

Eastern Towhee

Pipilo erythrophthalmus



Its *drink-your-tea* song and constant scratching in the leaf litter define the Eastern Towhee as well as its bold, black, rufous, and white plumage. The species occurs throughout the United States east of the Great Plains and into southern Canada, with Vermont near the northeastern edge of its range (Greenlaw 1996).

One common feature of Eastern Towhee habitat is a well-developed shrub layer. Typical sites include old fields and maintained shrublands such as power-line rights-of-way. Open forests where canopy gaps facilitate under-story development are also used, as well as edges of rocky outcrops on mountaintops. Towhees are far less common in early successional habitats dominated by saplings (Engstrom et al. 1984), including abandoned beaver meadows and wildlife openings (Chandler et al. 2009, King et al. 2009b). They arrive in Vermont beginning in late April, but limited data are available on nesting phenology in the state. Elsewhere in the Northeast, peak egg-laying occurs from late May into June (Greenlaw 1996). Incubation lasts 12 to 14 days and the nestlings fledge in another 10 to 12 days. Although Eastern Towhees are often double-brooded over much of their range, Vermont is likely too far north for multiple nesting attempts.

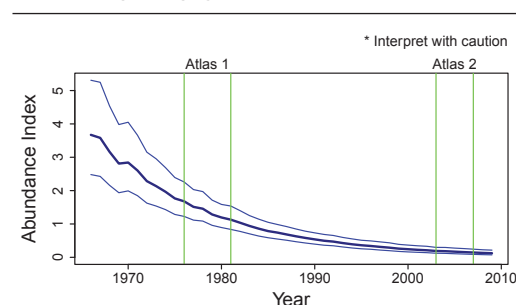
The species occurs throughout Vermont, though it is less common in the Northeastern Highlands and northernmost parts of the Vermont Piedmont and Green Mountains. During the second atlas, it was most prevalent in the western part of the state, with an additional concentration of occupied blocks in Orange County. This distribution is essentially identical to that documented by the first atlas, although the species was recorded in only half as many Priority 1 blocks.

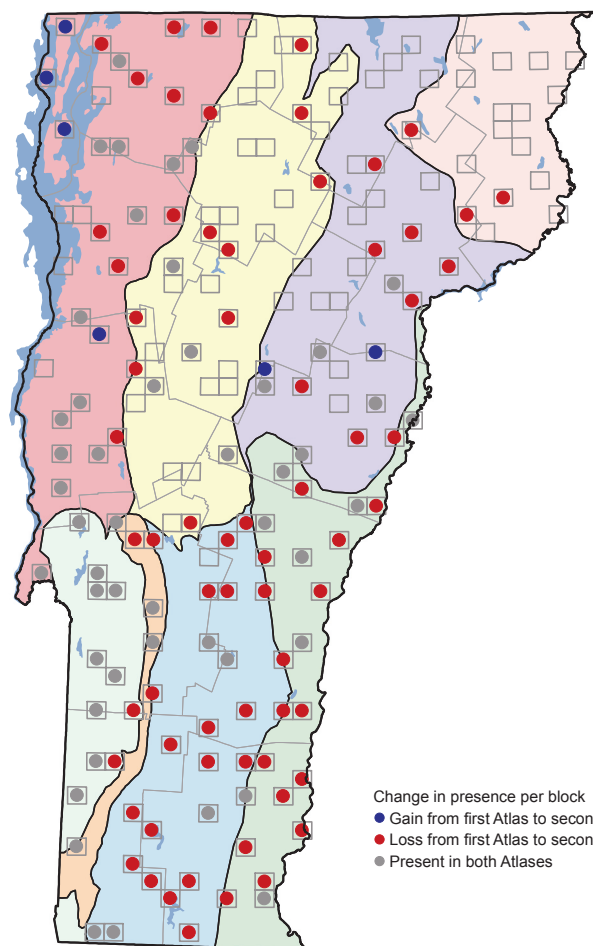
The decrease in the species' block occupancy is largely a result of habitat loss. Throughout the northeastern United States, farmland abandonment, succession of resulting shrublands, and forest maturation have resulted in fewer and smaller patches of early successional vegetation (Litvaitis 1993). This pattern of land-use change is more prevalent at higher elevations, where farming has always been less widespread; hence, there have been

larger declines in the Green Mountains, Northeastern Highlands, and much of the Vermont Piedmont. Concomitant with the decline in occupied blocks, Eastern Towhee was confirmed in only 19 percent of the blocks in which it occurred statewide, compared to 48 percent during the first atlas.

The plight of Eastern Towhee was first acknowledged in the early 1990s, when populations in New England were declining 8 to 10 percent annually (Hagen 1993). Breeding Bird Survey data show Vermont populations declining by 7.3 percent per year from 1982 to 2007 (Sauer et al. 2011), giving it the unfortunate distinction of being one of the most rapidly declining songbirds in the state. The range retraction detected in Vermont has been seen in the Adirondacks and southern Ontario (Cadman et al. 2007, McGowan and Corwin 2008), but not in Pennsylvania or Maryland (Ellison 2010, Wilson et al. 2012), suggesting that the species' decline is most notable in the northeastern portion of its range. This is supported by its apparent disappearance from the northern part of neighboring New Hampshire (P. Hunt unpubl. data) and stronger declines in northern compared to southern New England (Sauer et al. 2008). New England populations may have peaked in the mid-twentieth century (Griscom 1949), and

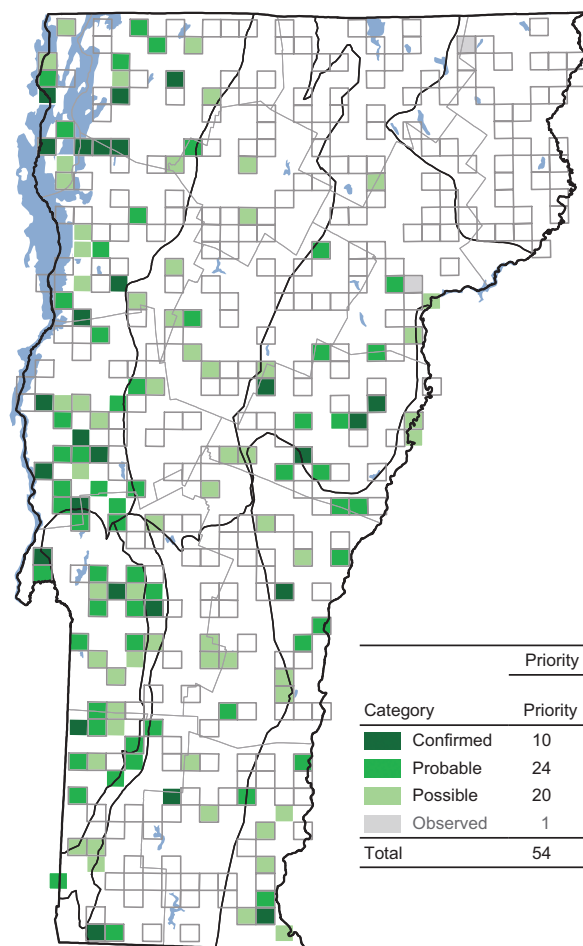
RELATIVE ABUNDANCE OVER TIME





CHANGE IN DISTRIBUTION BETWEEN ATLASES

Biophysical Region	First Atlas	Second Atlas	Change	% Change
Champlain Valley	23	17	- 6	- 26
Northeastern Highlands	3	0	- 3	- 100
Northern Green Mountains	13	4	- 9	- 69
Northern Vermont Piedmont	13	7	- 6	- 46
Southern Green Mountains	26	6	- 20	- 77
Southern Vermont Piedmont	21	7	- 14	- 67
Taconic Mountains	11	9	- 2	- 18
Vermont Valley	5	4	- 1	- 20
Totals	115	54	- 61	- 53



DISTRIBUTION IN CURRENT ATLAS

Biophysical Region	% of region species occupies	% of all records for this species found in region
Champlain Valley	47	31
Northeastern Highlands	0	0
Northern Green Mountains	20	12
Northern Vermont Piedmont	20	12
Southern Green Mountains	21	11
Southern Vermont Piedmont	42	15
Taconic Mountains	85	16
Vermont Valley	62	4

current declines may be returning the species to densities closer to those that existed prior to extensive forest clearing in the 1800s (Litvaitis 1993).

Although still relatively common across most of its range, Eastern Towhee is a Species of Greatest Conservation Need in much of the Northeast and a Species of Special Concern in Vermont. It generally responds positively to management or disturbance that promotes development of a shrub layer (Engstrom et al. 1984, Bell and Whitmore 1997) and as a result is not likely to ever disappear entirely from Vermont. There is, however, some

evidence that it is area sensitive (Zuckerberg 2002) and that populations in power-line rights-of-way are not self-sustaining (Wells 2003). More study is probably needed at the northern edge of its range.

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