

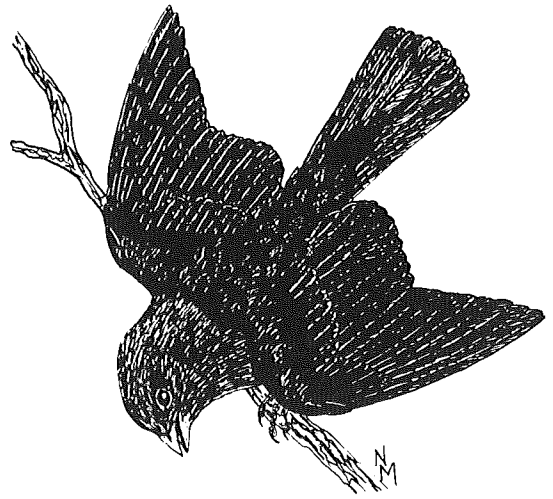
Brown-headed Cowbird

Molothrus ater

The Brown-headed Cowbird is most well known for its practice of laying eggs in the nests of other species of birds, thereby abdicating its parental chores. Cowbirds are relatively common and are most often encountered in open fields, active pastureland, and residential areas—wherever open areas with short grass suitable for ground foraging abound. The Brown-headed Cowbird was recorded in 95% of the 179 Atlas Project priority blocks in Vermont, evidencing its tolerance of a wide array of environmental conditions. Although elevation does not appear to be a major factor in the cowbird's distribution, the species does not occur in heavily forested areas (W. G. Ellison, pers. observ.), and therefore is rare in portions of the Green Mountains; it was absent from 25% of the priority blocks in the Northeast Highlands.

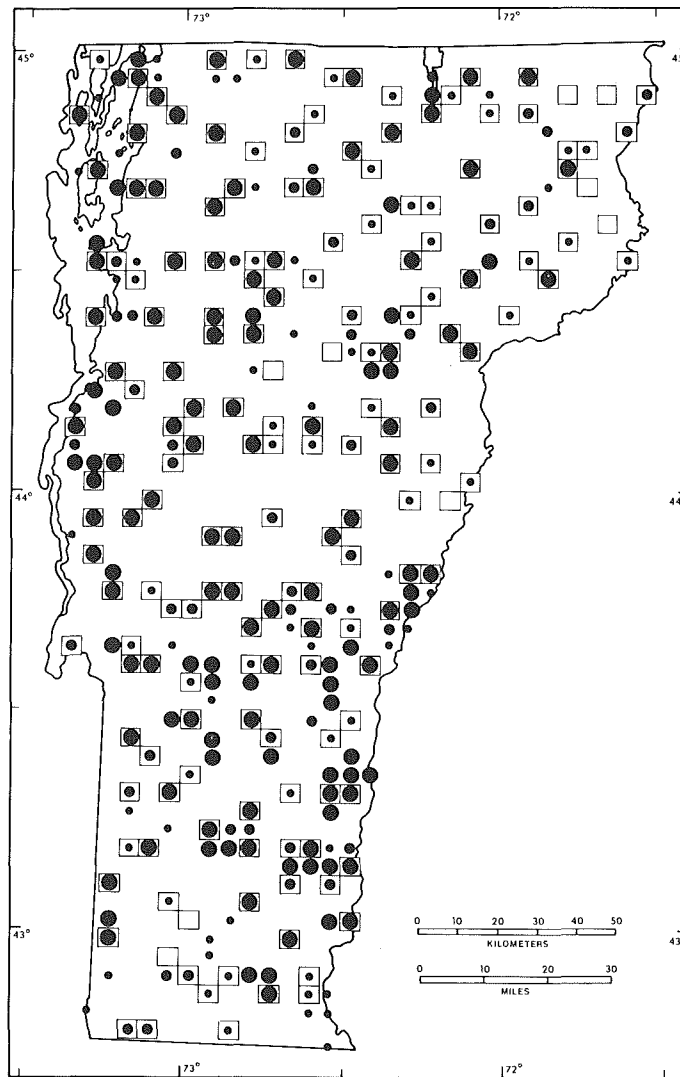
Cowbirds are usually easy to detect. The species arrives in breeding areas during late March and April. The song spread, a conspicuous breeding display performed by males, involves spreading the wings in a bowed form, ruffing up the body and neck feathers, and spreading the tail; the bird then bows forward while emitting its bubbling song. Fledgling cowbirds are very noisy and differ noticeably in appearance from their foster parents, often outsizing them considerably; nearly 55% of Atlas Project confirmations for the species involved young cowbirds attended by their adoptive parents.

The Brown-headed Cowbird has evolved a variety of mating systems to fit different environments. Studies by Elliot (1980) in Kansas indicate that the species is promiscuous in its mating habits and defends no territory. Darley (1968) and Dufty (1982), however, found that the species does hold a form of territory in northeastern North America. These so-called home ranges are large, averaging 20 ha (50 a), and are only defended by females against other females. Males mate monogamously with the holders



of home ranges and defend them from the advances of other males. Eggs are laid from mid May to early July; 16 Vermont egg dates extend from May 9 to July 6. Females apparently lay in discrete clutches that average 4 eggs each (Payne 1965), depositing a single egg just before dawn in each host nest. According to estimates by Payne (1976) and Scott and Ankney (1980), a female may lay 24 eggs over a single breeding season. Cowbirds commonly observe the activities of the prospective hosts during nest construction and the early stages of egg laying, then slip in to add their egg to the clutch, often removing 1 or more of the host's eggs. Eight nestling dates for Vermont cowbirds range from June 17 to July 24; 23 fledgling dates range from June 3 to July 22. The Brown-headed Cowbird is partly nonmigratory in Vermont. Flocks winter around both farms and residential areas.

Cowbirds do not show the fine-tuned adaptation to host species typical of the Common Cuckoo (*Cuculus canorus*) of Eurasia. Cowbirds seem to parasitize at random, and inappropriate hosts are selected with surprising frequency (Rothstein 1976; Scott 1977). Friedmann (1963, 1971) listed more than 210 species parasitized by the Brown-headed Cowbird. The five most heavily parasitized hosts cited for New York State by Bull (1974) were (in descending order): the Yellow Warbler, Red-eyed Vireo, Song Spar-



No. of priority blocks in which recorded

TOTAL 170 (95%)

Possible breeding: 48 (28% of total)

Probable breeding: 30 (18% of total)

Confirmed breeding: 92 (54% of total)

Physiographic regions in which recorded

| | no. of priority blocks | % of region's priority blocks | % of species' total priority blocks |
|---------------------|------------------------------|--|---|
| Champlain Lowlands | 31 | 100 | 18.0 |
| Green Mountains | 52 | 96 | 31.0 |
| North Central | 19 | 100 | 11.0 |
| Northeast Highlands | 12 | 75 | 7.0 |
| East Central | 16 | 84 | 9.5 |
| Taconic Mountains | 16 | 100 | 9.5 |
| Eastern Foothills | 24 | 100 | 14.0 |

row, American Redstart, and Chipping Sparrow. Among 44 records of cowbird parasitism in Vermont, 22 species have been identified as hosts, with the Red-eyed Vireo being most heavily victimized.

Mayfield (1965) contended that the Brown-headed Cowbird is a recent colonist in eastern North America. Early in the 1800s, the cowbird nested as far north as Burlington (Thompson 1853). The species was not considered common at the turn of the century, and remained uncommon into the 1920s. In 1933, Fortner et al. (1933) found it "uncommon to tolerably common." At present the cowbird is common in most parts of Vermont. U.S. Fish and Wildlife Ser-

vice Breeding Bird Survey data for the Northeast show an annual 3.5% decline in the cowbird population from 1966 to 1979, perhaps in response to reforestation (BBS 1966-79).

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