

# The Rusty Blackbird: A Conservation Priority

by Becky Stewart



Photo: Harold Stiver

Sometimes described as a mini-grackle, and named for the rusty tips that characterize its fall plumage, the Rusty Blackbird is a medium-sized songbird with yellow eyes. Breeding males are uniformly black with a slight greenish gloss on the body and a violet to bluish gloss on the head. Breeding females are brownish-grey.

Seventy percent of the Rusty Blackbird's global population breeds in Canada. Its breeding range extends from Newfoundland to Alaska, and includes every province and territory. It is closely tied to the boreal forest, where it nests in wooded wetlands such as bogs, beaver ponds, and muskegs. Forested wetlands are also favoured during migration and winter. Most of the population winters in the southeastern U.S.

Despite its extensive range, the Rusty Blackbird is probably the least well-known, and least understood, of all blackbirds. Missing the flashy epaulets of the Red-winged Blackbird, the notorious breeding habits of the cowbird, and the conspicuous size of the grackle, the Rusty Blackbird has flown under the radar for years. Its remote breeding range and fondness for inaccessible forested wetlands have left this species largely understudied, until now.

## Citizen Science Identifies a Conservation Priority

It is estimated that the Rusty Blackbird population includes up to 1.4 million individuals. That's a fraction of what it was 40 years ago, when numbers approached as many as 13 million. Two continent-wide Citizen Science initiatives played a key role in detecting the decline. Data from the Breeding Bird Survey (BBS) and

Christmas Bird Count (CBC) indicate that Rusty Blackbirds have declined by 5 to 10% per year since the mid-1960s – a total population decline of 85 to 95%.

Other sources of data – Mackenzie Nature Observatory, Étude des populations d'oiseaux du Québec, and the Ontario and Maritimes Breeding Bird Atlases – also indicate declines of differing degrees. Although the extent of decline varies regionally, all surveys indicate that over the last 40 years, the Rusty Blackbird has undergone the most severe declines of any songbird species.

The strength and persistence of the declines led the Committee on the Status of Endangered Wildlife in Canada to designate the Rusty Blackbird as a species of "Special Concern" in 2006. Such a designation is afforded to a species that is at risk of becoming Threatened or Endangered. In 2009, the Canadian government accepted this designation, and listed the Rusty Blackbird under the federal Species At Risk Act (SARA). This development is beginning to bring the Rusty Blackbird some long-overdue attention from the larger scientific community.

## Habitat Loss and Alteration

While many other blackbird species thrive in human-dominated landscapes, the Rusty Blackbird is far less adaptable to urban and agricultural lifestyles. The conversion of wetland forests to agriculture on the wintering grounds is likely the primary driving force behind the species' decline. Over the last 150 years, more than 80% of floodplain forests in the Mississippi Valley – where the bulk of the Rusty Blackbird population winters – have been converted for agriculture and urban

expansion. Similarly, wetland conversion in southern portions of the Rusty Blackbird's breeding range has resulted in some breeding habitat loss.

Even remote regions of the boreal forest are not immune to human population pressures. Acid rain led to increased acidity in wetlands, potentially harming important invertebrate food sources. Subsequent possible declines in calcium-rich invertebrates could affect eggshell and bone formation.

By releasing naturally-occurring mercury from rotting wood, the drowning of forests by hydroelectric reservoirs has increased mercury to toxic levels in wetland ecosystems. Other resource extraction activities such as logging, oil and gas extraction, mining, and road-building have also degraded forested wetland habitats in the south, opening these areas to Red-winged Blackbirds and Common Grackles, which displace their Rusty cousins. Despite these threats to the breeding grounds, a substantial portion of the species' northern breeding range remains intact. Conservation efforts should focus on this vast area, most of which lacks legal protection.

## Blackbird Control Programs

Blackbird control programs may have played a role in Rusty Blackbird declines. Most other bird species are afforded some protection in Canada and the U.S. as a result of the 1916 Migratory Birds Convention. Because blackbirds were considered agricultural pests at the time, they were not afforded legal protection in either country. Between 1974 and 1992, Red-winged Blackbird and European Starling lethal control programs were responsible for the

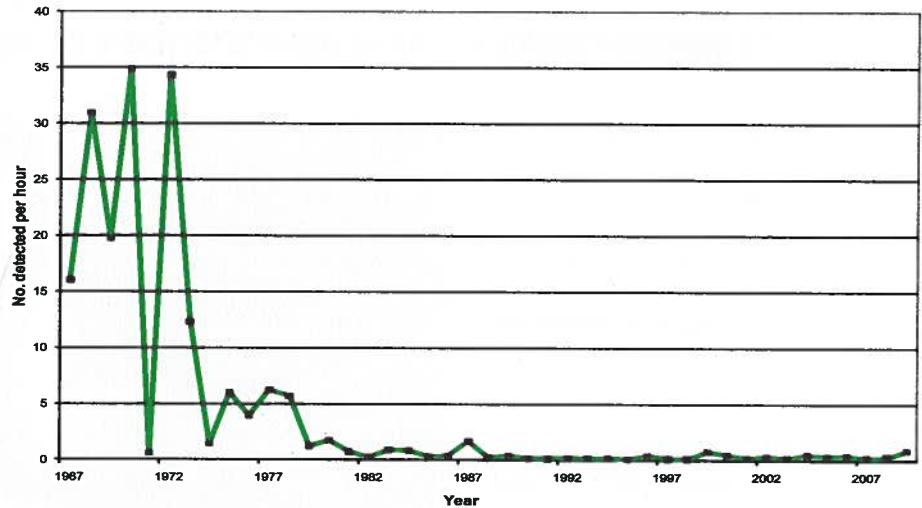
deaths of about 100,000 Rusty Blackbirds in the U.S. In 2008, the U.S. Fish and Wildlife Service listed the Rusty Blackbird as a focal species of special concern, and removed it from the standing depredation order. However, blackbird control programs are still in place. And because the Rusty Blackbird associates with large mixed flocks of other blackbird species during the winter, it is difficult to protect it from ongoing control programs that target other species.

Unlike the U.S., Canada's Migratory Bird Convention Act has not yet been amended to protect the Rusty Blackbird. Because SARA prohibitions apply only to Endangered and Threatened species, it currently receives no effective legal protection. Under SARA, the Canadian government is compelled to create a Rusty Blackbird "management plan," but regulations to implement the plan will apply to federal lands only. This means that protecting the Rusty Blackbird and its essential habitats in Canada will require provincial and territorial support.

The Rusty Blackbird is a unique wetland songbird that has nearly slipped through the cracks. With 70% of its breeding population in Canada, we as citizens will need to work together to help ensure that this once-common species does not spiral down further. Once a species enters Threatened or Endangered status, the costs of recovery to tax-payers are not only huge, but the chances of success become increasingly small. Here are some things you can do to help.

### Share Your Observations

By volunteering for the Breeding Bird Survey or the Christmas Bird Count, you can play an important role in monitoring Rusty Blackbird populations. You can also participate in one of the breeding bird atlas projects in Québec, Manitoba, British Columbia, or the Maritimes. Through these initiatives, thousands of citizen scientists collect information to determine bird species' distribution, abundance, and status. Atlasers survey all habitat types, including areas not covered by the BBS. Because Rusty Blackbirds nest in low densities, identifying potential breeding 'hotspots' could be important for their conservation. As an example, atlas surveys in the Hudson Bay Lowlands in Ontario showed that Rusty Blackbirds occurred there in relatively high



**Figure 1.** Christmas Bird Count data suggest that Rusty Blackbirds have declined by as much as 5% each year over the past 40 years.

densities, suggesting that these areas merit conservation attention.

Birders are also invited to participate in the Northwest Territories/Nunavut Bird Checklist Program ([www.mb.ec.gc.ca/nature/migratorybirds/nwtbcs](http://www.mb.ec.gc.ca/nature/migratorybirds/nwtbcs)), which was started by Environment Canada in 1995. And even if there is no formal survey program in your province, your Rusty Blackbird observations are important. Please document your sightings at any time of the year at [www.ebird.ca](http://www.ebird.ca).

If you take a winter vacation in the U.S., you can also participate in the annual Rusty Blackbird Blitz. Because the winter distribution of this species is still not very well known, it is difficult to know where to focus conservation efforts. In 2009, the International Rusty Blackbird

Working Group developed the "blitz" to identify local and predictable wintering concentrations of Rusty Blackbirds. The 17-day survey runs from January 30 to February 15, and volunteers report their observations through eBird.

### Be a Rusty Blackbird Steward

If you are a landowner with wooded wetland areas on your property, consider preserving them for the Rusty Blackbird, and the many other species that rely on wetland ecosystems. Even if you don't live within the Rusty's core breeding range, keep in mind that they rely on a predictable good supply of wooded swamps to stop and refuel during both their north and southbound migrations.

### Rusty Blackbird Facts

- The Rusty Blackbird's robust nests are reused by other birds, such as the Solitary Sandpiper.
- There are two subspecies of Rusty Blackbird. The *carolinus* subspecies is found throughout most of the Rusty Blackbird's range. The eastern *nigrans* subspecies (which is slightly darker, with more blue in the sheen on its head) breeds in Newfoundland and Labrador, Nova Scotia, and the Magdalen Islands in Québec.
- Rusty and Brewer's blackbirds are more closely related to grackles than to other blackbirds. In fact, John James Audubon first described the Rusty Blackbird as the "Rusty Grackle" [*sic*].
- The Rusty Blackbird's song is likened to the creaking of a rusty hinge. Two different song-types have been described. One is rhythmic, beginning with two or three musical notes, and ending in a high, squeaky note. The other is a rapid repetition of a three-note phrase, rising in pitch but lacking the final high note. Both males and females sing.
- Rusty Blackbirds moult once per year. The rusty feather edgings that characterize their fall plumage wear off by spring, giving the males their uniformly black appearance.