# Rusty Blackbird

*Euphagus carolinus*

The Rusty Blackbird is the least known, least studied, and most easily overlooked species of blackbird in North America. It breeds in remote wetlands across the greater boreal forest, from Alaska to northern New England (Avery 1995). Vermont is located on the southeastern edge of the Rusty Blackbird's breeding range and the species is uncommon in most of the state. However, it can consistently be found in Vermont's colder, northern regions where boreal wetland habitat exists. The declining status of this species range-wide means that Vermont and other northeastern states can play an important role in its conservation.

The Rusty Blackbird occupies beaver ponds, peatlands, coniferous swamps, and large wetlands adjacent to permanent lakes and ponds, typically within large tracts of contiguous boreal forest and mixed upland forests, between elevations of 300 to 600 meters (980 to 1970 feet). In Vermont, Rusty Blackbirds begin nesting in early to mid-May. Atlasers recorded nest building from 22 May to 21 June (N = 4), nests with young from 2 June to 18 June (N = 6), and fledglings from 5 June to 19 July (N = 12). Seven nests were monitored as part of a focused study of the Rusty Blackbird in the Northeastern Highlands; for these, egg-laying dates ranged from 12 May to 22 May, with fledging dates from 7 June to 16 June (C. Fisher unpubl. data). The majority of the breeding population is found in the Northeastern Highlands, although the species occurs in lesser numbers on the plateau of the Southern Green Mountains and in isolated locations in the Northern and Southern Vermont piedmonts and the Northern Green Mountains.

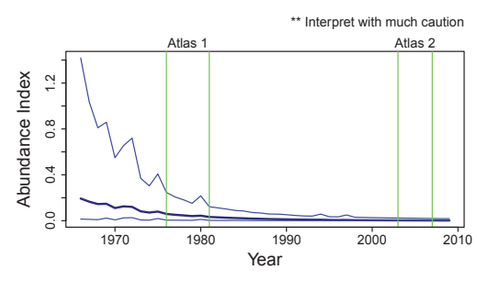
Since the first atlas, Rusty Blackbird populations appear to have declined in areas peripheral to the state's core breeding range, including the Northern and Southern Vermont piedmonts and the Champlain Valley. These changes, particularly in lowland blocks, may be due at least in part to alterations in protocols; some PO and PR records in the first atlas may have been migrants, found outside the "safe dates" enforced during the second atlas. The greater number of occupied blocks recorded in the Northeastern Highlands likely stems from intensive surveys for this species conducted in 2007 rather than increased nesting frequency.

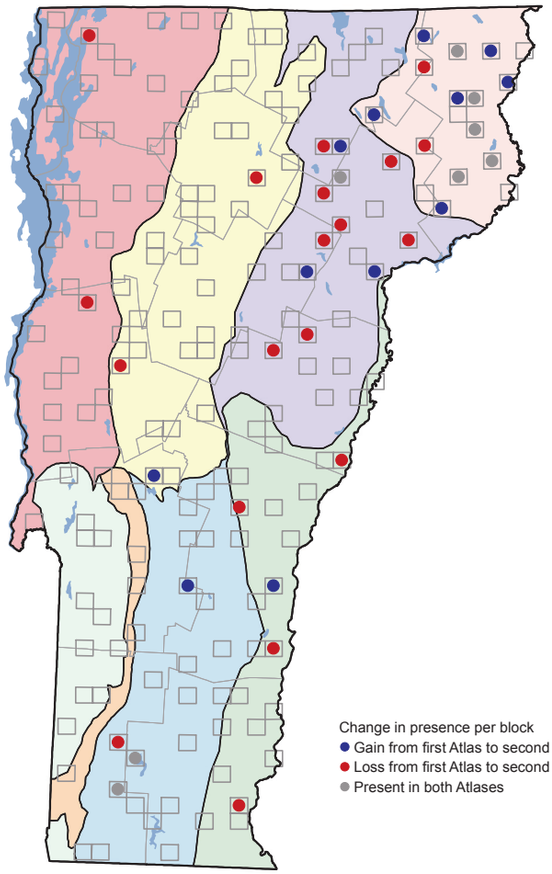
The Rusty Blackbird is now listed as a Species of Special Concern in New York, Vermont, New Hampshire, Maine, and Canada. Christmas Bird Count and Breeding Bird Survey data indicate significant range-wide declines: from 85 to 95 percent over the past half-century, with a particularly precipitous drop in the 1970s (Greenberg and Droege 1999, Niven et al. 2004, Sauer et al. 2011). Rusty Blackbirds have shown a major range contraction in Maine, disappearing entirely from southern and eastern parts of the state (Powell 2008).

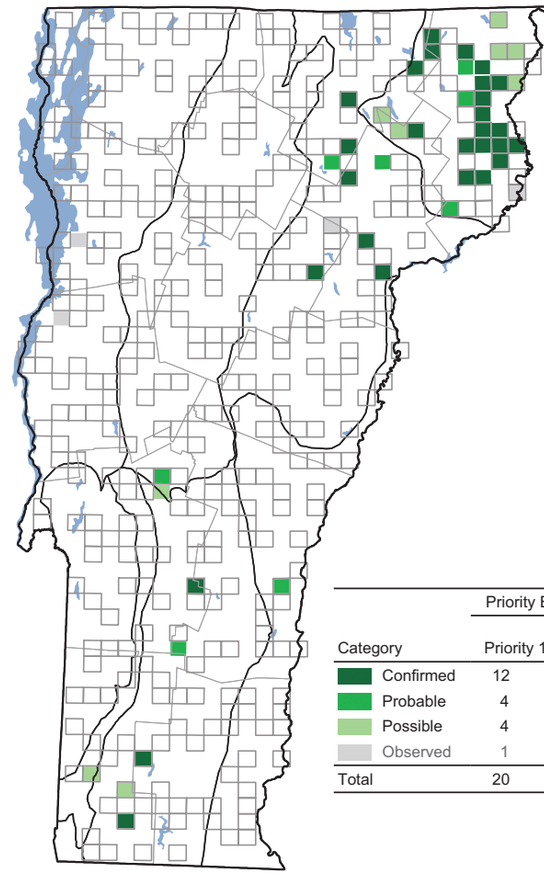
Remarkably, these severe declines went relatively unnoticed until recent years, and conservation biologists are only beginning to research the possible causes. Leading hypotheses include the loss of primary wintering habitat due to extensive clearing of bottomland forests in the southeastern United States, and habitat degradation on breeding grounds from development, logging, mercury contamination (Edmonds et al. 2010), and climate change (Greenberg and Droege 1999).

In New England, recent studies suggest that timber management practices affect nest survival. In Vermont

**RELATIVE ABUNDANCE OVER TIME**





| Category | Priority Block Count: Priority 1 | Priority 1 & 2 |
|---|---|---|
| Confirmed | 12 | 21 |
| Probable | 4 | 4 |
| Possible | 4 | 8 |
| Observed | 1 | 2 |
| Total | 20 | 33 |

**CHANGE IN DISTRIBUTION BETWEEN ATLASES**

| Biophysical Region | First Atlas | Second Atlas | Change | % Change |
|---|---|---|---|---|
| Champlain Valley | 2 | 0 | - 2 | - 100 |
| Northeastern Highlands | 7 | 11 | + 4 | + 57 |
| Northern Green Mountains | 2 | 1 | - 1 | - 50 |
| Northern Vermont Piedmont | 9 | 4 | - 5 | - 56 |
| Southern Green Mountains | 3 | 3 | + 0 | + 0 |
| Southern Vermont Piedmont | 4 | 1 | - 3 | - 75 |
| Taconic Mountains | 0 | 0 | + 0 | + 0 |
| Vermont Valley | 0 | 0 | + 0 | + 0 |
| Totals | 27 | 20 | - 7 | - 26 |

**DISTRIBUTION IN CURRENT ATLAS**

| Biophysical Region | % of region species occupies | % of all records for this species found in region |
|---|---|---|
| Champlain Valley | 0 | 0 |
| Northeastern Highlands | 54 | 61 |
| Northern Green Mountains | 1 | 3 |
| Northern Vermont Piedmont | 9 | 18 |
| Southern Green Mountains | 7 | 12 |
| Southern Vermont Piedmont | 2 | 3 |
| Taconic Mountains | 0 | 0 |
| Vermont Valley | 12 | 3 |

and Maine, Rusty Blackbird nests in regenerating clear-cuts (less than twenty years old) were more than twice as likely to suffer predation as nests in more mature forests (Powell et al. 2010). Researchers propose that un-logged, 75-meter (246-foot) buffers around suitable nesting wetlands could reduce nest depredation. Until the precise factors contributing to Rusty Blackbird population declines in each phase of its life cycle are more fully understood, the maintenance of quality breeding habitat is of vital importance.

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