

Egg 1	—	May 29	} Destroyed night of June 1
Egg 2	—	May 31	
Egg 3	—	June 1	
Egg 4	—	June 2	
Building Nest 2	May 25 to 28	June 4 to 7	
Laying	June 3 to 8 (5 eggs)	June 9 to 13 (5 eggs)	
Hatching	June 22	June 28-29	
Young banded	June 29	July 10	
Young flying	July 10-11	July 19	

From these tables, I have extracted the following contrasting facts regarding the behavior of the two pairs of Tree Swallows:

1. 1926 pair was here 25 days before building.
1927 pair " " 16 " " starting to build.
2. 1926 pair built first nest in 5 days.
1927 pair " " " 21 " "
3. 1926 pair worked continuously for 5 days (May 18 to 23).
1927 pair worked intermittently for 13 days (May 4 to 17), then continuously May 18 and 19. The 20th and 21st were rainy, but continuous work was resumed the 22nd.
Conclusion: May 18 to 23 is approximate period of greatest nesting activity.
4. Both pairs, for different reasons, built second nests in same length of time—four days.
5. Normal interval between building and laying, 4 to 5 days. In exceptional case, 2 days.
6. 1926 pair incubated 14 days. } Reckoned from last egg laid to
1927 pair 16 " } last one hatched.
7. Part of the 1926 young remained in nest 18 days and part 19 days.*
" " " 1927 " " " " 20 " " " 21 " "
8. Earlier arrival means earlier nesting.

Brewer, Maine, August, 1927.

CHEWINK RETURN RECORDS AT MARTHA'S VINEYARD DURING 1927

BY ALLAN KENISTON

IN this *Bulletin* for October, 1926, page 87, a note appeared giving some details of my Chewink returns: namely, fourteen out of a total of fifty-one banded previous to 1926, or 27.40 percent. Of the twenty Chewinks banded in 1926, thirteen were males. During that year I secured three returns banded in 1923 and eleven returns of birds banded in 1925.

During the current year, up to October 1st, I have banded thirty-one new Chewinks (*Pipilo e. erythrophthalmus*). The first one was banded on May 2d, a male, and the next fourteen

*The 1926 young, as shown by table, were two days *leaving the nest*. The 1927 young left nest the same day, but were two days *in hatching*.

banded were also males, omitting one female return. The 1927 returning Chewinks, numbering fifteen, appear below in tabulated form:

No.	Sex	Banding Date	Return-1 Date	Return-2 Date	Return-3 Date
67778	♀	June 9, 1923	May 12, 1925	May 13, 1926	May 4, 1927
67799	♂	Sept. 2, 1923	May 11, 1925	May 9, 1926	May 17, 1927
67777	♂	June 9, 1923	May 13, 1925	May 25, 1926	June 13, 1927
72977	♀	May 20, 1925	May 17, 1926	May 13, 1927	
355505	♂	July 14, 1925	May 7, 1927		
72997	♂	May 6, 1925	May 17, 1926	May 13, 1927	
355498	♀	July 31, 1925	May 18, 1927		
73003	♂	May 14, 1925	May 18, 1927		
355411	♂	May 22, 1926	May 18, 1927		
72987	♂	May 17, 1925	May 6, 1927		
73001	♂	May 15, 1925	May 15, 1926	May 14, 1927	
72958	♂	May 12, 1925	May 8, 1927		
72990	♂	May 16, 1925	June 5, 1927		
355496	♂	Aug. 1, 1925	June 12, 1927		
355429	♀	June 14, 1926	June 6, 1927		
Totals			15	6	3

It will be noted that of the fifteen returning birds eleven were males. This ratio of eleven males to four females is maintained approximately in the new Chewinks banded during 1926 and 1927. I have no explanation to offer why this is so.

Attention is called to the records of the first three birds in the table, all banded in 1923. These three were recorded in 1925¹, one on each of three successive days in May. Similarly the same three birds were taken as Returns-2 in 1926, also in May,—100 percent of the Returns-1, and it is gratifying and significant that again 100 per cent were alive to reappear as Returns-3 in 1927. As two of these birds were adults when banded, they are now at least five years old, and their survival year after year with no break in their ranks justifies the belief that with increasing years comes increasing ability to escape the hazards which destroy so many birds during their first fall and winter.

Chewinks feed from very early morning until it becomes so dark that it is difficult for the observer to be sure what species is in the trap.

The songs of the many Chewinks about my station during May and June form a fine chorus. In spite of the heat of some June days, from the tips of the trees comes the song of

¹ My station was not operated during 1924.

the Chewink which others have said sounds like the words "Drink-your-tea", the last word prolonged with several *e*'s. I have often admired their courage, as I have never known a day in summer too hot for them to sing their song all through the day.

This past season I have used exclusively a home-made pull-string trap, having three in use and at times four. Two were set on the ground, and two were off the ground four and five feet. I did not notice that any choice was shown for either location. All traps were tended or tripped from the windows of my house. I used what is commonly called in grain stores "scratch feed", and at times the intermediate grade called "intermediate chick feed". Chewinks seemed to be very fond of the ingredients with the exception of the wheat.

In submitting these notes it should be stated that the time spent by me in banding work is of necessity very limited, a fact which explains my failure to discuss other obvious aspects of the large number of Chewinks nesting about my station and generally on the eastern part of this island.

Heath Hen Reservation, Martha's Vineyard, Massachusetts.

NOTES ON THE DEVELOPMENT OF YOUNG COMMON AND ROSEATE TERNS

BY CHARLES B. FLOYD

DURING the past three years my work among the Common and Roseate Terns (*Sterna hirundo* and *dougalli*) on Tern Island, Chatham, Massachusetts, has had to do with their breeding-habits and the banding of large numbers of the young. This year (1927) a study was made which included matters of feather-growth and the weight of developing young from the time they emerged from the shell until it was impossible to find them. All plumage-changes were noted at the time of each weighing, which took place every morning as near the same hour as possible. It was particularly difficult to secure the young for observation and weighing after they were a week old or even less, for in many instances they desert the nest within twenty-four hours of their birth and can be found only after a diligent search among the beach grass. If, therefore, they were rediscovered daily, it was a matter of good fortune, for no satisfactory plan was found by which they could be