

Least Flycatcher

Empidonax minimus

This small insectivore has the unusual distinction of breeding in tight aggregates within its woodland habitat (Tarof et al. 2005, Bourque and Desrochers 2006, Fletcher 2007). In fact, proximity to other Least Flycatchers seems to be as important for breeding as habitat quality (Sherry and Holmes 1985, Tarof and Ratcliffe 2004). The Least Flycatcher breeds in a broad swath extending across the forested regions of Canada from Nova Scotia into eastern British Columbia, south into the northern United States and even farther south along the ridges of the Appalachian Range. Cutting (1884) stated that the Least Flycatcher was the most abundant flycatcher in Vermont. His assertion seems plausible in view of the scattered woodlots and orchards in the landscape of Vermont at that time. This species winters in Central America (AOU 1998).

The Least Flycatcher nests in contiguous open woodlands with moderately open understory, in restricted stands of trees surrounded by farmland, and in edge situations (Tarof and Briskie 2008). It is usually found at elevations below 610 meters (2000 feet; Forbush 1927, Holmes and Sherry 1994). In the second Vermont atlas, nest building was reported from 13 May to 8 July (N = 27). Seven nests with eggs were noted from 30 May to 2 July, and eight nests with nestlings were recorded on dates ranging from 13 June to 3 July. Fledglings were found from 23 June to 7 August (N = 34). This species is sufficiently conspicuous, through the uniqueness and duration of its vocalizations, that its presence should be readily revealed during an atlas survey.

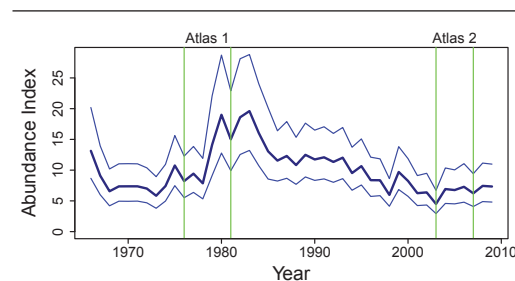
The Least Flycatcher is a common species in Vermont and was distributed evenly across the state in both atlases. During the second atlas, only the Northeastern Highlands and the Vermont Valley had block occupancy below 90 percent; occupancy in the remaining six biophysical regions ranged from 91 to 100 percent. There appears to have been no notable change in distribution or proportion of occupied blocks between the first and second Vermont atlases.

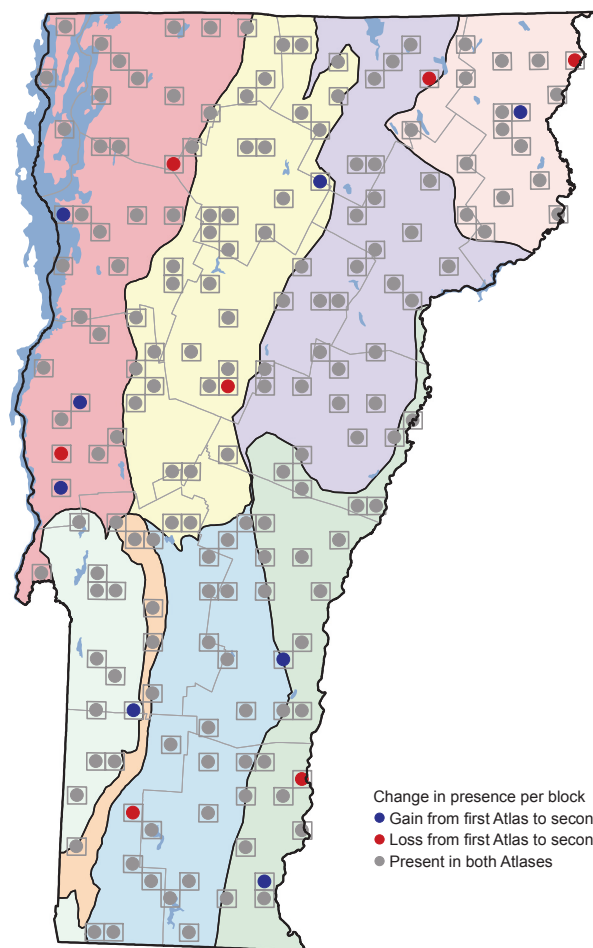
Breeding Bird Survey data show a significant decrease



of 1.8 percent per year for the Least Flycatcher in Vermont from 1966 to 2007. During the shorter period from 1982 to 2007, following the first Vermont atlas, Breeding Bird Survey data showed a steep and significant decline of 4.0 percent per year in the state, part of a significant 2.5 percent per year decline in the Atlantic Northern Forest (Bird Conservation Region 14; Sauer et al. 2011). In the Vermont Forest Bird Monitoring Project, a decline in Least Flycatcher abundance was not significant based on standardized surveys of 10 sites in unmanaged forests from 1989 to 2006 (Rimmer et al. 2007). Breeding Bird Survey data, however, show a significant 3.0 percent annual decline during the same time period (Sauer et al. 2011). In a study from 1969 to 1998 at Hubbard Brook in New Hampshire, Holmes and Sherry (2001) found a decrease of 17.3 percent per year, leading to extirpation of the species in their study area. Dunn et al. (2001) found significant decreases from 1971 to 1992 in Quebec. Changes were small in second atlases in surrounding states, but were nega-

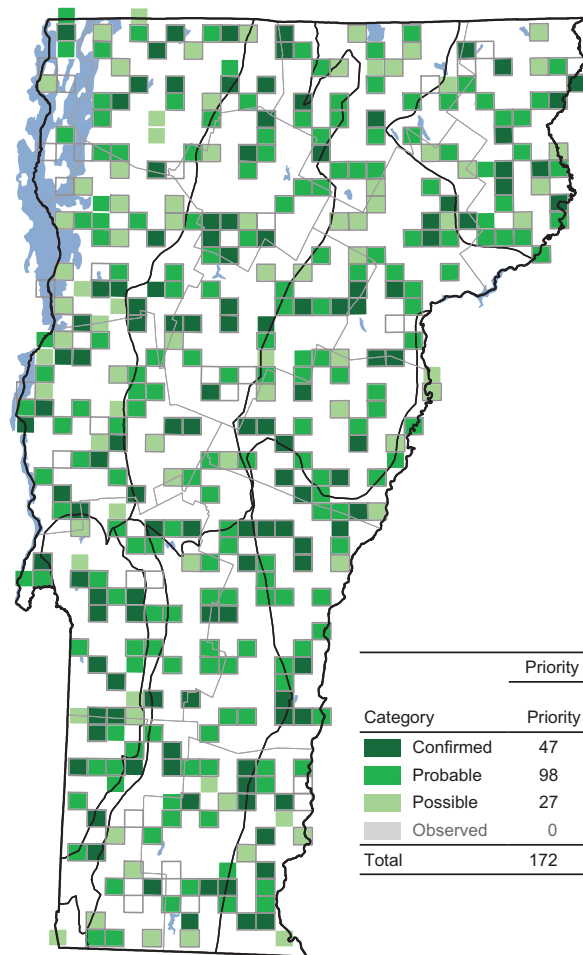
RELATIVE ABUNDANCE OVER TIME





CHANGE IN DISTRIBUTION BETWEEN ATLASES

Biophysical Region	First Atlas	Second Atlas	Change	% Change
Champlain Valley	30	31	+ 1	+ 3
Northeastern Highlands	16	16	+ 0	+ 0
Northern Green Mountains	34	34	+ 0	+ 0
Northern Vermont Piedmont	30	29	- 1	- 3
Southern Green Mountains	27	26	- 1	- 4
Southern Vermont Piedmont	19	20	+ 1	+ 5
Taconic Mountains	10	11	+ 1	+ 10
Vermont Valley	5	5	+ 0	+ 0
Totals	171	172	+ 1	+ 1



Category	Priority Block Count	
	Priority 1	Priority 1 & 2
Confirmed	47	112
Probable	98	166
Possible	27	59
Observed	0	0
Total	172	337

DISTRIBUTION IN CURRENT ATLAS

Biophysical Region	% of region species occupies	% of all records for this species found in region
Champlain Valley	84	18
Northeastern Highlands	91	10
Northern Green Mountains	93	18
Northern Vermont Piedmont	96	19
Southern Green Mountains	92	15
Southern Vermont Piedmont	95	11
Taconic Mountains	95	6
Vermont Valley	87	2

tive; Maryland showed a 10 percent decline (Ellison 2010), while in New York and Pennsylvania, this flycatcher declined by a modest 4 percent (McGowan and Corwin 2008, Wilson et al. 2012). Ontario showed little overall change in the numbers of blocks with Least Flycatchers.

Although atlas data suggest that Least Flycatcher populations are stable in Vermont, Breeding Bird Survey data, which provide a better indication of population trends for widespread and common species, show a decline since the first atlas. Woodland maturation and disturbance of forest structure by deer browsing are the primary factors

that might have caused declines (Tarof and Briskie 2008). For northern New England, forest maturation is the only explanation supported by extensive study (Holmes and Sherry 2001). As forests continue to mature, further declines can be anticipated. Least Flycatchers should receive continued monitoring and may need future attention from a conservation perspective. Declines are occurring across their range, indicating that there may be threats to populations on the wintering grounds.

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