

FIELD NOTES

Bluebird Nestbox Project: This is a preliminary report on a bluebird population study carried out during 1962 and 1963 in the Olean, (Cattaraugus Co.) area.

In the fall of 1962 the Biology Students of Allegany Central School built 25 bluebird boxes under my direction which were erected in spring within a five mile radius of the school. In 1962 eight of the boxes were occupied by bluebirds. Other activities in the summer prevented acquiring more detailed information.

The success of this very limited project led, in the fall of 1963, to the making of 150 more bluebird boxes by the Biology students at Allegany Central School. With the help of Dr. S. W. Eaton, Biology Professor at St. Bonaventure University, the boxes were distributed within the area used by the annual Christmas bird count. (Audubon Field Notes, April, 1951 pg. 67)

Dr. Eaton and I erected 124 boxes between March 16-18, 1963 and observed nine bluebirds during the operation. Especially interesting were three bluebirds which were seen perched on a telephone wire that crossed a small stream. The birds were feeding on stonefly adults (probably *Taeniopteryx nivalis*) which had recently hatched and were crawling on top of the snow. This may well be an important source of food for bluebirds in the first month of return.

The break-down of the 1963 nesting season is as follows:

The total number of boxes erected was 124 and of these:

- 40 were used by bluebirds (first and second broods combined)
- 2 were used by bluebirds and then House Sparrows (*Passer domesticus*)
- 4 were used by bluebirds and then Tree Swallows (*Iridoprocne bicolor*) (in only one case did the bluebird nest after the tree swallow)
- 1 was used by a bluebird and then a House Wren (*Troglodytes aedon*)
- 34 were used by Tree Swallows
- 3 were used by House Wrens
- 3 were used by House Sparrows
- 3 were used by Black-capped Chickadees (*Parus atricapillus*)
- 1 was used by a Tree Swallow and then a House Wren
- 27 were empty
- 6 were destroyed by humans

The first nesting period (April 15-May 15) produced 31 clutches of 136 eggs, averaging 4.4 eggs per clutch. Of these, 52 hatched and 34 nestlings left the nest. Of these 23 were banded. Out of the 31 clutches 20 were totally unsuccessful. Twenty-five percent of the eggs laid produced fledged bluebirds.

The second nesting period (May 20-July 15) produced 28 clutches of 131 eggs, averaging 4.7 eggs per clutch. Of these, 106 hatched and 90 nestlings left the nest, of which 67 were banded. Out of the 28 clutches 4 were totally unsuccessful. Sixty-eight percent of the eggs laid produced fledged bluebirds.

Combining the first and second nesting together we see there were 59 clutches of 267 eggs, averaging 4.5 eggs per clutch, 158 hatched and 124 nestlings left the nest. Of these 90 were banded.

It is interesting to compare this with the success of W. L. Highhouse (Kingbird, 1963, 13:24) (Pennsylvania Game News, April 1963). It should be noted that none of the eggs were sprayed with a mild flea powder and that the floor space of all boxes used was at least 20 square inches.

Other points of interest were:

There was one clutch of 5 white eggs which was abandoned. These were later removed from the nest and examination showed they were fertilized. In two instances Tree Swallows usurped a bluebird nestbox after the bluebirds had begun laying. In one case one bluebird egg was found with the tree swallow eggs, in another two bluebird eggs. None of the bluebird eggs hatched. One box contained 7 eggs of which 5 hatched and 4 young left the nest. One box contained 8 eggs none of which hatched. (Two females were

observed in the area). The smallest clutch observed contained 3 eggs. Only one breeding pair of Tree Swallows was known prior to the erection of boxes in 1962, while, in 1963 thirty-four breeding pairs used the nest boxes. This population of Tree Swallows and Bluebirds will be followed for the next two years rather closely. It may well be the nestbox project in the Warren, Pennsylvania sixty-five miles west of Olean, area conducted by Mr. Highhouse (op. cit.) is partially responsible for this rapid invasion.

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Hybrid Warblers in Chatham Area: On the morning of Sunday, July 21, 1963, a group of seven warblers identified as one Golden-winged, one Blue-winged, one Lawrence's, and four Brewster's appeared in a rural area between East Chatham and Old Chatham, Columbia County. They were observed from 7:00 to 7:15 a.m., at such close range that their markings were distinguishable even without the use of field glasses. It had rained during the night, but the atmosphere was now clear.

When I first noticed the birds, they were close together, on a barbed wire fence that separates a flower garden from a large field used frequently as pasture for cows. I was watching from a glass enclosed room. The birds flitted about but remained near one another, always returning to the fence. One flew toward me and alighted on a rhododendron bush; for a fleeting moment it was at rest only about six feet away and was readily identified as a Golden-winged. Of the others, all observed within 20 feet and both with and without field glasses, only one had the black throat patch and the black cheek of the Golden-winged but it had distinctly yellow underparts. This was unmistakably a Lawrence's. The other five birds all had yellow underparts, and all but one had yellow wing-bars as well. The one with the white wing-bars had the typical Blue-winged plumage. The others, I surmised, were Brewster's although the underparts seen were yellow, not white, in any of these birds. The birds continued to flit about to different parts of the fence and to a nearby lespediza clump. The Blue-winged perched on the lespediza long enough to give the characteristic buzz of the species. Then all flew across the field, which is bounded by a small stream to the west, by woods to the north, by another field to the east, and by my house and grounds to the south. I have not seen the birds again.

It seemed to me that I might have seen a family group, so to check on this probability I consulted the article by Kenneth C. Parkes on "The Genetics of the Golden-winged X Blue-winged Warbler Complex," which appeared in the *Wilson Bulletin* of March, 1951. According to this article, many Brewster's have yellow underparts, especially in the first winter plumage. As for the production of a Lawrence's although the parents usually appear typical of the two distinct species, they must both have recessive genes from both species, since the Lawrence's has double recessive characteristics. Several combinations are possible to produce from 12.5% to 50% Lawrence's among the offspring in accordance with the Mendelian Law. Different combinations account for the varying characteristics among the Brewster's Warblers.

Hortense Barten, Mariposa, Old Chatham

Another Albino Robin: On September 19, 1963, a partial-albino Robin appeared in my yard. The body was all white, with some grey feathers on wings, tail and head, and the eyes were brownish. The bird remained for 19 days, usually eating the fruit of the Mountain Ash (*Sorbus americana*) with other Robins, and being seen to bathe frequently. In general there was little conflict, although I did see a normal-plumage Robin chase the albino on one occasion. Attempts to photograph the bird by Mr. Harold Mitchell, who also observed it in the vicinity, were unsuccessful.

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