

Wood Thrush

Hylocichla mustelina



The ethereal song of the Wood Thrush has inspired the admiration of generations of nature observers. It feeds on invertebrates of the forest floor and nests in shrubs or trees, often on low branches. Vermont is near the northern edge of the Wood Thrush's breeding range, which extends from southern Quebec and the Maritime Provinces south to the Gulf Coast and west to the edge of the Great Plains (Roth et al. 1996). A century ago, the Wood Thrush was judged to be uncommon in the state (Perkins and Howe 1901), but suitable habitat increased during the twentieth century as forests replaced abandoned farmlands, and its populations increased. Today, it remains a common resident in many of Vermont's forested areas, but populations have decreased in recent decades.

The Wood Thrush nests in moist deciduous and mixed forests or woodlots that feature moderate shrub density and are rich in decaying leaf litter (Roth et al. 1996). It avoids predominantly coniferous forests, such as those found at higher elevations in Vermont. Nests are placed 3 to 4 meters (9 to 13 feet) off the ground (Roth et al. 1996), and tend to be higher as the breeding season progresses (B. Stutchbury pers. comm.). Based on observations by current and previous Vermont atlasers, egg-laying peaks in early to mid-June and nestlings are most common from mid to late June (Kibbe 1985). A few individuals attempt to nest as late as August.

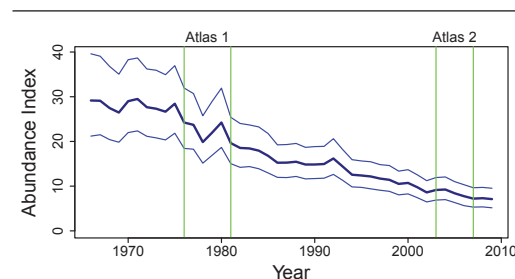
During the second atlas, the Wood Thrush was widely distributed across all regions of Vermont, with CO, PR, or PO records in over 90 percent of priority blocks. In fact, atlasers failed to find evidence of breeding in only 3 priority blocks in the southern half of the state. Evidence of breeding was less frequently encountered in the more coniferous Northern Vermont Piedmont and adjacent Northeastern Highlands.

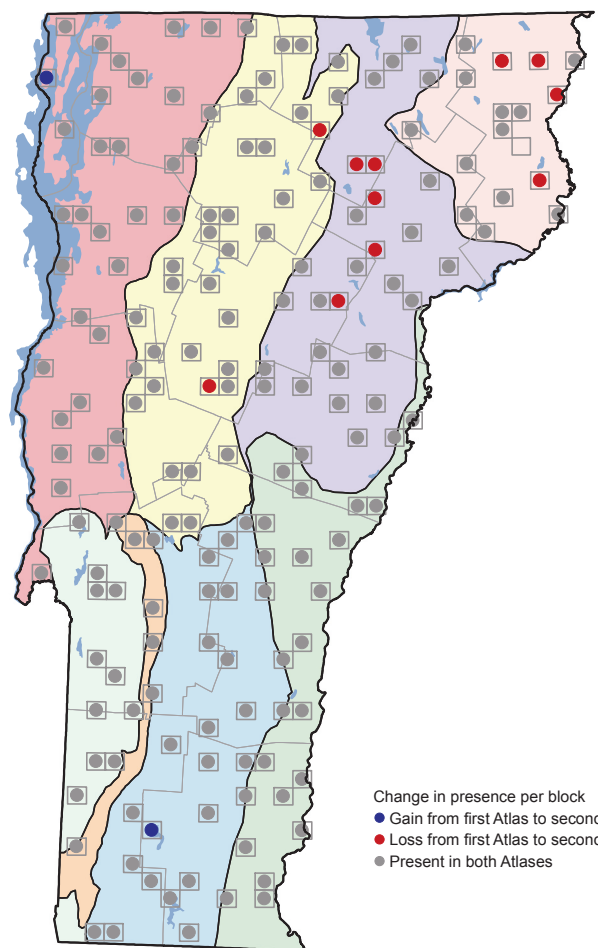
Despite its continued widespread distribution, Wood Thrush occurred in fewer blocks during the second atlas in northeastern Vermont. The second atlas in New York found a similar reduction in blocks with breeding records; losses were concentrated in the Adirondack region

not far from Vermont (Hames and Lowe 2008). Two separate monitoring programs also indicated a decrease in Vermont's Wood Thrush populations: the Breeding Bird Survey reported an average population decline of 3.6 percent per year from 1982 to 2007 (Sauer et al. 2011), and the Forest Bird Monitoring Program reported a striking decline of 6 percent per year from 1989 to 2006 (Rimmer et al. 2007). Collectively, these findings provide strong evidence that the declines indicated by the second atlas are real and not an artifact of differences in effort.

Why the Wood Thrush has declined in Vermont is uncertain, but likely reflects factors that have affected the species across its range. Several plausible explanations have been proposed for population reductions, more than one of which may be operating simultaneously. First, the natural aging of forests may render them less suitable to Wood Thrush (Holmes and Sherry 2001). Second, a loss of calcium-rich invertebrate prey due to acid rain may reduce successful breeding (Hames et al. 2006). Third, habitat fragmentation may lead to increased nest predation and parasitism, though these effects appear more severe in the Midwest than in the East (Roth et al. 1996, Driscoll and Donovan 2004). Finally, the loss of tropical forests on

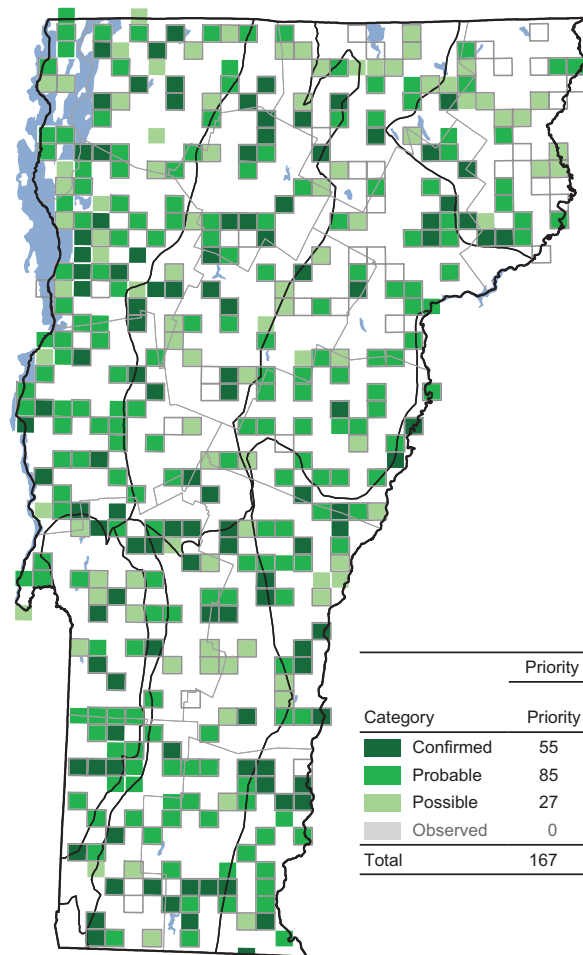
RELATIVE ABUNDANCE OVER TIME





CHANGE IN DISTRIBUTION BETWEEN ATLASES

Biophysical Region	First Atlas	Second Atlas	Change	% Change
Champlain Valley	32	33	+ 1	+ 3
Northeastern Highlands	16	12	- 4	- 25
Northern Green Mountains	35	33	- 2	- 6
Northern Vermont Piedmont	30	25	- 5	- 17
Southern Green Mountains	26	27	+ 1	+ 4
Southern Vermont Piedmont	21	21	+ 0	+ 0
Taconic Mountains	11	11	+ 0	+ 0
Vermont Valley	5	5	+ 0	+ 0
Totals	176	167	- 9	- 5



Category	Priority Block Count	
	Priority 1	Priority 1 & 2
Confirmed	55	98
Probable	85	166
Possible	27	68
Observed	0	0
Total	167	332

DISTRIBUTION IN CURRENT ATLAS

Biophysical Region	% of region species occupies	% of all records for this species found in region
Champlain Valley	97	21
Northeastern Highlands	70	8
Northern Green Mountains	92	18
Northern Vermont Piedmont	81	16
Southern Green Mountains	96	16
Southern Vermont Piedmont	97	12
Taconic Mountains	100	6
Vermont Valley	100	2

the wintering grounds may reduce adult survival (Roth et al. 1996).

Despite its widespread distribution, Vermont has designated the Wood Thrush a Species of Special Concern because of the compelling evidence of population declines. National and international watch lists, such as that prepared by Partners in Flight, have recognized the Wood Thrush as being of high continental conservation concern (Rich et al. 2004). As with other Nearctic-Neotropical migrants, habitat conservation both within the state and far beyond its borders is necessary to assure

that this bird continues to add its flute-like song to Vermont's woodland chorus.

SCOTT SCHWENK