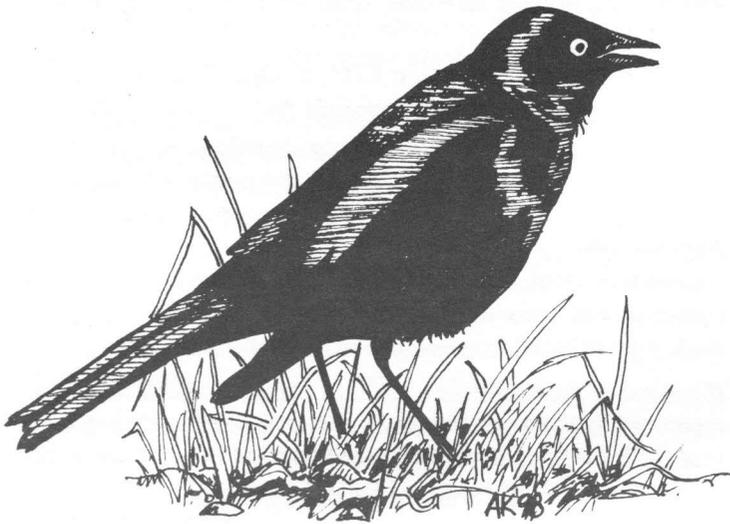


Brewer's Blackbirds: On Hold?

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Brewer's Blackbird by Andrea Kingsley

The Brewer's Blackbird first bred in Ontario in 1945 and rapidly expanded along the north shore of Lake Huron and Georgian Bay reaching Sudbury in 1963. It seemed that the Brewer's Blackbird would spread and colonize southern and eastern Ontario, but it didn't. There appears to be an invisible barrier preventing its expansion in Ontario. What is it?

The Brewer's Blackbird is a welcome sight in Ontario, but southern Ontario birders generally have to travel to find it. It is rare over most of the province, though locally uncommon from the Manitoba border to Sudbury, and in isolated pockets on the Bruce Peninsula, in Simcoe County and occasionally elsewhere. In western North America, Brewer's Blackbirds are so common that they probably don't get a second look. They inhabit roadsides, open spaces and areas close to human habitation. In the early 1900s, they expanded east to Minnesota and the eastern Prairies, then in mid-century to Michigan and Ontario as far east as Sudbury and Oshawa. They spread along roadsides, railway tracks and where forests had been cleared. Plentiful habitat was present in eastern and southern Ontario and the conditions seemed right. Ornithologists Jim Baillie and Ott Devitt expected them to continue expanding east and south.

However, in the mid-1970s the Brewer's Blackbird population stopped expanding. *The Atlas of the Breeding Birds of Ontario* (1986) reported: "Only two squares supported the bird in southwestern Ontario during the Atlas period." It failed to establish permanent breeding populations away from north of the Great Lakes and the Bruce Peninsula, except for a few isolated nestings. Brewer's are doing best at the most northern part of their Ontario range where conditions are cooler.

Several factors could affect the Brewer's Blackbird expansion in Ontario: habitat, natural barriers, predators and competition with other species. Habitat seems plentiful. Natural barriers are the Great Lakes, but the birds expanded on three fronts: from Manitoba across northern Lake Superior, through northern Michigan and from southern Michigan. Forested areas also could be a barrier, but the Brewer's had already crossed major forest barriers along the north shore of Lake Huron and Geor-

gian Bay and around Sudbury. Competition from Common Grackles has been postulated as a reason for the lack of expansion, but Brewer's Blackbirds and Common Grackles share habitat in large parts of their range.

A recent observation of Brewer's Blackbirds got me thinking about why they aren't more abundant in southern Ontario. On 21 June 1998, I watched nine Brewer's Blackbirds north of Coldwater, Simcoe County, Ontario. They were on wires, fence posts and walking about in the farm fields. They searched the shoulder of the road for dead insects that had been hit by cars. Nesting was suspected but not confirmed. Two birds became very agitated if we approached too closely a spot in the ditch where there may have been a nest. The temperature in mid-afternoon was quite warm at about 27°C according to Environment Canada in Barrie. The Brewer's Blackbirds were panting. Common Grackles and Red-winged Blackbirds in the same area showed no evidence of heat stress such as panting.

When temperatures become very warm, panting is essential to a bird's survival. Birds increase their normal breathing rate to panting, which cools them down and gets rid of excess body heat. My observation of panting Brewer's Blackbirds may indicate they are unable to tolerate heat and humidity, the same reason that appears to limit the eastern expansion of Black-billed Magpies (Pittaway, *OFO News* 15:3, October 1997). Differences in the ability to thermoregulate have been suggested as a factor in the population distribution of other species. Thermoregulation in birds is a little studied physiological process that may be more important in controlling the distribution of birds than is presently known.

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