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

inspection of the 20 similar houses, when one of the young birds just banded flew out of the box on its maiden flight and headed directly out over the lake. I watched it travel approximately 75 yards and then drop to the water exhausted. Hastily peeling off my clothes, I swam after it. I found the bird apparently quite unperturbed and making rather rapid headway *in the direction of the nearest shore* with flipper-like movements of its wings. It swam with its tail sticking straight up in the air, Ruddy Duck fashion, and made rather concerted struggles to prevent me from capturing it. I carried it back and returned it to the nest where it stayed. The other four young birds were still there.

Two days later, a similar exhibition took place at another nest. This time the bird, in flight and out of the nesting box for the first time, crash-landed about 30 yards from shore. I watched it swim all the way in this time—again by the most direct route. Though somewhat bedraggled, it was quite able, on reaching shore, to stand on its feet and make headway up the beach away from me. This bird also was returned to the nest and remained there until the following morning.—ROBERT O. BEATTY *Izaak Walton League of America, Inc., Chicago, Illinois.*

Nest-building by the Virginia Rail.—Although there is excellent printed material on the nesting of the Virginia Rail (*Rallus limicola*), eye-witness accounts of the actual nest-building appear to be few. The following notes, made from observations in a small cattail marsh not more than two miles southeast of the business district of Pittsfield, Massachusetts, may therefore be of interest.

Here Pied-billed Grebes, Florida Gallinules, Soras and Virginia Rails had been seen and heard frequently during the spring and summer of 1946. On July 8 I had been hearing both species of rails give the usual calls, with the addition of some loud *pip-pips* uttered by a Virginia Rail as it fed near by. At 7:30 P. M., while I was sitting at the edge of the marsh where a four-foot bank gave excellent view over the lower land, a Virginia Rail came close by with a piece of cattail (*Typhus latifolia*) in its blood-red bill. It went at once to a small 'island' in the shallow water, a spot not more than six by twelve inches in extent which was covered with grass, a species of bedstraw (*Galium* sp. ?) and a clump of Marsh Fern (*Thelyptris Thelypteris*). The rail dropped the material, worked it in with her bill—I am assuming the bird to have been a female—and then sat down, turning around and molding the nest site.

As I sat a fascinated spectator about twelve feet away, and only partly concealed by bushes, the bird worked busily for an hour. Hurrying away from the nesting site, she tugged vainly at a piece of dead cattail, not seeming able to cut it off with her bill. She tried two others before succeeding in getting a 'mouthful' which was again worked into the nest without loss of time. After a number of such trips, gathering bits of cattail from three to fifteen inches in length, about half of which were dry and the others wet and mucky, the bird spent ten minutes at the nest. She scratched around the bottom with bill and feet, next turned completely around several times, and finally, still sitting, reached up with that useful, long bill and cut off pieces of grass and bedstraw. She dropped these into the nest, and then adjusted the scanty foliage, picking here and there to make it conceal her to better advantage.

The bird worked steadily, moving to and from the nest rapidly, without a pause in her nest-building labors. If my eye momentarily wandered, suddenly the bird was not there, and it took careful watching to detect her approach to the nest. Once her mate (I supposed) called *wak-wak-wak* close by, whereupon I saw and heard her give a peculiar high *wa-a-ak* four times, much higher and more squeaky than the usual calls. As darkness fell, I left, sorry that further observation and photography were impossible, since this was my last day in Berkshire County for some months.—DOROTHY E. SNYDER, *The Berkshire Museum, Pittsfield, Massachusetts.*