NESTING DATA AND NOTES ON A TREE SWALLOW COLONY

By Edwin A. Mason

Basically this paper's reason for being is to add the thirteen-year accumulation of notes and data from the Wharton Bird Banding Station, Groton, Massachusetts on the nesting of the Tree Swallow (*Iridoprocne bicolor*) to the not inconsiderable mass of information already in the literature.

A reference to the effects of climate on tree swallows was recorded in notes for the year 1940. It is stated: "Many of the eggs laid early in the season were chilled during the low temperatures which occurred. In a number of instances these eggs were found later. They had been covered with nest material and another clutch laid above them.

"This factor, coupled with the obvious actions of the birds at the time, indicates that the late cold spell (frosts occurred on May 31st, when 28 degrees was reached in some places) completely broke their reproductive cycle. Having to leave the area entirely to secure food probably has something to do with this and might well account for the chilled eggs."

The summarized data for the year (1940) indicates a reasonably average year was attained in time, even though late cool conditions might have induced a delayed beginning.

It is possible to study side-by-side summaries for the years 1940 and 1941. These summaries are very similar in content, and so present an excellent picture of the total effort of a nesting population of tree swallows.

Tree Swallow	1940	1941
Nests recorded with eggs	13	13
Eggs laid	70	64
Average per clutch	5.38	4.92
Broods hatched	11	11
Nestlings hatched	47	49
Average per brood	4.27	4.45
Broods banded	8	11
Young banded	40*	56**
Average size broods banded	3.75	4.18
Adult females captured	10	11
Adult males captured	7	7
Prob. number of pairs	12	12***
Av. no. young raised per pr.	2.42	3.38

*only 1 bird died after being banded

**1 died after banding

***1 pair totally unsuccessful

Two of the returns taken in 1937 from nest boxes at the Wharton Bird Banding Station were originally banded as nestlings. One of these (a ♂) used the same nest box for the fourth year.

The deleterious effects of the nest parasite *Protocalliphora*

(*Apaulina*) on cavity nesting bird species such as the Tree Swallow were presented in considerable detail by Mason (1944). In that paper will be found a discussion of the effects of this parasite in relation to climatological conditions.

TREE SWALLOW BROOD SIZES

Year	Total No. of Broods	Average	1	2	3	4	5	6	7	Total banded	Total returns
1930	1	4				1				4	—
1931	2	4.50				1	1			13	—
1932	5	4.40	1		1	1	3			33	1
1933	8	4.25	1		1	2	3		1	47	2
1934	7	4.14		1		4	1	1		37	6
1935	9	4.66			1	3	3	2		48	8
1936	13	5.15		1		1	5	6		82	5
1937	15	4.13	1	1	1	7	2	3		76	11
1938	13	4.15		1	3	3	5	1		66	10
1939	15	4.80			2	4	5	3	1	92	11*
1940	8	3.75		2	1	2	3			40	6
1941	11	4.18		1	1	5	3	1		56	7
1942	12	4.66			2	3	4	3		70	9
Av. Totals	9.16	4.37	4	7	13	37	38	20	2	664	76*

*Plus one recovery.

Attention is called particularly to the work of Dr. Lawrence B. Chapman, especially his paper in *Bird-Banding*, **26** (2): 45-70. Here will be found a large and complete bibliography capable of leading a student to the many facets involved in the nesting and related activities of Tree Swallow nesting colonies.

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A DECOY AND NET FOR CAPTURING NESTING ROBINS

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I found that using a modified version of a net developed by Nolen (*Auk*, **78**:643-645), with a live decoy added was very effective in collecting nesting Robins (*Turdus migratorius*) in situations that precluded the use of the Nolen net. Nolen's net for capturing nesting birds was the epitome of simplicity, consisting of a bag made from a Japanese mist net with a supporting hoop at the mouth of the bag. The hoop was tied to the nest limb after pruning away interfering branches. A string was attached to a corner of the bag and tied to a supporting limb away from the nest, so that the bag was horizontal to the nest. After the bird returned to the nest Nolen would frighten the bird into the net. Unfortunately, several drawbacks became apparent when I used the Nolen net to capture nesting Robins. Only the nests near the main axes of trees were at suitable netting sites, while the Robins occupying nests out toward the ends of small branches high in trees could not be captured at all. Also pruning limbs which were in the way of the net was not accepted in parks and on campuses where my study was conducted. Furthermore, only the incubating bird could be collected using the Nolen net. Both birds of a pair could be collected only when young were being fed in the nest.