Golden-winged Warbler

Vermivora chrysoptera

The Golden-winged Warbler is one of Vermont's rarest warblers, a status it has held for nearly a century (Clark 1985). It is also one of Vermont's most beautiful, with patches of yellow on the wings and crown that emblazon a gray back and white belly. The Golden-winged Warbler underwent a northward range expansion over the past 130 years, colonizing early successional habitats created by farm abandonment. Following this initial increase in both abundance and range, the Golden-winged Warbler declined as forests regenerated. Parasitism by the Brown-headed Cowbird and genetic swamping by the closely related Blue-winged Warbler have also negatively impacted populations (Confer 1992). Small, local populations of Golden-winged Warblers are scattered from southern Ontario southward to northern Georgia and westward to the Mississippi River. The majority of the population resides in the upper Midwest. The species winters in Central America and northern South America, where its forest edge habitat is in jeopardy (Confer 1992).

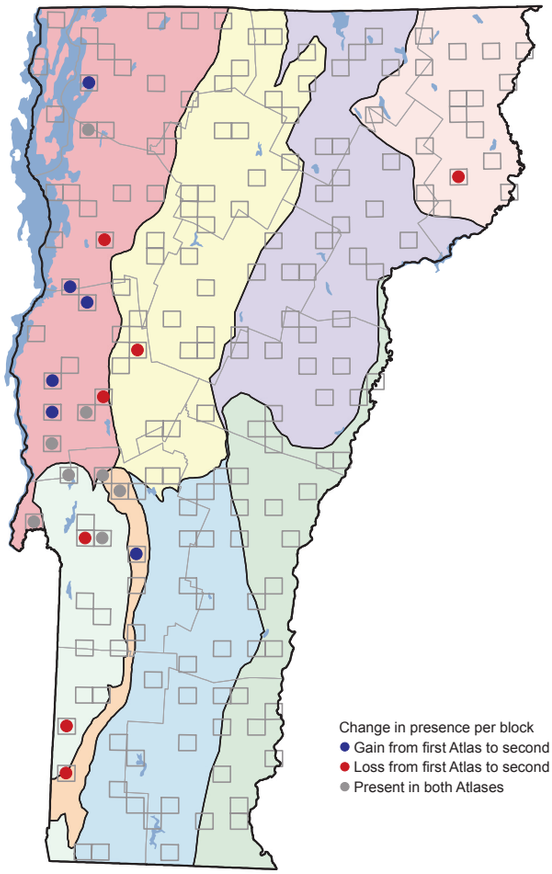
The Golden-winged Warbler returns to Vermont in early to mid-May. Its preferred habitats vary in plant species composition but nearly always include shrubby thickets interspersed with lower shrubs and forbs (such as goldenrod) and scattered tall trees or forest edge. Golden-winged Warblers tend to prefer slightly earlier successional habitat than Blue-winged Warblers (Confer 1992), but the two species sometimes co-occur in Vermont and elsewhere. Nests are concealed in herbaceous clumps on or near the ground. Incubation takes 11 days and the young may leave the nest 10 days later. One nest with eggs was found on 10 June and another with young on 19 June. Fledglings were found in other blocks on 3 and 12 July. Using tape playbacks can increase the probability of detecting this species, and playbacks were occasionally used in the atlas. Golden-winged Warblers may sing Blue-winged Warblers' songs, and vice versa, and consequently atlasers were encouraged to visually confirm the identity of both species.

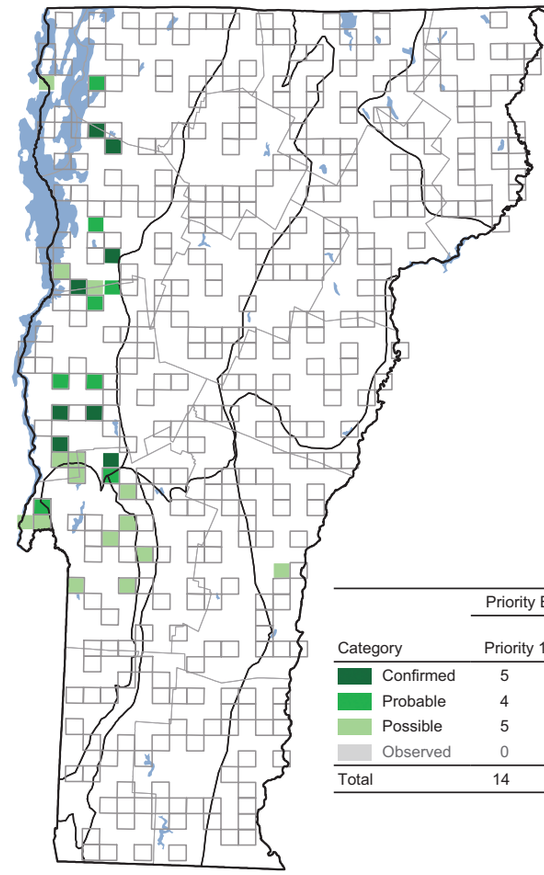
Golden-winged Warblers are now generally restricted to the Champlain Valley and adjacent portions of the Taconic Mountains and Vermont Valley. During the first atlas, they also occurred in several non-priority blocks in the Connecticut River Valley. There have been only two reported sightings in the eastern portion of the state between the first and second atlases: at South Londonderry on 18 July 1995, and in the vicinity of Norwich on 17 May 1997.

Breeding Bird Survey data for Golden-winged Warblers in the Atlantic Northern Forest (Bird Conservation Region 14) showed significant declines of 7.6 percent annually from 1982 to 2007 (Sauer et al. 2011). Decreases in block occupancy of 53, 61, and 65 percent were documented in second atlases in New York, Pennsylvania, and Maryland, respectively (McGowan and Corwin 2008, Wilson et al. 2012, Ellison 2010). In Ontario a decrease in the probability of observation of 65 percent was recorded (Cadman et al. 2007).

A more substantial decrease in occupancy may have occurred than is reflected in the priority blocks; there were 7 records in non-priority blocks during the first Vermont atlas and none in the second atlas. Some of these losses are likely the result of forest maturation. Blue-winged Warblers have been implicated in the displacement of Golden-winged Warblers in other states. Although Blue-winged Warbler occupancy did increase during the second atlas, none of the blocks were sites where Golden-winged Warblers had disappeared.

The Golden-winged Warbler is listed as a Species of Special Concern in Vermont, as threatened in Canada, and as a Species of Greatest Conservation Need in New York and New Hampshire. To date, however, many actions that have been developed to preserve and benefit local populations (such as burning of habitat to retard succession; Confer 1992) appear inappropriate for Vermont. Current research into management activities that





Category	Priority Block Count: Priority 1	Priority 1 & 2
Confirmed	5	6
Probable	4	6
Possible	5	11
Observed	0	0
Total	14	23

CHANGE IN DISTRIBUTION BETWEEN ATLASES

Biophysical Region	First Atlas	Second Atlas	Change	% Change
Champlain Valley	6	9	+ 3	+ 50
Northeastern Highlands	1	0	- 1	- 100
Northern Green Mountains	1	0	- 1	- 100
Northern Vermont Piedmont	0	0	+ 0	+ 0
Southern Green Mountains	0	0	+ 0	+ 0
Southern Vermont Piedmont	0	0	+ 0	+ 0
Taconic Mountains	4	2	- 2	- 50
Vermont Valley	3	3	+ 0	+ 0
Totals	15	14	- 1	- 7

DISTRIBUTION IN CURRENT ATLAS

Biophysical Region	% of region species occupies	% of all records for this species found in region
Champlain Valley	20	65
Northeastern Highlands	0	0
Northern Green Mountains	0	0
Northern Vermont Piedmont	0	0
Southern Green Mountains	0	0
Southern Vermont Piedmont	0	0
Taconic Mountains	23	22
Vermont Valley	37	13

may benefit the species in Vermont include mechanical treatments to set back woody succession (being applied in Pennsylvania) and rotational grazing as a means of maintaining appropriate habitat conditions (being used in West Virginia). The Vermont Wildlife Action Plan recommends habitat restoration, particularly in wetter sites, and population monitoring.

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