

Rusty Blackbird (*Euphagus carolinus*)

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Introduction

The Rusty Blackbird is a winter resident of the southeastern United States. In fall and winter, this bird is found typically in wooded wetland areas and has some affinity to stream banks near agricultural landscapes, including pecan orchards. Blackbirds often gather in large flocks that also may include Brown-headed Cowbirds (*Molothrus ater*) and Red-winged Blackbirds (*Agelaius phoeniceus*) at night roosts. They breed mainly in boreal forests of Alaska and Canada. The Rusty Blackbird is often confused with other blackbirds such as the Common Grackle (*Quiscalus quiscula*), Brewer's Blackbird (*Euphagus cyanocephalus*) or Red-winged Blackbird, but both males and females have a wash of rusty coloration to their feathers unlike the other species.



Taxonomy

Family: Icteridae

Genus: *Euphagus*

The icterids are New World blackbirds with two species in the genus *Euphagus*, the Brewer's Blackbird and the Rusty Blackbird. Winter and summer ranges of the Brewer's Blackbird are west of Georgia, so it is an uncommon visitor to the state during any part of the year.

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Status

According to the Breeding Bird Survey (BBS - <http://www.pwrc.usgs.gov/BBS/>), Rusty Blackbird populations have declined 12.5% in the past 40 years. Christmas Bird Counts (<http://www.audubon.org/Bird/cbc/>) also suggest at least a 90% decline in population numbers during that time. In 2007, the International Union for the Conservation of Nature (IUCN) changed the Rusty Blackbird's conservation status from "Least Concern" to "Threatened-Vulnerable." The U.S. Fish and Wildlife Service (USFWS) listed it as a "Focal Species of Conservation Concern." Yet, for many years, the Rusty Blackbird also has been labeled an agricultural pest by the USFWS and part of a standing depredation order that is an exemption to the Migratory Bird Treaty Act (MBTA). This status means the Rusty Blackbird, along with other blackbird species, are subject to lethal and non-lethal control measures without additional permitting if it is judged that they are interfering, or are about to interfere with agricultural activities, including eating crops or posing a health risk to livestock. In December 2008, however, the USFWS proposed a rule change to the standing depredation order. They have recommended removing the Rusty Blackbird from this exemption.



Description

The Rusty Blackbird is a medium-sized songbird (approximately 9" long and about 2 oz.) with males generally larger than females. Both sexes molt after the breeding season. This molt results in feather colors that are the most distinguishing characteristics of the Rusty Blackbird. During winter, males will be black with feather edges having a rusty color. Females during winter will be brownish-black, darker on the back and wings, lighter and sometimes grayish on the chest and belly. Females also have a distinct beige eye stripe or "eyebrow." Males sometimes show an eye stripe. The amount and intensity of the rusty wash varies because as the fall and winter season progresses the rusty feather edges wear off leaving only solid black or grayish-black feather color. By the time breeding season arrives males will be almost completely black with little to no rusty coloration, and females will be more gray. Both sexes have pale yellow eyes. The tail of the Rusty Blackbird is blunt at the end unlike the Common Grackle's, which is wedge-shaped. The bill is thinner compared to the bills of the Common Grackle, Red-winged Blackbird, and Brown-headed Cowbird.

Distribution

Breeding season distribution ranges across the boreal forest from Alaska to the Atlantic coast of Canada. Southern limits of the breeding range extend into the United States but only as far as the northernmost parts of New England—New Hampshire, Vermont, New York, and Maine. Fall migration

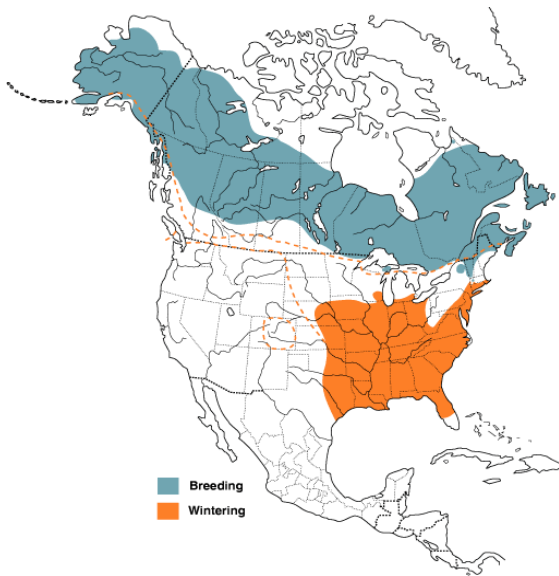


Figure 1: Breeding & wintering range of the Rusty Blackbird.

occurs mainly from September to October. During winter the Rusty Blackbird can be found across the southeastern U.S., with the western extent of the range stretching to the Great Plains and the northern extent reaching into southern New England (Figure 1). Most birds winter in the Lower Mississippi Valley and southeastern Coastal Plain. Spring migration occurs mainly from March to April.

Form and Function

The structure of the Rusty Blackbird's bill and skull make it suited to feed on insects, invertebrates, small seeds, small grains, and fruits. However, because the bill is slender it is not as effective at cracking larger acorns and nuts such as pecans.

Ecology

The Rusty Blackbird relies on two main habitats—breeding season and wintering—plus the habitats it encounters when migrating during its lifetime. The wide range of landscapes these birds encounter present challenges to wildlife managers who seek to stabilize and maintain their population numbers.

Reproduction: Breeding occurs in wet woodland- mostly conifers, peat bogs, fens, muskegs, beaver ponds, and along swampy streams and lake edges in the boreal forest of Alaska and Canada, extending into northern New England and New York. Rusty Blackbirds are believed to be monogamous and tend to nest as an isolated pair rather than in large groups or colonies, though some loose groupings of pairs have been observed. Nests are usually near water but found in a range of living or dead trees such as willow, spruce, fir, birch, or even in grasses. Nests are commonly built from small branches or twigs of alder or tamarack, lined with dried grasses. Birds may begin nest building as early as May depending on the location. Eggs are laid one per day and incubation is believed to begin with the laying of the first egg. Females are the sole incubator with the male bringing food to the nest for the female. Clutch sizes of Rusty Blackbirds are less than five eggs on average with a range of 3-6 eggs. The incubation period is approximately 2 weeks. Upon hatching, the young birds are helpless. Only females brood but both sexes feed the nestlings. Fledging, when the young leave the nest, occurs after 13-14 days and fledgling birds may remain near the parents for up to a month after leaving the nest.

Feeding: Rusty Blackbirds have a varied diet that includes seeds, grains, fruits, insects, and invertebrates such as snails. They look for food while walking. Often they can be seen wading through very shallow water flipping leaves over to look for prey items. Sometimes the Rusty Blackbird is seen foraging alone, other times they will be in groups. They have been known to scavenge bits of pecan that a Common Grackle has already cracked open or acorns that have been crushed by car wheels. Smaller acorns, such as those from the Willow Oak, which is found in swamp habitats, are also eaten by Rusty Blackbirds. Although the Rusty Blackbird may include grains in its diet, it relies more on other food

sources and does not cause major negative impacts to agricultural crops like other blackbirds. The Rusty Blackbird has been known to attack and kill other birds for food but it is believed that this type of behavior is often restricted to times of food shortage during winter.

Behavior: Although the Rusty Blackbird forages exclusively on the ground, they can be found perching in trees (sometimes near the top) throughout the day. Both males and females sing and the male's song can be described as the sound of rewinding a tape recorder while it is playing. Birds do vocalize during the winter, though calling is sporadic and is believed to be by males only. Females have been reported to sing in response to a male song and when leaving the nest. It is believed that singing by males is to establish territory in the breeding season and that the female response is to strengthen/maintain the pair bond. In winter, Rusty Blackbirds may spend the day foraging in small groups (approximately 20 birds) but then travel before sundown to large, communal roosting spots, which could include other blackbirds. Examples of roosting spots are trees in urban areas or fields of dried grasses in rural locations. There is some evidence of separate roosting locations for male and female birds.

Habitat: The Rusty Blackbird inhabits two unique realms with a common theme—water. During breeding season, one can find the Rusty in boreal forest wetlands and in winter, the wooded wetlands of the southeastern U.S. Both of these habitat types have undergone changes that likely contribute to the dramatic decline in Rusty Blackbird populations. Substantial amounts of the wooded wetlands in the Rusty Blackbird's winter range have been converted to agriculture and other uses since the mid-1950s. Although the boreal forest is not as susceptible to direct human influence, indirect activities such as wetland draining and drying could influence the breeding habitat of Rusty Blackbirds. Breeding habitat is often difficult to access and few studies have been done in these areas, so little data exist for estimating long-term reproductive trends. In the eastern part of the Rusty Blackbird's range, mercury accumulations are high. Implications of elevated mercury levels are being investigated.

Enemies: Predation on Rusty Blackbirds is mainly by hawks, owls, and falcons. Gray Jays are thought to be potential nest predators. The winter range of Rusty Blackbirds generally does not overlap with the range of the Gray Jay so it is unlikely that the Gray Jay is a threat during winter. Humans can have negative impacts on Rusty Blackbird populations. Studies are ongoing to discover the reason for the recent large decline in population numbers. Theories include habitat loss, particularly in the wintering grounds, mercury contamination, and drying of wetlands caused by climate change and draining wetlands caused by humans.

General: Field data of banded birds recaptured later have found two Rusty Blackbirds at least 8 years old, but general lifespan is not really known.

Populations: During the breeding season, Rusty Blackbirds are not believed to exist in dense groups. Pairs will be either solitary or organized into loose groups of pairs spread across multiple acres. In winter, these birds can be found among flocks of other blackbirds or in flocks of only Rusty Blackbirds. Since the mid-1800s, the Rusty Blackbird's classification in spring and autumn migration checklists as well as in state accounts has changed from "abundant" to "rare-uncommon."

Disease

So far, the Rusty Blackbird has not been affected by West Nile Virus and thus would be an unlikely transmitter of this disease.

Economic value

Rusty Blackbirds have little specific economic value. Considering their specific habitat associations, they could have value as an indicator species for boreal forest wetlands and the wooded wetlands of the southeastern U.S.

Damage

Rusty Blackbirds are lumped with other blackbirds that are known to affect agricultural crops because they tend to be found in flocks with Red-winged Blackbirds, Common Grackles, and Brown-headed Cowbirds. However, this bird is more likely to feed on invertebrates and insects rather than exclusively on grains.

Medicinal use

There is no known medicinal use.

Legal Aspects

The legal status of the Rusty Blackbird is contradictory. The bird is technically protected by the Migratory Bird Treaty Act (MBTA) between the U.S., Mexico and Canada, but is not protected under the Canadian Migratory Birds Convention Act. Additionally, in the U.S., the Rusty Blackbird is part of an exemption to the MBTA that automatically permits lethal and non-lethal control of agricultural pests. As of December 2008, the USFWS has proposed removing the Rusty Blackbird from this exemption. The Rusty Blackbird has been listed by Committee on the Status of Endangered Wildlife in Canada as a “Species of Special Concern” and is a “Bird of Conservation Concern” according to the USFWS. Neither of these designations provide legal protection.

Control to Reduce

The USFWS includes the Rusty Blackbird in its list of agricultural pests. There is a standing depredation order, meaning no additional permit is required to use lethal control measures on birds that are engaging in or about to engage in acts detrimental to agricultural crops or livestock health. Other methods for reducing damage include scare or harassment of birds at feeders or livestock pens, habitat modification to breeding areas or winter roost sites and exclusion of birds from feeding troughs or waste grain. Management to minimize grain spillage and confined feeding of cattle can help reduce losses to Rusty Blackbirds.

Management to Enhance

Despite uncertainty as to the causes of Rusty Blackbird population declines, the most likely way to enhance or at least stabilize populations is to conserve remaining habitat. Until more research is completed on both breeding and wintering grounds along with associated toxicological analyses, it is difficult to provide specific recommendations on ways to increase this bird’s population numbers.

Human use

Native American - no known uses

Colonists - no known uses

Further Reading

- American Ornithologists Union. 1998. The AOU checklist of North American birds. American Ornithologists Union, McLean, VA. <http://www.aou.org/>
Cornell Lab of Ornithology: All About Birds.
http://www.birds.cornell.edu/AllAboutBirds/BirdGuide/Rusty_Blackbird_dtl.html
- Elphick, C., J.B. Dunning, Jr., and D.A. Sibley, eds. 2001. *The Sibley Guide to Bird Life and Behavior*. Alfred A. Knopf. NY 608 p.
- Jaramillo, A. and P. Burke. 1999. *New World Blackbirds: the Icterids*. Princeton University Press. Princeton, NJ 431 p.
- Sibley, D.A. 2000. *The Sibley Guide to Birds*. Alfred A. Knopf. NY 554 p.
- Smithsonian Migratory Bird Center: Rusty Blackbird Overview.
http://nationalzoo.si.edu/ConservationAndScience/MigratoryBirds/Research/Rusty_Blackbird/

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