

Blue-winged Warbler

Vermivora cyanoptera



The Blue-winged Warbler is one of several species of indigenous birds of eastern North America that benefited from the clearing of the primeval forests. Originally restricted to the Ozark Mountains of Arkansas and the savannahs of Tennessee and Kentucky, the species spread northward and eastward when the forests fell. Then, in the late 1800s, the Blue-winged Warbler, which prefers the shrub-filled early stages of plant succession, began colonizing abandoned agricultural land (Gill et al. 2001). By the mid-1900s, Blue-winged Warblers had invaded central New York. Within two decades they were found in western Vermont, where they had been little more than a rare vagrant (Clark 1985). The Blue-winged Warbler now breeds from northern Arkansas and Alabama northward into southern Ontario and Quebec and eastward into Maine (Gill et al. 2001). It hybridizes with the Golden-winged Warbler producing recognizable fertile hybrids: Brewster's Warbler and the rarer Lawrence's Warbler.

The Blue-winged Warbler returns in early May to Vermont, where it nests on the ground in old fields with dense, shrubby growth, and in wet brushy areas, including alder swamps. Incubation takes 11 days and the young leave the nest 10 days after hatching. Two nests with young were found during the atlas, on 12 and 17 June. Fledglings were reported in 4 blocks between 2 and 6 July. Males sing from elevated perches throughout the day and are relatively easy to find early in the nesting season. Though the song is distinctive, visual confirmation of the species is important because the hybrids' songs include characteristics of either or both parents. Hybrids are less vigorous in their displays than Blue-winged Warblers are, and cease singing earlier in the season (Confer and Tupper 2000).

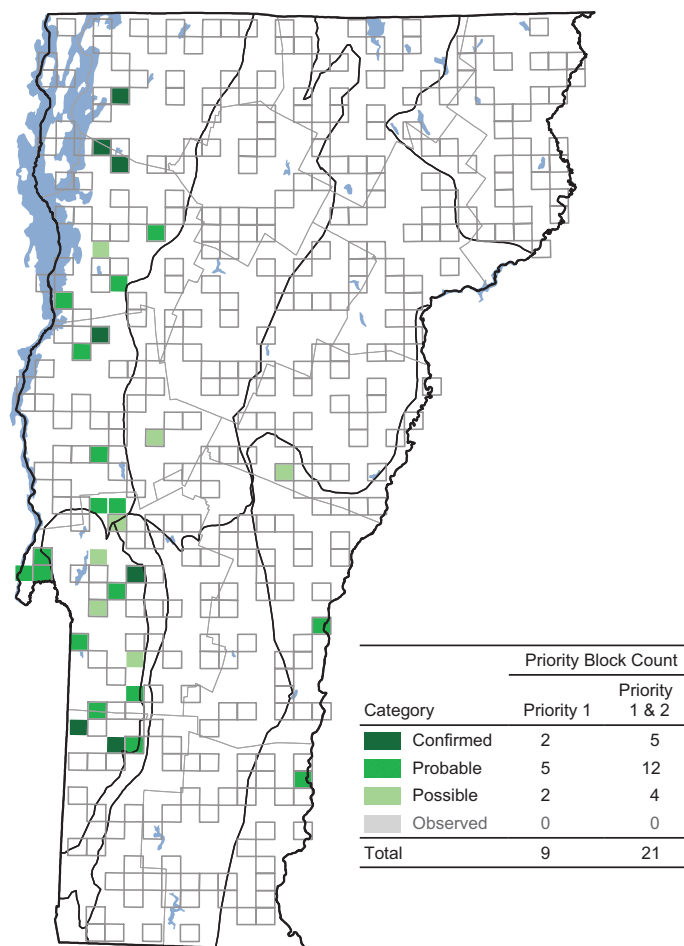
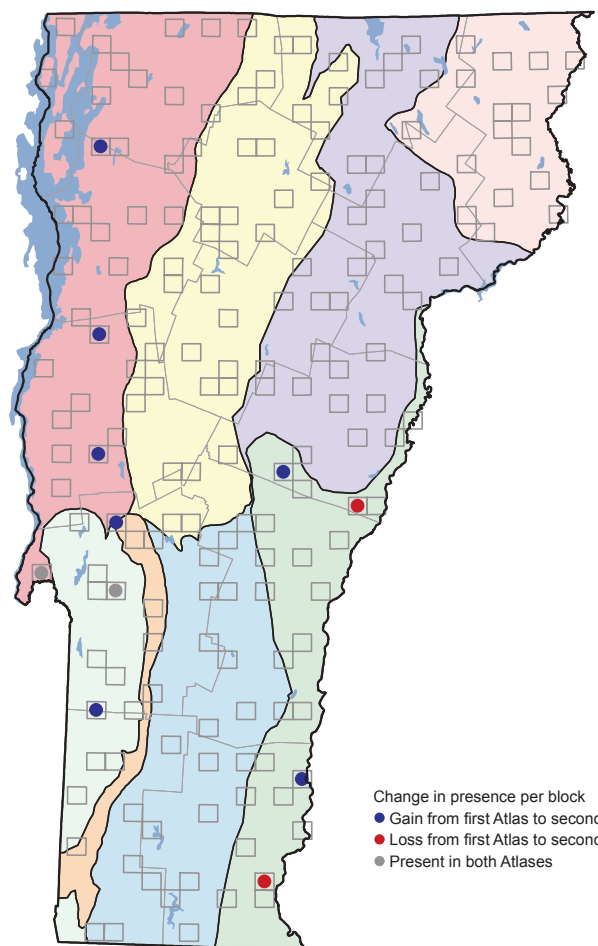
Although Vermont is near the eastern edge of the species' range expansion, Blue-winged Warblers may appear wherever there is early farmland succession; they have yet to be reported in the Champlain islands, however. During the first atlas, 3 of the 4 records for the Blue-winged Warbler were from the lower elevations of the Champlain and

Connecticut valleys; those numbers rose to 7 of 10 Priority 1 blocks during the second atlas. A shrubland denizen, this bird avoids the high, unbroken woodlands that cover much of the rest of the state. A record on 23 June 2007 from the Northeastern Highlands may represent a bird that overshot the breeding grounds.

Though the Blue-winged Warbler still occupies few blocks in Vermont, it more than doubled its rate of occurrence during the second atlas. Data from other atlases indicate that the distribution of Blue-winged Warbler has shifted since the early 1980s. In New York, block occupancy increased by 17 percent (1867 to 2189 blocks), mostly along the eastern end of Lake Ontario into the St. Lawrence Valley (Confer 2008). Pennsylvania's atlas reported a decrease of 4 percent (from 1403 to 1346 blocks; Wilson et al. 2012), and Maryland found a 29 percent decline (133 to 94 blocks; Ellison 2010). In Ontario, where the species became a well-established breeder during the past sixty years, the atlas revealed an increase of 74 percent with substantial expansion into the northeastern portion of the province (Vallender 2007).

Despite an increase in its occurrence in parts of the East, the Blue-winged Warbler is a Species of Special Concern in Vermont because of its small population and diminishing habitat. Any species that depends upon abandoned farmland will eventually find its habitat in short supply if forest succession continues. The loss of forest on Central American wintering grounds (Finch 1991) presents an additional challenge. The Blue-winged Warbler may require habitat manipulation in the future to remain part of Vermont's breeding avifauna. It is among the ten most abundant species in northeastern power-line rights-of-way that are maintained in an early successional stage (Confer and Pascoe 2003).

DOUGLAS P. KIBBE



CHANGE IN DISTRIBUTION BETWEEN ATLASES

Biophysical Region	First Atlas	Second Atlas	Change	% Change
Champlain Valley	1	4	+ 3	+ 300
Northeastern Highlands	0	0	+ 0	+ 0
Northern Green Mountains	0	0	+ 0	+ 0
Northern Vermont Piedmont	0	0	+ 0	+ 0
Southern Green Mountains	0	0	+ 0	+ 0
Southern Vermont Piedmont	2	2	+ 0	+ 0
Taconic Mountains	1	2	+ 1	+ 100
Vermont Valley	0	1	+ 1	+ 100
Totals	4	9	+ 5	+ 125

DISTRIBUTION IN CURRENT ATLAS

Biophysical Region	% of region species occupies	% of all records for this species found in region
Champlain Valley	13	48
Northeastern Highlands	0	0
Northern Green Mountains	1	5
Northern Vermont Piedmont	0	0
Southern Green Mountains	0	0
Southern Vermont Piedmont	7	14
Taconic Mountains	28	29
Vermont Valley	12	5