

UNUSUAL BEHAVIORS AT A
ROBIN'S NEST

GLORIA M. D'AGOSTINO

S. W. EATON

AND

LORRAINE E. GIOVINAZZO

Three unusual behaviors were seen at the nest of an American Robin (*Turdus migratorius*) on the Saint Bonaventure University campus, New York, in the spring of 1980. Once, a spotted young robin incubated eggs of a later brood, and on several occasions recent fledglings begged for food at the nest and received food from the incubating adult female. The same adult female robin mounted one of these young near the nest. In this note we report our observations of these incidents because we believe that they may give clues to the evolution of helping behavior and to the possible significance of copulation as a dominance gesture.

The nest was built on a window ledge in 1978, used twice in that year, twice in 1979, and three times in 1980 (GMD, LEG). The first brood raised in 1980 left the nest on 31 May (LEG). The nest was relined on 3 June and an adult female robin was incubating three eggs by 8 June (GMD). Since this robin was not marked, we are not certain that it was the same bird who used the nest in May. This is, however, highly probable since 41% of the robins studied by Young (Proc. Linn. Soc. N.Y. 62:17, 1951) remained on the same territory for their second brood.

On 11 June a spotted fledgling sat on the three eggs for several minutes while the adult female was away foraging (SWE). On 14 June, two spotted young were seen following and being fed by an adult male robin who foraged 25–100 m from this nest. One of these young flew to the nest rim and begged for food from the incubating female. The female left the nest and foraged. The fledgling remained on the nest rim and alternately gave juvenile food begging calls and inspected the nest contents by leaning forward on the rim with its head into the nest and its tail up. The second fledgling also flew to the window ledge about 1 m from the nest. The first young was fed by the adult female when she returned, but the second young was chased by her. The female resumed incubation but jumped from the nest within 3 min to again chase off the second young, who had returned. The first fledgling was allowed to remain at the nest. When the female began foraging below the nest, the first young joined her and was soon fed. After she fed this fledgling, she climbed on its back in a copulatory position, but the observer could not tell whether this was

sexual behavior or aggression. Within the next 6 min the young robin was fed and then mounted, twice on the ground and once on the window ledge near the nest (SWE).

We do not know if these unmarked young were from the May brood of this nest. This is probable, as their appearance and behavior indicate that they had fledged on or near the same date as the May brood.

The second brood in this nest fledged, and the third set of three eggs was being incubated in the same nest by 24 June (GMD). On several occasions over the next two weeks, three spotted young begged at the nest. The incubating female fed these birds between incubation bouts. The last set of eggs never hatched, and the nest was eventually abandoned (GMD, LEG).

To the best of our knowledge, helping at a later nest by young of an earlier brood has not been reported for wild robins. Favell (*in* Nice, Trans. Linn. Soc. N.Y. 6:79, 1943) reported seeing a young robin feeding still younger ones in captivity. Even in species where helping is common, it usually takes the form of feeding, antipredatory behavior or territorial defense, but not incubation. Goodwin (Ibis 89:656–658, 1947), however, cited a case of a captive four-month-old Rock Dove (*Columba livia*) incubating the eggs of a later clutch.

Begging at a later nest and feeding of young by an incubating female also appears to be uncommon in robins. The male usually takes charge of the first brood while the female prepares for the next brood (Bent, U.S. Natl. Mus. Bull. 196:21, 1949). Although Young (Am. Midl. Nat. 53:332, 1955) cited an observation of a female robin trying to mount a fledgling, he gave no additional information about the circumstances. The sequence of feeding followed by mounting that we witnessed is apparently unusual.

Although the behaviors we observed were not typical for helping at a nest, they lead us to speculate that begging at a nest may be a first step in developing the habit of helping, because this would allow the young access to the nest containing the next brood. The act of begging at the nest may not always be enough, however, to gain access, since one of the fledglings observed was continually chased away from the nest while the others were tolerated. These young were probably begging for food from their mother at the nest from which they were recently fledged. This situation may have enhanced the boldness of the young to approach the nest as well as the female's acceptance of their presence. If incipient helping at the nest does occur in robins, the best place to search for it may be in nests re-used for successive broods.

Biology Department, Saint Bonaventure University, St. Bonaventure, New York 14778. Received 20 December 1980. Final acceptance 8 March 1982.