

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

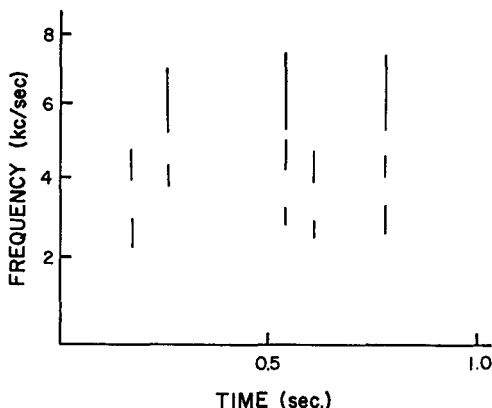


FIG. 1. Clicks given by Long-billed Curlew nine hours prior to hatching.

as well as the frequency of clicks was noted. The clicks of *N. americanus* were physically similar to those of the Gray Partridge (*Perdix perdix*) and the Painted Quail (*Excalfactoria chinensis*) studied by Vince (op. cit., plate II).

Suggested sources of the clicking sounds include bill-shell contact, bill-clapping, and respiratory movements (see Vince, op. cit., 39). My observations on the hatching curlew chicks showed that clicks were given with the bill open and were independent of bill-shell contact. Also clicks seemed to be associated with movements of the gular region which indicates an origin of clicking in the respiratory system, a view held by Driver (Ibis, 109:434-437, 1967). The clicks are probably produced by air passing over the syrinx during the period when the respiratory system becomes functional. My observations shed no light on the functional significance of clicking. Too little is known about the nesting biology of *N. americanus* to test Vince's hypothesis that clicking serves to synchronize hatching.

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Flashes of white in the wings of other species elicit territorial behavior in a Mockingbird.—In the winter of 1969-1970 we first noted a Mockingbird (*Mimus polyglottos*) at our feeder on the morning of 23 January. On the afternoon of the following day the Mockingbird was first seen to attack other birds in the vicinity of the feeder. For the next six days we noted only chases directed to Red-bellied Woodpeckers (*Centurus carolinus*) and Evening Grosbeaks (*Hesperiphona vespertina*). Thereafter we also noted occasional attacks on Cardinals (*Richmondia cardinalis*) and Purple Finches (*Carpodacus purpureus*) and, less frequently, on White-throated Sparrows (*Zonotrichia albicollis*) and Downy Woodpeckers (*Dendrocopos pubescens*). We saw no attacks on Tufted Titmice (*Parus bicolor*), Carolina Chickadees (*P. carolinensis*), Pine Siskins (*Spinus pinus*), and American Goldfinches (*S. tristis*). Blue Jays (*Cyanocitta cristata*) drove off the