

Woodpecker. It would be interesting to know if some other species of Woodpecker is doing the control work in this area.

I am indebted to Dr. E. D. Ball and Dr. L. P. Wehrle of the University of Arizona for the identification of this gall insect.—A. H. ANDERSON, *Route 2, Box 105C, Tucson, Arizona.*

**A Family of Arkansas Kingbirds Near Toledo, Ohio.**—A sight record for the Arkansas Kingbird (*Tyrannus verticalis*) in Ohio was published in 'The Auk,' January, 1931, p. 123. This bird, observed near Little Cedar Point, Lucas County, by Miss Marjorie Dean and the writer on September 14, 1930, constituted what was probably the first record for this species in Ohio. On the strength of this observation the Arkansas Kingbird was included as a sight record in the 'Revised List of Ohio Birds' compiled by Milton B. Trautman and published April, 1932, by the Ohio Division of Conservation.

On July 29, 1933, some three miles east of the location of the sight record mentioned above I found a family of Arkansas Kingbirds consisting of one adult and three young at a point one and one-half miles north of the village of Bono, Jerusalem Township, Lucas County, Ohio. Two of the young, a male and a female, were collected. Although both of these birds were well able to fly, all the tail feathers and all but two or three of the primaries were still more than one-fourth sheathed. The condition of these feathers and general lack of development pointed to the conclusion that the birds had been out of the nest only a short time.

The next day, July 30, Milton B. Trautman of Columbus, Ohio, and my brother, Bernard R. Campbell, returned to the same place and found only an adult which was collected by Mr. Trautman. This bird proved to be a female in very worn plumage. The fourth bird was not seen again.

The three skins, prepared by Bernard R. Campbell, were presented to the Ohio State Museum at Columbus, Ohio. A comparison of measurements of adult and young birds is as follows: adult wing—124 mm., juvenile wing (two birds)—108 mm. and 103 mm.; adult tail—81 mm., juvenile tail (two birds)—73 mm. and 68 mm.

The situation in which this group of birds was found was strikingly similar to that described by Dr. Roberts (Birds of Minnesota, Vol. II, p. 10) as a characteristic nesting habitat of this species. The size of the young birds and the condition of their plumage, the fact that the family group was apparently still intact, and the attachment to this locality shown by the female, make it appear probable that the birds nested in this locality.—LEWIS W. CAMPBELL, *304 Fearing Boulevard, Toledo, Ohio.*

**Rough-winged Swallow in Bristol County, Massachusetts.**—On May 29, 1932, Mr. Ludlow Griscom and I found two Rough-winged Swallows (*Stelgidopteryx ruficollis serripennis*) which we judged to be a mated pair about a small pond in the town of Dartmouth, Massachusetts. A year later, May 28, 1933, Mr. A. C. Bent, Dr. W. M. Tyler, Mr. E. B.

Church and I found two Rough-winged Swallows at the same place. A search of the immediate neighborhood failed to reveal a nesting-site, and on a later visit to the locality, June 25, we failed to find the birds at all. The evidence of breeding is, of course, very far from conclusive, but the presence of a pair two years in succession at the same spot seems worth recording. Mr. Bent had never before seen the Rough-winged Swallow in his home county of Bristol, and Forbush (*Birds of Massachusetts*) gives no record of the species for that county. This species is seen every year in migration in eastern Massachusetts, but there appear to be no breeding records, though a few years ago in Middleton, Essex County, a pair started a nest, which was later disturbed and abandoned (S. G. Emilio, *Bulletin of the Essex County Ornithological Club*, 1929).—FRANCIS H. ALLEN, *West Roxbury, Mass.*

**Singing of the Tree Swallow.**—The Tree Swallow (*Iridoprocne bicolor*) is not generally known as a singing bird; all references which I have available credit the species merely with a variety of twittering notes. But at least in this locality (extreme northwestern Montana), Tree Swallows show definite seasonal singing habits. The usual twittering notes and phrases, some of which are truly musical, are given independently of season, weather, or time of day. One unvarying and pleasing phrase of gurgling notes is frequently interpolated between other notes by the male Swallows throughout the season; it is occasionally given by the females, especially when mating occurs; and I once heard a young Swallow only nineteen days old, on the day after leaving the nest, render this same musical phrase. But the true seasonal song of the adult male Tree Swallows is first given a few days before their mates commence egg-laying, and is last heard about the time the young birds leave the nests.

In the early part of the season the birds do most of their singing early in the morning, beginning between three and four o'clock, before daylight, and continuing for about an hour. As the light grows stronger, the songs become more irregular, the typical phrases being interspersed with ordinary twittering notes. As the season advances, the birds sometimes sing during the day also, especially during rainy weather. By the time the young birds hatch, singing may be heard frequently at all times of the day, even during very hot weather. Once in June I listened for several minutes to a Tree Swallow singing in flight at midnight.

Singing is done both in flight and from perches near the nests. A series of phrases, repeated over and over in slightly varying order, at a rate of 125 to 140 a minute, is given for several minutes or as much as an hour without pause. The commonest song which I have recorded during early morning hours runs something like this: "Tishha querr querr, tishha querr, tishha tishha querr, tishha querr, tishha tishha querr . . ." The accented *tishha* is sung with the second note slurred downward, and the *querr*, on a lower note, is given with a rising inflection. This order is reversed in another early morning song which I have written as "Eee