

Philadelphia Vireo

Vireo philadelphicus



Few breeding songbirds in Vermont are as enigmatic as the Philadelphia Vireo. The species' obscure status stems both from its statewide rarity and its extreme vocal similarity to the congeneric, far more abundant Red-eyed Vireo. The northern limit of the Red-eyed Vireo's range overlaps the southern limit of the Philadelphia Vireo's range, although Vermont comprises a very small portion of the latter's total breeding distribution. This most northerly breeding vireo is a bird of the boreal forest, breeding from northeastern British Columbia across Canada to New Brunswick, brushing the extreme northern United States from Minnesota to Maine. Disjunct populations occur in North Dakota and in New York's Adirondack Mountains (Moskoff and Robinson 1996).

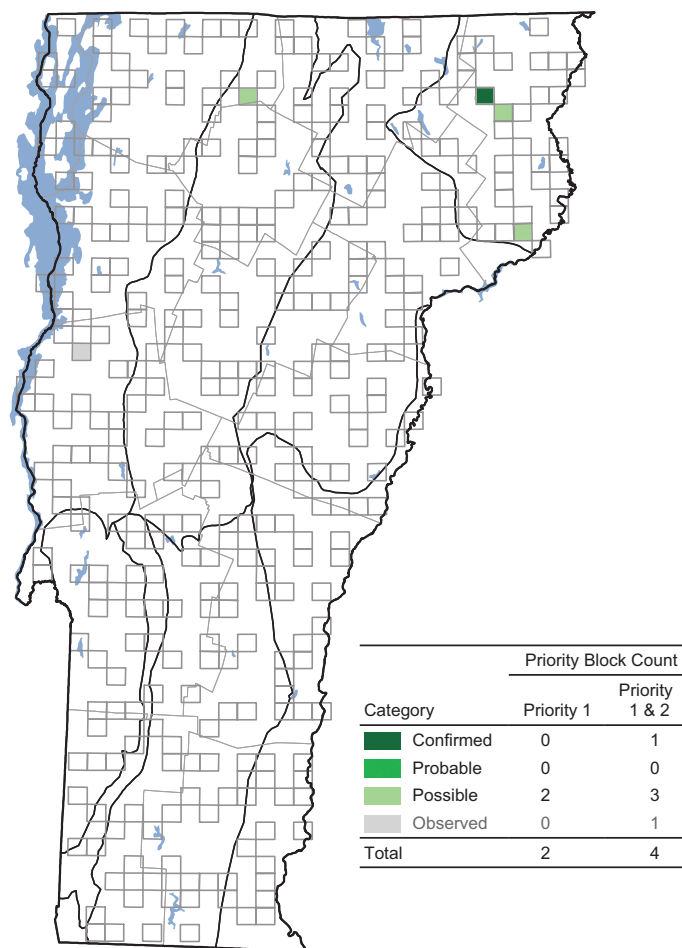
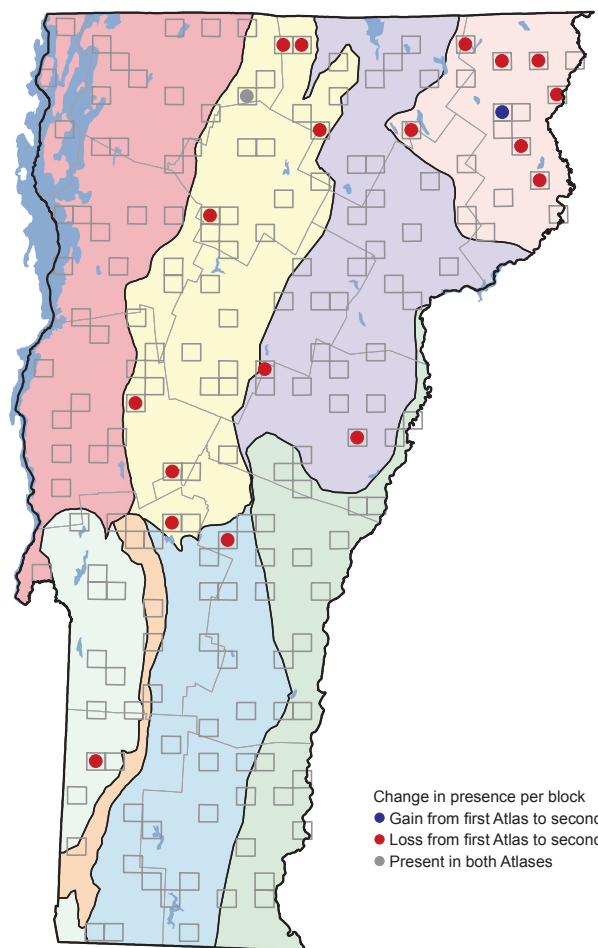
Throughout its breeding range, the Philadelphia Vireo exhibits a preference for early- and mid-successional deciduous forest, typically dominated by aspen, birch, alder, and ash. As forests matured over a span of thirty years, Philadelphia Vireos disappeared from study sites in New Hampshire's White Mountains (Holmes and Sherry 2001). The species' absence from late-successional forests suggests that disturbance may be important in maintaining suitable habitat and that long-term site persistence is unlikely. In Vermont, most breeding records are in regenerating hardwood forest following selective or clear-cut logging operations (Kibbe 1985); the species also occupies areas recovering after fires (Moskoff and Robinson 1996). Its distribution and abundance in Vermont may have always fluctuated and been patchy, following natural and human-caused changes in the landscape.

Neither the historic nor the current status of Philadelphia Vireo in Vermont is well documented. Never considered common in the state, the species' inconspicuous behavior and the difficulty of distinguishing it from Red-eyed Vireo have doubtless led to its being under-reported. However, Philadelphia Vireo appears to have virtually disappeared from Vermont as a breeding species in the past twenty-five years. While the first atlas recorded the species in 19 Priority 1 blocks from five biophysical regions, records plummeted during the second atlas; Phila-

delphia Vireo was reported in only 2 Priority 1 blocks and 3 Priority 2 blocks, all from northern Vermont. The single breeding confirmation was of an adult feeding a fledgling in Brighton State Park on 19 August.

The apparent decline of Philadelphia Vireo in Vermont defies straightforward explanation. Recent atlas data in both New York and Ontario indicate pronounced increases in the species' distribution; possible explanations include maturation of abandoned farmland, recovery of forests following logging and fires, improved survey coverage, and increased familiarity with the species' song (James 2007, McGowan 2008).

The actual status of Philadelphia Vireo in Vermont is obscured by the difficulty in explaining results of the two atlases. The species' striking drop in records over twenty-five years likely reflects a true statewide decline. Diminished effort in the second compared to the first atlas seems an improbable cause, as several observers in the second atlas conducted focused, albeit limited, searches. Misidentification of song cannot be ruled out, but this seems unlikely to account for the magnitude of the species' decline in Vermont. It is noteworthy that the New York and Ontario atlases showed increases based on all records combined, but no change and a dramatic decline, respectively, in the number of confirmations, for which birds had to be identified by sight. Landscape-level changes in habitat suitability offer a more plausible explanation. As forests have matured towards late-successional stages, whether from reduced forestry operations, natural succession following farmland abandonment, or recovery from pest outbreaks, habitat conditions have likely become less favorable for Philadelphia Vireo. If the apparent population increases elsewhere in its breeding range



CHANGE IN DISTRIBUTION BETWEEN ATLASES

Biophysical Region	First Atlas	Second Atlas	Change	% Change
Champlain Valley	0	0	+ 0	+ 0
Northeastern Highlands	7	1	- 6	- 86
Northern Green Mountains	8	1	- 7	- 88
Northern Vermont Piedmont	2	0	- 2	- 100
Southern Green Mountains	1	0	- 1	- 100
Southern Vermont Piedmont	0	0	+ 0	+ 0
Taconic Mountains	1	0	- 1	- 100
Vermont Valley	0	0	+ 0	+ 0
Totals	19	2	- 17	- 89

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	75
Northern Green Mountains	1	25
Northern Vermont Piedmont	0	0
Southern Green Mountains	0	0
Southern Vermont Piedmont	0	0
Taconic Mountains	0	0
Vermont Valley	0	0

are real, the species' decline in Vermont may not warrant serious conservation concern. Explicitly targeted surveys are needed to elucidate the status of Philadelphia Vireo; without such studies, the species is destined to remain a little-known member of Vermont's breeding avifauna.

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