

Swainson's Thrush

Catharus ustalatus

A pre-dawn song or an evening vesper as darkness falls may be the only hint that a Swainson's Thrush is about. Although the bird itself is secretive, its song, spiraling upward, rich and flute-like, is one of the characteristic sounds of Vermont's montane and lowland boreal forests. The Swainson's Thrush breeds wherever spruce and fir comb the horizon, ranging from the south slope of Alaska's Brooks Range to central Labrador, across northern New England and southward in the mountains to Virginia. In the West, the Swainson's Thrush breeds in the northern Great Lakes states, southward through the Rocky Mountains into Arizona and along the Pacific Coast to central California (Mack and Yong 2000).

In Vermont, the Swainson's Thrush prefers mixed-age classes of hardwoods and conifers with spruce and fir in the understory (Mack and Yong 2000, K. McFarland pers. comm.). It inhabits a range of elevations from the lowland boreal forests of the Northeastern Highlands to the high-elevation, fir-dominated forests of the Green Mountains, generally selecting more mature (Noon 1981) and, on average, higher-elevation forests than the Hermit Thrush (Peterson 1988), although the two species do overlap at lower elevations (Kibbe 1985). Swainson's Thrush does not nest in the more stunted fir trees (less than 2 meters [6.6 feet] tall) near the krummholz, but inhabits dense montane spruce-fir forest just below (C. Rimmer pers. comm.). Of 25 nests located in montane forests, 18 were placed in balsam fir (VCE unpubl. data.).

There were 15 records of confirmed breeding during the second atlas. Two nests with eggs were found: 12 June and 9 July. Three nests with young were found between 30 June and 28 July. Fledged young were observed in 10 blocks between 16 June and 24 July. In a separate study conducted in Vermont's montane forests, Swainson's Thrush nests were monitored from 1995 to 2005. Nests were initiated from 4 June to 9 July (N = 34). Eggs hatched from 20 June to 17 July (N = 20), and fledging was recorded from 2 July to 24 July (N = 14; VCE unpubl. data.).

The first atlas recorded the Swainson's Thrush in 64 Priority 1 blocks (36 percent), of which 19 yielded CO re-

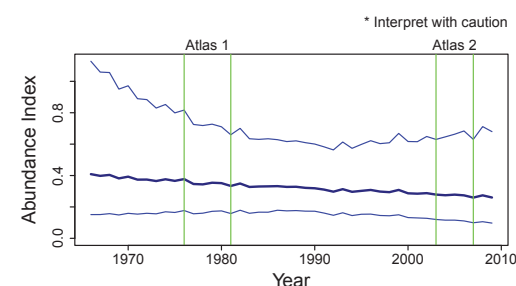


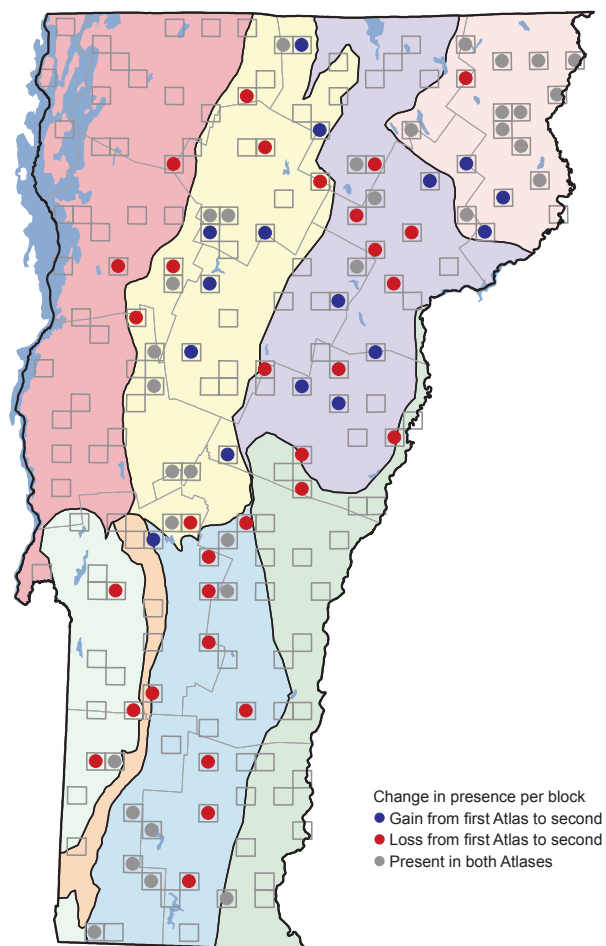
cords. The second atlas reported only 49 Priority 1 blocks (15 CO). Swainson's Thrush was absent from both the Vermont Valley and the Champlain Valley during the second atlas and experienced losses in all other regions of the state except the Northeastern Highlands and the Northern Green Mountains, where it increased 15 percent and 7 percent, respectively. Overall, occupied blocks declined by 23 percent statewide.

Swainson's Thrush showed a similar decline in New York's second atlas, as the number of occupied blocks dropped 16 percent (McGowan and Corwin 2008). The species gained in Pennsylvania's second atlas, however, increasing by 130 percent (Wilson et al. 2012). The second Ontario atlas reported a 3.5 percent increase, and estimated a provincial population of 8 million (Friesen 2007). Between 1993 and 2000, the New Hampshire White Mountain National Forest Point Count Survey showed a 1.1 percent annual increase in the number of Swainson's Thrushes (King et al. 2007). Conversely, Vermont's Forest Bird Monitoring Program revealed a 4 percent annual loss from 1989 to 2006 (Rimmer et al. 2007).

At Hubbard Brook Experimental Station in New

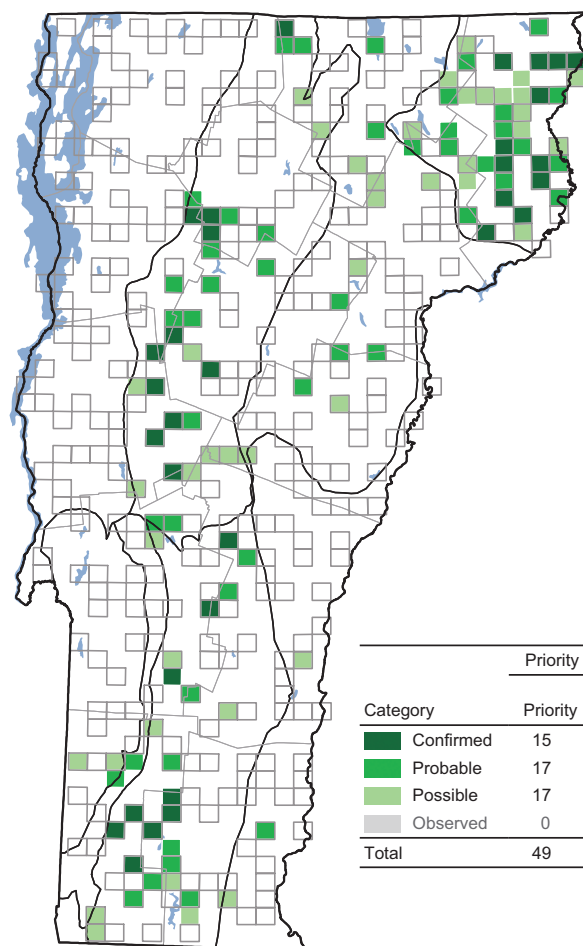
RELATIVE ABUNDANCE OVER TIME





CHANGE IN DISTRIBUTION BETWEEN ATLASES

Biophysical Region	First Atlas	Second Atlas	Change	% Change
Champlain Valley	2	0	-2	-100
Northeastern Highlands	13	15	+2	+15
Northern Green Mountains	15	16	+1	+7
Northern Vermont Piedmont	12	8	-4	-33
Southern Green Mountains	16	8	-8	-50
Southern Vermont Piedmont	2	1	-1	-50
Taconic Mountains	4	1	-3	-75
Vermont Valley	0	0	+0	+0
Totals	64	49	-15	-23



Category	Priority Block Count	
	Priority 1	Priority 1 & 2
Confirmed	15	29
Probable	17	40
Possible	17	32
Observed	0	0
Total	49	101

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	83	31
Northern Green Mountains	47	31
Northern Vermont Piedmont	18	12
Southern Green Mountains	37	21
Southern Vermont Piedmont	10	4
Taconic Mountains	9	2
Vermont Valley	0	0

Hampshire's White Mountains, local conditions—not adverse changes on the wintering grounds—were responsible for declines in the Swainson's Thrush population between 1969 and 1988 (Holmes and Sherry 1988). Currently, the species appears not to be limited by habitat availability in Vermont. Climate-change models predict an upslope migration of temperature-sensitive fir forests, however, which could push the upper montane populations into competition with Bicknell's Thrushes (Rodenhous et al. 2008). Global warming could also impact cone crop cycles (K. McFarland pers. comm.). Alternating

cone crops dictate predator populations, which in turn have a dramatic effect on reproductive success of open-cup nesting species such as Swainson's Thrush (VCE unpubl. data), which already experiences a high rate of egg and nestling predation (Mack and Yong 2000).

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