replacements visible in the sheaths. The third bird had only one old feather remaining, the new ones being at various stages of development. This is an obvious error in the Manual which has doubtless been recognized by experienced banders. Furthermore, it is apparent that the same sequence of molt occurs in Chickadees, despite the similar misinformation in the text. What I had hoped might be an additional aid to the ageing of these species at this time of year - through characteristics of molt - proved a failure.

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