

lone parent was away from the nest in 22 out of 61 observations and it stayed away from the nest for up to 180 minutes at a time. The incubation period was 18 days for this nest. It is assumed that this increased time was due to the lack of normal incubation because of the presence of only one parent.—JOANNA BURGER, *Biology Department, State University College, 1300 Elmwood Avenue, Buffalo, New York, 12 December 1966.*

Reaction of Mourning Doves to cowbird eggs.—Friedmann (1963. *U. S. Natl. Mus. Bull.* 223:46–47.) reported that Mourning Doves (*Zenaidura macroura*) are occasionally parasitized by the Brown-headed Cowbird (*Molothrus ater*) but that there is no positive record of a fledgling being produced. In 1966 at Fremont, Nebraska, cowbird parasitism on several species was found to be heavy. The absence of parasitism in 110 Mourning Dove nests was very conspicuous. Therefore, eggs of cowbirds and Red-winged Blackbirds (*Agelaius phoeniceus*) were removed from Redwing nests and placed in Mourning Dove nests.

The following results were obtained:

M-31—On day eight of incubation I put in two Redwing eggs. They were there for three days. On the fourth day they were both broken on the ground directly under the nest.

M-21—A cowbird egg was added on day 15 of incubation. The Mourning Dove eggs both hatched, the cowbird egg remained on the nest for four days with three dove young. All were taken by a predator.

M-24—I put in a cowbird egg (incubated one day) between the laying of the first and second dove egg. The eggs were all taken by a predator on about the day when the cowbird should have hatched, 11 days later.

M-23—Two cowbird eggs were added on the fifth day of incubation. On the day when they should have hatched (11 to 12 days), one cowbird egg disappeared. The other was still present seven days later when the doves hatched and eventually was pushed off the nest by the growing young.

M-26—A cowbird egg was put in on day three of incubation; seven days later (day 11 of cowbird egg incubation) the cowbird egg was gone.

M-45—Two cowbird eggs were put in on day four of incubation; all eggs were gone on the following day.

From these few experiments it appears that Mourning Doves are tolerant to other eggs in their nests. In M-23 and M-26, cowbird eggs disappeared on the day when they should have hatched. It may be that these eggs hatched and the nestling cowbird was removed from the nest by the Mourning Dove.

I would like to hypothesize why cowbirds do not parasitize Mourning Dove nests more often, and if they do, why eggs and young are not found often in the nests. If eggs are laid in a nest, they may be knocked off accidentally from the frail platform nest of the dove. When doves leave the nests, they do so very quickly, and I have known them to knock their own eggs or young off the nest. The quick, fluttering take-off from the nest by the adult dove may knock off the cowbird eggs which are much lighter than dove eggs. I suspect this is what happened to the Redwing eggs in M-31. Mourning Doves stay at the nest site and leave for only short periods of time. I have very infrequently found an adult dove away from the nest in the morning hours when the cowbird would be laying her eggs. Friedmann (op. cit.) discusses reasons why a dove would have difficulty in raising a cowbird, the major reason being a difference in behavior of feeding young.—LARRY C. HOLCOMB, *Department of Biology, Creighton University, Omaha, Nebraska, 27 September 1966.*