

GENERAL NOTES

The roosting tree of the Scissor-tailed Flycatcher.—Knowledge of the flocking and social behavior of the Scissor-tail (*Muscivora forficata*) is inadequate. In 'Life Histories of North American Flycatchers, Larks, Swallows, and their Allies' (U. S. Nat. Mus., Bull. 179: 82-92, 1942) Bent quotes Mrs. Florence Merriam Bailey on an observation of communal roosting by these birds in Texas. Her article (Condor, 4: 30-31, 1902) relates that "when Mr. Bailey shot a rattlesnake at the foot of a big oak in camp the report was followed by a roar and rattle in the top of the tree and a great flock of scissortails arose and dispersed in the darkness." She attributed this concentration to a general lack of suitable roosting places in the area between Corpus Christi and Brownsville.

One of the least known facts of this relatively well known bird is the post-breeding season behavior. Its individuality during the breeding season is well known, when audacious attacks on larger birds are commonplace and even vigorous defense of a territory against members of its own species is the rule. But the interesting contrast comes after the ties of territoriality have been broken and the juveniles have attained nearly full growth. This extreme is a very decided flocking or gregarious tendency at roosting time, which is seemingly peculiar to this species in the family Tyrannidae.

During the summer of 1946, ample opportunity was afforded for the observation of these birds in and around College Station, Texas, which lies in the center of the breeding range. The flocking behavior was first noticed on the campus of Texas A. and M. College about 6:30 P. M. on August 23, when a large number of Scissor-tails were seen in and around one large tree, an osage orange (*Maclura pomifera*). In spite of the availability of dozens of other trees that appeared to be equally suitable as roosting sites, this one tree was selected and used night after night until mid-September when migration had thinned their ranks. Birds were followed from as far as one and one-half miles away to the tree, indicating that this roost served an area at least three miles in diameter. The birds were easy to alarm just before dusk and when frightened arose with a roar of wings and dispersed in all directions. What motivates this aggregation, and what sort of social organization makes it function so systematically would make an interesting study.—FRANK W. FITCH, JR., Texas A. and M. College, Fish and Game Department, College Station, Texas.

January singing in the Black-capped Chickadee.—The experience of Mr. Aretas A. Saunders with the singing of the Black-capped Chickadee (*Parus atricapillus atricapillus*) in southwestern Connecticut as shown in his paper 'The Seasons of Bird Song: The Beginning of Song in the Spring' in The Auk for January, 1947, differs so decidedly from my own in eastern Massachusetts that it seems worth while to put mine on record. I agree with Mr. Saunders and most other observers in considering the *phoebe* whistle to be a song, and it is of that note that we are speaking.

Mr. Saunders says: "I have heard it every month of the year except January. The earliest date on which it was heard averages, in thirty-two years of observation, March 13. The earliest date is February 5, 1938, and the latest, April 19, 1935." My own records go back much farther than his, but for purposes of comparison I will use only those from 1915 to 1946, inclusive—thirty-two years. I have heard the Chickadee's song in January in seventeen of those thirty-two years, and in five of those Januaries I have heard it on four to six days. My average earliest date is February 4 as against his March 13. My earliest date of all is January 1 in 1926,

and my latest April 11 in 1915. In the present year of 1947, not included in the foregoing summary, I heard the song on four days in January—the 19th, 13th, 25th, and 28th. It occurs to me that perhaps my early records of Chickadee song may be due to the fact that the Chickadee, especially since winter feeding began, is a pretty constant inhabitant of my immediate neighborhood in winter and spring. I find that my records for the only two years that show April dates for the earliest song also show comparatively few records of the presence of the bird about my house. In 1915, when the first singing was noted April 11, I recorded the bird as present with us only January 4, 10, 17, 24; February 27, 28; March 13, 21, 24; and on April dates before the 11th. In 1921, when the first singing was noted April 6, the only Chickadees recorded about the house were on January 1, 16; February 13; and March 16 and 21. The omission of these two aberrant years from my summary would bring my average back into January, the month when Mr. Saunders has never heard the song—to January 31, to be precise.

I am puzzled to account for this difference between Mr. Saunders's experience with Chickadee song and mine, and on writing to him about it I find that he too is unable to account for it satisfactorily. He writes me under date of February 20, 1947: "At least part of the discrepancy between your experiences and mine is due to my not living among Chickadees most of the time. From 1919 to 1939 I lived in a place where Chickadees were almost never seen, so my observations were largely confined to field trips which were mainly week-ends. But since the fall of 1939 I have lived practically in the woods, and have fed Chickadees every winter. They were scarce some winters, but in others I recorded them almost daily each January yet never heard the song. This year I beat my earliest record by hearing one February 3, but still that wasn't January."

It would be interesting to learn of the experience of other observers with this common bird whose song seasons do not follow conventional patterns.—FRANCIS H. ALLEN, *West Roxbury, Massachusetts*.

Post-nuptial copulation among swallows.—While I was watching a large number of migrating swallows swarming over the Fern Ridge Reservoir west of Eugene, Oregon, on August 31, 1946, a copulation act was observed between a female Violet-green Swallow (*Tachycineta thalassina lepida*) and a male Barn Swallow (*Hirundo rustica erythrogaster*).

Numerous swallows of both of these species and two others were alighting along the water's edge from six to twenty feet from the car in which I was sitting. While I was watching these birds, I noticed a female Violet-green Swallow alight and not settle down as the other birds were doing. Rather she fluttered her wings and rocked her body. Very shortly afterwards a finely marked male Barn Swallow dropped onto her back, performed copulation, flew off a few feet and returned to repeat a second time. After the second action, both birds flew away and disappeared into the swarming flock. Having observed the nesting and habits related to nesting of the Violet-green Swallows for several years, I had no doubt as to the action anticipated by the female, nor was there the least doubt concerning the species performing the action.—GORDON W. GULLION, *1657 E. 13th St., Eugene, Oregon*.

Behavior of nestling Tree Swallows in water.—The following event took place while I was banding young Tree Swallows (*Iridoprocne bicolor*) at Douglas Lake, Cheboygan County, Michigan, on July 29, 1946. I had just banded and returned to the nest (in a swallow house on a five-foot post about five feet from the water's edge) the last of a family of five fledglings and was continuing my daily