

Winter nesting attempts by Great-tailed Grackles.—Great-tailed Grackles (*Cassidix mexicanus*) normally begin nesting from mid-March to late April (Bent, U.S. Natl. Mus. Bull., 211, 1958; Selander and Giller, Condor, 63:29–96, 1961), however, an instance of autumnal nesting in this species has been recorded (Selander, Condor, 64:81–91, 1962). The present paper reports observations of winter nesting in Great-tailed Grackles.

During January and early February, 1971, we observed calling, displaying, and related courtship behavior in male Great-tailed Grackles on the Texas A&M campus. Great-tailed Grackles normally use the campus as a spring nesting area and build nests in the numerous live oak trees (*Quercus virginiana*). However, on 16 February, we observed eight newly constructed nests in a single live oak. Females were observed bringing grass and twigs to these nests. Although these females built nests, they failed to lay eggs and complete the breeding cycle.

Two adult male and two adult female Great-tailed Grackles were collected for examination. Ovaries measured 12 mm by 8 mm, with no individual ovum being larger than 1 mm by 1 mm; testes measured approximately 1 mm by 1 mm. These measurements are normal for this time of year.

Fall and winter (1970–71) precipitation levels for the College Station area were much lower than totals for the same periods in 1969–70 or 1968–69 (viz., 14.27 inches for the period June 1970–February 1971; and 28.51 inches and 39.53 inches during the same periods in 1969–70 and 1968–69, respectively). Temperatures ranged 37–85°F (Ave. = 63.0) during 34 of 42 (81 per cent) days prior to occurrence of nests. In the remaining eight days, three separate cold fronts moved through the area; and consequently, minima of 22–41° and maxima of 43–52° (Ave. = 39.6) were recorded for this eight-day period. An extended period of mild temperatures followed these three fronts and was in turn followed by a fourth cold front on the night of 21 February. Low temperatures were sustained for three days; and at this time, all nesting activities ceased.

We feel that the nest-building of these Great-tailed Grackles may have resulted from the abnormally high temperatures and/or dry winter weather. Apparently the threshold for this portion of the reproductive cycle was lowered; however, the birds were not physiologically ready to continue this behavior sequence to fruition, i.e., egg-laying and incubation.

This is contribution no. TA 9046 from the Texas Agricultural Experiment Station.—DONALD W. COON, ROBERT F. GOTIE, AND KEITH A. ARNOLD, *Department of Wildlife and Fisheries Sciences, Texas A&M University, College Station 77843, 15 March 1971.*

Bluebirds successfully nesting in house under construction.—In forty years of studying Eastern Bluebirds (*Sialia sialis*), I have observed thousands of nests. Most of them were built in nest boxes, but some were built in mail boxes, tin newspaper cylinders, and cavities in tree trunks and fence posts. One nest was built in the cavity of a limestone rock used in a park entrance pillar, but was not successful.

A successful nesting observed in 1970 was most unusual. The nest was built in early August in one compartment of a concrete block placed next to a chimney located in the middle of the wooden section of a two story house under construction and about twenty feet from ground level. The house was being built in a small clearing in deciduous woods in the 140-acre tract owned by Mr. and Mrs. Alex Taylor in Leiper's Fork, Tennessee, twenty miles southwest of Nashville.

When the nest was built and the three eggs laid, the uprights were in place, but the outer walls were not boarded. While incubation was in progress, the walls were boarded, excepting the openings left for windows at front and back of this two-story and attic

section. The pounding and activity of the workmen did not deter the nesting activities. The adults used the window openings at front and back for entrance and exit.

On 10 August, 3 eggs were being incubated which were not hatched on 23 August. The nest was not examined on 24 August, but the young were hatched by 25 August. On 4 September, I banded 3 well-developed young. They flew from the nest early on 11 September when about 17 days old.

In my experience, much human activity near the nest of Eastern Bluebirds usually causes desertion, therefore the faithfulness of this pair in this very unusual situation seems remarkable.—AMELIA R. LASKEY, 1521 Graybar Lane, Nashville, Tennessee 37215. 2 March 1971.

Predation on snakes by Eastern Bluebird and Brown Thrasher.—At 08:00 on 9 September 1964 I watched a female Eastern Bluebird (*Sialia sialis*) as it devoured a snake about 8 inches long. This bird was one of a family group which frequented our home grounds and which had become accustomed to feeding on mealworms regularly provided during the nesting period and shortly thereafter. The bird was first noted as it flew to the roof of a low building about 5 feet high with a wriggling snake held in its bill. It beat the snake against the roof and thrashed it about for several minutes before beginning to swallow it. When the snake had half disappeared the bird paused, rested briefly with the remainder of the snake dangling from its bill, then resumed feeding until it was swallowed. I was unable to find any account in the literature of this species feeding on a snake.

On 21 September 1970 a Brown Thrasher (*Toxostoma rufum*) was observed attacking a live snake as it moved along the ground. For about 10 minutes the thrasher repeatedly picked up the snake and tossed it down again, after shaking it slightly, until it was dead. Then the bird fed upon the snake, hammering three or four times with its bill until a small piece was obtained which was swallowed. After feeding for about 5 minutes the bird drank from a small amount of water in some dried leaves on the ground nearby, resumed feeding briefly in the same manner, then drank again. After it flew away I retrieved the remainder of the snake, which was the tail section. It measured 8½ inches and I estimated the full length had been about 12 inches. The snake was an eastern milk snake or "barn" snake (*Lampropeltis doliaata triangulum*), a species commonly found about our barn.—ANNETTE B. FLANIGAN, Smith Road, Waite Hill, Ohio 44094, 1 February 1971.

Clicking in the egg-young of the Long-billed Curlew.—"Clicking," a sharp, metallic sound produced by a bird prior to hatching, has been observed in a number of precocial species (Driver, *Nature*, 208:315, 1965; summary in Driver, *Ibis*, 109:434-437, 1967). However, its origin and function are incompletely understood, and observations on additional species are needed.

From 24 to 26 May 1966 I observed and tape-recorded the hatching sounds of four Long-billed Curlew (*Numenius americanus*) egg-young taken from a nest west of Brigham City, Box Elder County, Utah. Clicking was heard in all pipped eggs from 21 to 9 hours prior to hatching. This is similar to the sequence reported by Vince (*Anim. Behav.*, 14:34-40, 1966) in five species of galliforms. Driver (*Nature*, 208:315, 1965), however, stated that clicking continues for some hours after hatching. Structurally the clicks of *N. americanus* were brief sounds with frequencies ranging from 3 to 8 kc/sec (Fig. 1). Rates of 10-12 clicks per second were typical but considerable variation in the spacing