

**Common Grackle predation on adult passerines.**—Most published accounts of Common Grackles (*Quiscalus quiscula*) killing small songbirds (Townsend 1920, Christofferson 1927, Forbush 1927, Davis 1944, Bent 1958) are of birds that were recently fledged or were in a weakened condition. The following observations may be the first documentation of predation by a Common Grackle on several species of small birds.

From 1 May to 5 June 1992, I visited First Canadian Place Parkette in Toronto, Canada, on 31 days as part of a migration monitoring project. I made up to four visits per day and spent 80 h in total at the parkette which, during spring and fall migration periods, is a resting and feeding place for small passerines, the composition varying from day to day. The park is small (36 × 30 m) and is surrounded by high-rise office towers. About half the area is paved, and the remainder is lawn with plantings of birch and maple trees and several species of shrubs. An artificial waterfall is built into the building that borders the park on the north side.

I first saw a Common Grackle with an aluminum band on its left leg in the park at noon on 11 May; I last saw it on 1 June. In the intervening period, it appeared that the grackle killed and ate a total of 39 small passerines. I observed 12 of the kills and found the remains of 27 other fresh kills. The birds taken were Ruby-crowned Kinglet (*Regulus calendula*) 1, Ovenbird (*Seiurus aurocapillus*) 2, White-throated Sparrow (*Zonotrichia albicollis*) 35, and House Sparrow (*Passer domesticus*) 1.

Within an hour of its first appearance at mid-day on 11 May at 13:00 EDT, the banded grackle killed and fed on a White-throated Sparrow; at 14:00 it chased another which escaped. At 16:00 the grackle killed a second White-throated Sparrow and ate it; a few minutes later it tried to catch another, unsuccessfully. Twenty-four of the kills occurred in the first three days that the grackle was present. The last known kill (which was observed) was on 22 May. The reason for no further killings may have been lack of prey after the few surviving small, ground-frequenting species had fled the park. No White-throated Sparrows were seen in the park after 22 May. Although unsuccessful attacks were made the morning of 13 May on a Hermit Thrush (*Catharus guttatus*), a Wood Thrush (*Hylocichla mustelina*), and a Black-throated Blue Warbler (*Dendroica caerulescens*), no attacks were seen on other species in the park that included a variety of tree-frequenting warblers, Mourning Doves (*Zenaida macroura*), and a Brown Thrasher (*Toxostoma rufum*).

I observed a change in the grackle's method of hunting after the first two days. Initially, the grackle watched for its prey from a tree top perch from which it would attack any birds seen below. During the first two days it lost prey when it diverted its attention from one bird to another or drove birds upwards into the trees. By noon on 13 May (within 48 h), it had learned to target a specific bird and chase it down to the ground where it caught and killed it. From that time on, every chase seen ended in a kill. After a few days, the birds visiting the park became aware of the danger. When the grackle appeared the birds gave warning calls, took cover, and ceased all singing and movement. Then, the grackle again adjusted its method of hunting. It began to use hidden lookouts. It watched from building ledges above the trees where it could see into the trees easily but could probably not be seen by the birds in the park. It also began methodical explorations of the trees, usually flushing one or two birds out of hiding.

Many of the birds were caught on the paved walkways and carried in the grackle's claws (if still alive) or in its bill (if dead) into the shrubbery for feeding. They were eaten immediately, except for 12 May when three kills found intact in the early morning were eaten later the same day. Three spots in the shrubbery were favored for feeding, and the remains of from five to nine dead birds were clustered in these areas. After feeding on the latest kill,

the grackle would also return to feed on previous kills. The grackle always started feeding by placing the victim flat on its back, plucking out the breast feathers, and eating the breast first. Usually the remainder was eaten on one of its return visits. On two occasions, it was starting to feed on birds whose wings and tails were still fluttering. The grackle preferred its prey to other food. When I covered dead birds with raw hot dog and hamburger meat, the grackle pulled the prey from under them and moved elsewhere for feeding, leaving the proffered meat uneaten.

No more than two grackles were seen at the park until 3 June when, at 11:14, three grackles landed on the centre lawn and foraged in the grass for 8–10 min. The largest wore a band on the right leg that appeared thicker and chunkier than the one on the killer's left leg. These and others appeared during June, but the banded killer grackle was not seen again.

The success of the grackle's predation resulted from its ability to take advantage of the artificial situation set up by this small island of plantings surrounded by high buildings. The prey birds were concentrated into a constricted area from which escape was difficult, and they may have been weakened by migration.

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