BROWN-HEADED COWBIRD REMOVES BLUE-GRAY GNATCATCHER NESTLINGS

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Abstract.—A female Brown-headed Cowbird (*Molothrus ater*) apparently removed all nestlings from a Blue-gray Gnatcatcher (*Polioptila caerulea*) nest, despite attacks by the parents. The nestlings were not eaten; two were dropped below the nest and a third was carried 15 m and dropped. This is at least the fourth report of cowbird removal of nestlings of a host species.

INDIVIDUO DE *MOLOTHRUS ATER* SACA DEL NIDO A PICHONES DE *POLIOPTILA CAERULEA*

Sinopsis.—Aparentemente, una hembra de tordo (*Molothrus ater*) sacó del nido a los pichones de una pareja de *Polioptila caerulea*, pese a la defensa por parte de los adultos. Dos pichones fueron dejados caer al suelo inmediatamente debajo del nido y un tercero fue cargado unos 15 metros antes de ser dejado caer. Este es, al menos, el cuarto informe de remoción de pichones de nidos por parte de tordos.

Female Brown-headed Cowbirds (*Molothrus ater*) often remove an egg from nests of potential host species and occasionally remove nestlings. A summary of such records (Scott et al. 1992) included only three cases of nestling removal. We report an additional observation.

On 28 Apr. 1986 we and M. J. Davin observed a female cowbird visit a shrub containing a Blue-gray Gnatcatcher (*Polioptila caerulea*) nest and apparently remove three nestlings from it. The site was in Big Bend National Park, Brewster County, Texas (29°15′N, 103°15′W) at 1650 m elevation in Campground Canyon, a steep, brushy ravine along Pulliam Ridge in The Basin of the Chisos Mountains. At 0900 hours CDT, while on a survey for Black-capped Vireos (*Vireo atricapillus*), we played a tape-recording of vireo song. A female cowbird appeared and perched in a small oak, attracting a male and female gnatcatcher, who scolded and dove at the cowbird for approximately 3 min. The cowbird then flew 10–15 m to an evergreen sumac (*Rhus virens*) and fluttered in and around the shrub for 2 min, while the gnatcatchers, which had pursued her, continued to dive and call at close range, almost striking her. The cowbird flew away with something in her beak and dropped it approximately 15 m distant.

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In the shrub we found an empty gnatcatcher nest 1 m above ground, and on the ground below two small, nearly naked nestlings still alive, one with a wound on the head. We could not find the object, presumably a nestling, which the cowbird dropped farther from the nest. We replaced the young in the nest, and the female gnatcatcher returned and brooded. The cowbird returned shortly after our check of the nest and was chased away by the male gnatcatcher.

Although we did not see the gnatcatcher nest before these observations, we infer that it contained three nestlings and the cowbird removed all three, but ate none of them. Of the three records of nestling removal by female cowbirds collected by Scott et al. (1992), that of Beane and Alford (1990) is most similar to our observation: a cowbird removed four nestlings from a Pine Warbler (*Dendroica pinus*) nest and dropped them to the ground without eating them. Tate (1967) observed a cowbird remove a young Black-throated Green Warbler (*Dendroica virens*) from its nest but leave two other warblers and one cowbird nestling; she dropped the nestling to its death and did not eat it. Du Bois (1956) saw a cowbird carry off one of four nestling Song Sparrows (*Melospiza melodia*), possibly with the intention of eating it.

A possible explanation for removal of nestlings without eating them is that it might result in the victimized parents renesting, which would provide the cowbird a chance to deposit an egg. Blue-gray Gnatcatchers accept Brown-headed Cowbird eggs (47 records in Friedmann et al. 1977) and rear cowbird nestlings (Root 1969). Nestling removal by cowbirds appears to be rare (Scott et al. 1992), but is probably much more difficult to detect after the fact than egg removal. Even nestlings dropped below the nest may be inconspicuous. A nest from which young nestlings have disappeared is usually assumed to be a case of predation by an animal that ate the young, and observers may not think to search the vicinity for corpses. We encourage observers studying species parasitized by cowbirds to look for such evidence when a nest fails in the nestling stage.

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LITERATURE CITED

BEANE, J. C., AND S. L. ALFORD. 1990. Destruction of a Pine Warbler brood by an adult cowbird. Chat 54:85–86.

DU BOIS, A. D. 1956. A cowbird incident. Auk 73:286.

FRIEDMANN, H., L. F. KIFF, AND S. I. ROTHSTEIN. 1977. A further contribution to knowledge of the host relations of the parasitic cowbirds. Smithsonian Contrib. Zool. No. 235.

ROOT, R. B. 1969. The behavior and reproductive success of the Blue-gray Gnatcatcher. Condor 71:16–31.

SCOTT, D. M., P. J. WEATHERHEAD, AND C. D. ANKNEY. 1992. Egg-eating by female Brownheaded Cowbirds. Condor 94:579–584.

TATE, J., JR. 1967. Cowbird removes warbler nestling from nest. Auk 84:422.

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