

Solitary Vireo

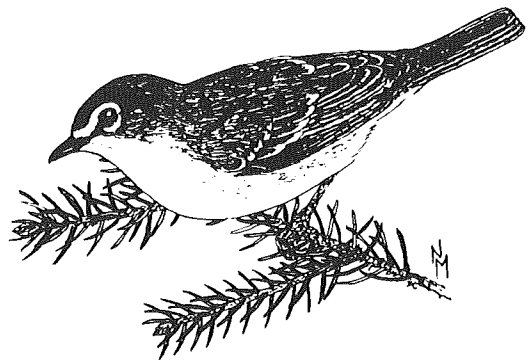
Vireo solitarius

The Solitary Vireo is by far the hardest member of its family to occur in Vermont, regularly arriving during the third week of April and frequently lingering until the third week of October—exceptionally, until November 11. The species winters from the southeastern U.S. south to El Salvador. It breeds across most of Canada and the northern U.S., in the West south to northern Mexico, and in the East to northern Georgia. Although widely distributed in the North, the species is much more localized in the southern portions of its breeding range.

Throughout its breeding range the Solitary Vireo displays a marked preference for coniferous and mixed coniferous-deciduous woods, a habitat preference indicated by the species' Atlas Project priority block distribution in the mountainous and highland portions of the state. Clearing for agriculture and urban development in the lowlands has removed much suitable breeding habitat. Throughout most of the remainder of the state, however, Solitary Vireos may be readily found, albeit (true to their name) usually in low densities. The four pairs per 40.5 ha (100 a) found in deciduous-coniferous second-growth northwoods (Carpenter 1977) are probably representative of densities in the majority of the state.

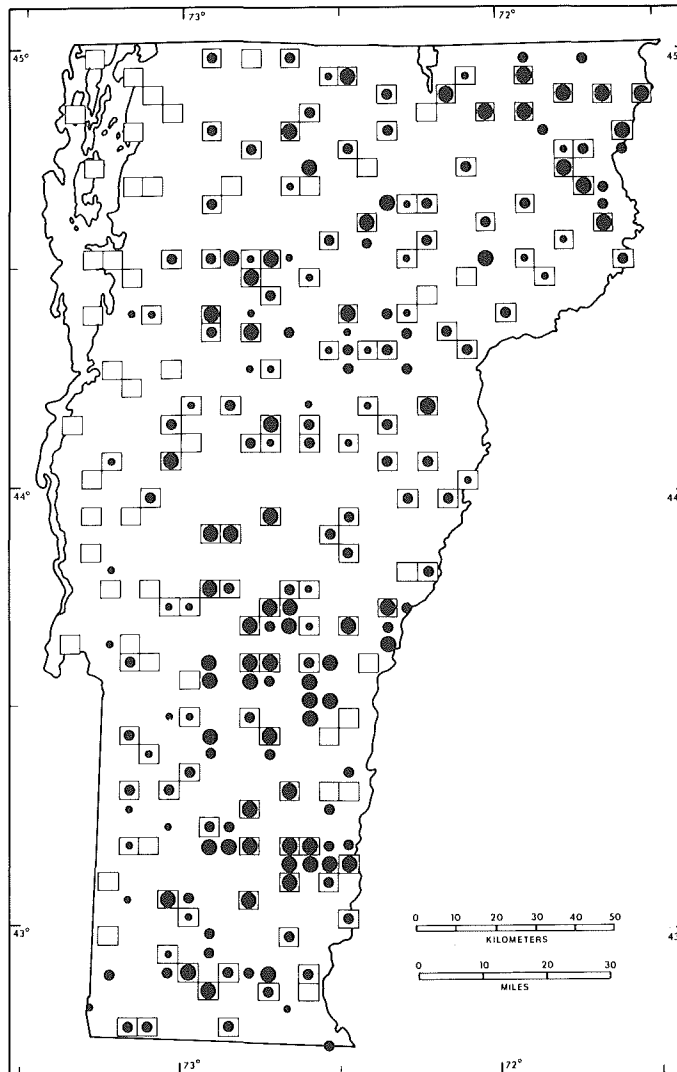
Sabo (1980) found that Solitary Vireos occupied 300 m (984 ft) long linear territories along streams in his subalpine study area in the White Mountains of New Hampshire. He also found that territory size was a relatively large 5 ha (12.5 a). Bent (1950) also found territory size to be large, particularly relative to that of the Red-eyed Vireo, with which the Solitary may share territories. Solitary Vireos are territorial even in the wintering grounds, and are seldom seen in conspecific aggregation even during migration. They are, however, common migrants in Vermont—among the vireos, second only to the Red-eyed.

Nesting by the Solitary probably com-



mences in May, although all four available Vermont records of nest building are from June 1 to June 19. The pair shares in nest building, although the female does most of the actual construction. The nest, a cup suspended (like most vireo nests) in a fork of a horizontal branch, is generally located midway up a conifer, 1.2–3.7 m (4–12 ft) high—rarely, as high as 12.2 m (40 ft). Deciduous trees are occasionally also used. The 3 to 5 (usually 4) brown-speckled, creamy white eggs may be laid from mid May through June. Vermont egg dates (six records) range from May 22 to July 2. The eggs are incubated by both parents for 11 to 12 days (Bull 1974). Both parents may call or sing while on the nest. The song is slower and sweeter than the Red-eyed Vireo's. Incubating birds are exceptionally tame and may even be fed by hand or touched while on the nest (Bent 1950). The nestling period may be 12 to 14 days, according to data analyzed at the North American Nest Record Program at the Cornell Laboratory of Ornithology. Confirmation of breeding is most easily achieved during the nestling period; 60% of all Atlas Project confirmations were of adults feeding young. Age to independence is unknown. Bent (1950) cited observations of young accompanying the adults as they built the nest for a second clutch. Fledglings have been recorded in Vermont as late as July 30.

Although second broods are apparently common at the southern limits of the species' range, the frequency with which they occur in the northern area of the range is



No. of priority blocks in which recorded

TOTAL 134 (75%)
 Possible breeding: 31 (23% of total)
 Probable breeding: 59 (44% of total)
 Confirmed breeding: 44 (33% of total)

Physiographic regions in which recorded

	no. of priority blocks	% of region's priority blocks	% of species' total priority blocks
Champlain Lowlands	7	22	5
Green Mountains	52	96	39
North Central	16	84	12
Northeast Highlands	16	100	12
East Central	18	94	13
Taconic Mountains	8	50	6
Eastern Foothills	17	70	13

unknown. Late egg and departure dates from Vermont imply that second broods are likely, although this is as yet unproven.

Around the turn of the century, when agriculture was still in its heyday, the Solitary Vireo was considered a rare to uncommon summer resident in Vermont (Perkins and Howe 1901; Allen 1909). Since that time, reforestation of abandoned farmland has proceeded at an accelerated rate, and the Solitary Vireo can be found breeding wherever stands of relatively mature white pines or other conifers are prevalent. The species still appears to be most common in boreal habitats, however, and was found in low

numbers in the Champlain Lowlands, which has little suitable coniferous habitat. The Atlas Project established the species' nesting status in Vermont, which had previously been considered "uncertain" (Spear 1976).

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