

Bicknell's Thrush

Catharus bicknelli

Classified as a distinct species from Gray-cheeked Thrush (*Catharus minimus*) in 1995 (AOU 1995), and the subject of intensive range-wide studies for almost twenty years, Bicknell's Thrush has emerged from ornithological obscurity since Vermont's first atlas. However, its true population status remains surprisingly unresolved, in Vermont and throughout its geographically restricted and highly fragmented breeding range. Breeding is patchily distributed from the Catskill and Adirondack mountains of New York, eastward through southern Quebec and the mountains of New England, to the Gaspé Peninsula and Cape Breton Island in Nova Scotia (Rimmer et al. 2001).

Although decidedly scarce overall in Vermont, Bicknell's Thrush can be locally common and vocally conspicuous in high-elevation coniferous forests. The species delivers its nasal, gyrating song and piercing calls from late May through mid-July, especially at dawn and dusk. Birds are far more often heard than seen, but vocalizing individuals occasionally use prominent perches, often on treetops or dead snags. The mountaintop chorus can be spectacular on June evenings, with multiple males singing and calling, some undertaking flight songs in large circles 25 to 75 meters (82 to 246 feet) above the forest.

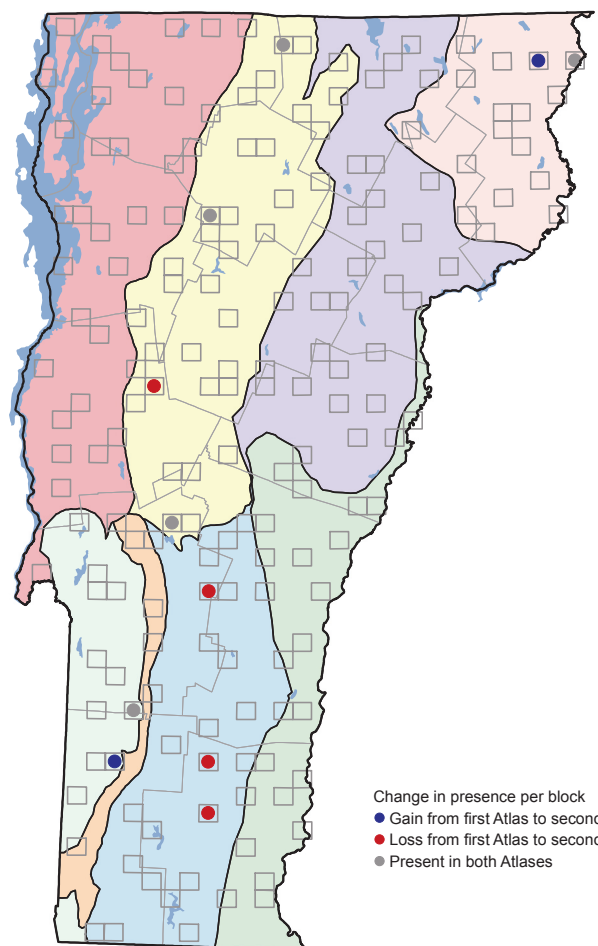
Bicknell's Thrush is a habitat specialist throughout its breeding range, occupying montane forests dominated by balsam fir, with lesser amounts of spruce, white birch, and mountain ash (Rimmer et al. 2001). Although its elevational limits vary with latitude (Lambert et al. 2005), Bicknell's Thrush generally breeds above 900 meters (2950 feet) elevation in the Green and Taconic mountains of Vermont. Breeding sites are often associated with disturbed areas undergoing vigorous succession, characterized by standing dead conifers and dense regrowth of fir (Wallace 1939, Rimmer et al. 2001). In Canada and Maine, Bicknell's Thrush also occupies regenerating stands of mixed forest following forest fires or industrial clear-cutting (Nixon et al. 2001, Chisholm and Leonard 2008).

The second atlas confirmed the restricted breeding distribution of Bicknell's Thrush in Vermont, but yielded

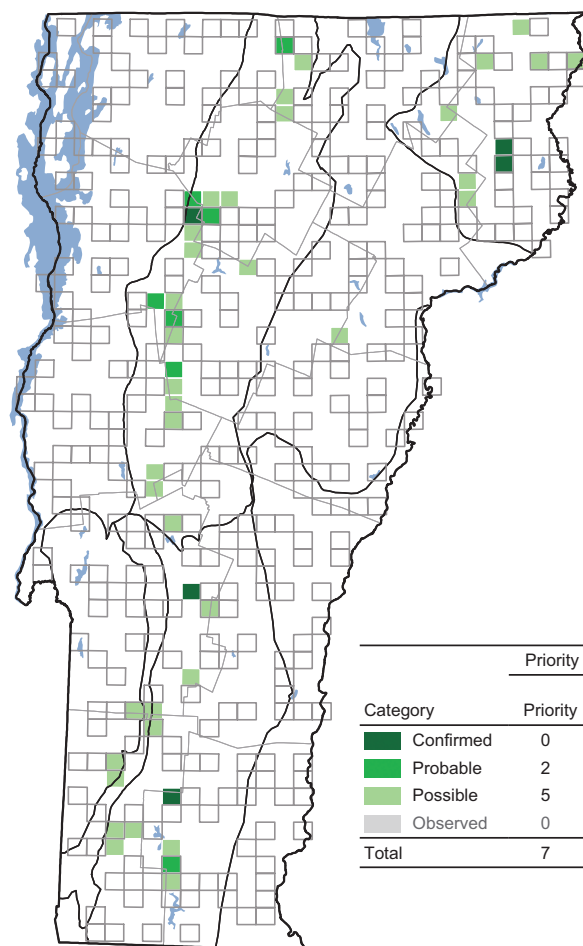


few concrete insights on changes in the species' status. The first atlas recorded Bicknell's Thrush on 18 blocks (9 Priority 1 blocks). The second atlas registered the species on 48 blocks (7 Priority 1, 9 Priority 2), distributed as expected among the four biophysical regions that include Vermont's highest mountains. The apparent contradiction of the species' loss from 4 Priority 1 blocks and a 167 percent increase in total records likely reflects differences in observer coverage between the two atlases. Birders' increased attention to Bicknell's Thrush and the launching of Mountain Birdwatch in 2001 (Lloyd and Hart 2009) undoubtedly increased survey effort in high-elevation habitats during the second atlas.

The breeding distribution of Bicknell's Thrush appears to have changed little during the last quarter-century, in Vermont or range-wide. New York showed a 46 percent increase in the number of atlas blocks reporting the species, but an overall stable distribution (Rimmer 2008). Presence-absence surveys in Vermont during the early 1990s documented Bicknell's Thrush on 112 peaks, including all 30 with known historic (pre-1992) records (Atwood et al. 1996). Programs designed to monitor abundance, however, generally indicate declining populations, especially in core and northern parts of the breeding range. The species showed a stable population trend across its U.S. range from 2001 to 2009, including in Vermont (IBTCG 2010), but populations in the White Mountain National Forest significantly declined at an annual rate of 7 percent from 1993 to 2003 (King et al. 2008, Lambert et al. 2008). Canadian populations are plummeting, with Breeding Bird Survey data from 16 routes showing a 9 percent annual decline, and targeted surveys in New



Change in presence per block
 ● Gain from first Atlas to second
 ● Loss from first Atlas to second
 ● Present in both Atlases



Category	Priority Block Count	
	Priority 1	Priority 1 & 2
Confirmed	0	2
Probable	2	4
Possible	5	10
Observed	0	0
Total	7	16

CHANGE IN DISTRIBUTION BETWEEN ATLASES

Biophysical Region	First Atlas	Second Atlas	Change	% Change
Champlain Valley	0	0	+ 0	+ 0
Northeastern Highlands	1	2	+ 1	+ 100
Northern Green Mountains	4	3	- 1	- 25
Northern Vermont Piedmont	0	0	+ 0	+ 0
Southern Green Mountains	3	0	- 3	- 100
Southern Vermont Piedmont	0	0	+ 0	+ 0
Taconic Mountains	1	2	+ 1	+ 100
Vermont Valley	0	0	+ 0	+ 0
Totals	9	7	- 2	- 22

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	8	19
Northern Green Mountains	10	44
Northern Vermont Piedmont	0	0
Southern Green Mountains	7	25
Southern Vermont Piedmont	0	0
Taconic Mountains	9	13
Vermont Valley	0	0

Brunswick and Nova Scotia yielding annual declines of 17 percent and 19 percent, respectively (IBTCG 2010).

Despite its apparent stability in Vermont, Bicknell's Thrush is one of the most rare and vulnerable songbirds in North America. Its global population is estimated at 126,000 or fewer individuals (IBTCG 2010), and the species faces an array of threats throughout its migratory range. Climate change alone is projected to severely reduce the extent of montane forests in the United States (Rodenhouse et al. 2008), while winter habitat loss and

degradation continue unchecked in the Greater Antilles. A formal conservation action plan (IBTCG 2010) offers the best hope to secure the future of this at-risk mountaintop denizen.

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