Incubation and Nestling Periods of the Olive-sided Flycatcher.—In 1955 Walkinshaw found a nest of the Olive-sided Flycatcher (Nuttallornis borealis) in a sparsely wooded bog in Schoolcraft County (T47N, R13W, Section 5), Michigan. The undergrowth was predominantly sphagnum moss with protruding individuals or groups of black spruce (Picea mariana) and tamarack (Larix laricina) and a ground cover of cranberry (Vaccinium), leatherleaf (Chamaedaphne calyculata), swamp laurel (Kalmia polifolia), Labrador tea (Ledum groenlandicum), and bogrosemary (Andromeda glaucophylla). The nest was 14 feet up on a horizontal black spruce branch, about 18 inches from the trunk and well hidden among the spruce needles. It contained three eggs on June 25 and two young on July 2.

On June 19, 1956, W. Powell Cottrille and Walkinshaw found another nest less than 50 feet from the 1955 nest. The female was carrying nesting material as they watched her. She gave a continuous "position call" of "Whup-whup." This nest was 15 feet above the bog and one foot from the trunk in almost the same relative position as the 1955 nest in another black spruce. On June 22 there were no eggs in the nest, but on June 25 in the late evening the female was sitting on the nest; we examined it June 26 at 6 A.M., finding three eggs. When Walkinshaw and William Dyer left the area on July 6, the female was still incubating three eggs. C. J. Henry and Robert Sundell watched it periodically thereafter. On July 10 at 4 P.M., there were three eggs; on July 11 at 4 P.M., one egg and two young; and on July 12 at 4 P.M., three young, giving an incubation period for the last-laid egg of 16 or possibly 17 days. The young remained in this nest until July 27, at which time they all "erupted" when the branch was bumped with the pole mirror used to examine it. This was 16 days after the first two and 15 days after the last one hatched. Possibly they might have remained in the nest another day or two. One of the young was taken and deposited in the University of Michigan Museum of Zoology.

Betty Cottrille found a nest in the same area about one-fourth mile away, and again in the same relative position, about 15 feet up on a horizontal black spruce branch. Ed DeRosia and Walkinshaw nailed slats on another spruce three feet from the nest tree and made periodic trips to the spot. After July 6 they were joined by DeRosia, Henry, and Sundell. This nest was found June 22, 1956 as the female was building. On June 25 in the early morning it contained one egg, and on June 27 at 6 a.m., three eggs. On July 12 there were still three eggs, but on July 13 at 6 a.m. there were two young and one egg. On July 14 at 6 a.m. there were still only the two young and the egg was gone. Incubation again required either 16 or 17 days. The young remained until July 30, when they left as DeRosia climbed the tree nearby, 17 days after they had hatched. They, too, might have remained a day or two longer if left undisturbed.

This nest was collected. The exterior was made of twigs of black spruce lined with *Usnea*. On the interior, it measured 62 mm. from front to back, 76 mm. in width, and 20.8 mm. in depth. On the outside it measured 150 mm. in width and 45 mm. in depth.

The one young taken by Henry, July 27, 1956, when it was either 15 or 16 days old, somewhat resembled an Eastern Kingbird on the back; its breast was similar to that of the adult, with a slight yellowish tinge. The lower mandible was yellowish; the upper, dark gray. The wing measured 59 mm.; the tarsus, 15.7 mm.; and the exposed culmen, 12 mm.

A Sharp-shinned Hawk nest with four young, found July 3, 1956 by William Dyer and Powell Cottrille, was almost directly between these two nests, but out

of the six eggs the flycatchers fledged five young.—Lawrence H. Walkinshaw, 1703 Wolverine-Federal Tower, Battle Creek, Michigan, and C. J. Henry, Seney National Wildlife Refuge, Seney, Michigan.

Display of the Least Grebe.—On April 30, 1956, Marian Zimmerman and I watched two Least Grebes (*Podiceps dominicus*) indulge in what appeared to be courtship behavior on a small forest pond 55 miles southeast of Escárcega, Campeche, México. The pond occupied less than half an acre and I doubt if any other grebes were present. I believe the two birds were male and female, though I cannot be certain of this. One was slightly larger than the other.

When first seen the grebes were swimming and feeding within a few feet of each other in open, sun lit water not far from the deeply shaded edge of the pond. As we watched from a distance of 20 or 25 feet, the birds approached to within six or eight inches of one another until they were side by side and headed in the same direction. Suddenly both simultaneously rose so that their bodies were about half out of the water, and their necks extended forward and upward, their bills pointing at approximately "10 o'clock" (see Figure 1). Their head plumage, especially

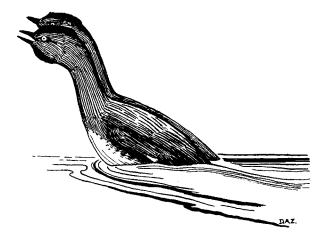


FIGURE 1. Mutual display of the Least Grebe.

that of the throat, was somewhat fluffed out. In this position they rapidly glided forward for three or four feet and quickly lowered their breasts into the water, stopping suddenly. Both birds preened, dabbed about in the water with their bills as if feeding, then without obvious preliminaries again rose and glided three or four feet. This process was repeated five times in five minutes. Each glide was terminated by a few seconds of preening and bill-dabbing. Throughout the performance one bird uttered a high-pitched, nasal nyĕ-nyĕ-nyĕ much of the time. Their black throat-patches and golden-yellow eyes were conspicuous.

The appearance of another person may have prematurely terminated the display. At any rate, they swam off through the vegetation and were lost from view. Meager though these notes are, they seem to represent the only recorded observations on the displays of this common bird.—Dale A. Zimmerman, Imlay City, Michigan.