

Yellow Warbler

Setophaga petechia

In his 1884 assessment of Vermont's bird communities, Cutting (1884) described the Yellow Warbler as abundant, "nesting in orchards and gardens, and is one of the most valuable as one of the most plentiful of man's friends." Its breeding range spans more than two-thirds of North America, from coastal Virginia northward to Newfoundland and Labrador, westward across Canada to Alaska, and southward through the plains and intermountain states to Baja and northern Mexico (Lowther et al. 1999).

Yellow Warblers glean foliage for insects throughout Vermont's shrublands, wooded riparian habitats, hedgerows, and early successional forests. They breed throughout the summer in Vermont, although, as in other regions, they likely raise only a single brood (Goossen and Sealy 1982). Nest building (by females only) has been observed as early as 5 May in Vermont; nests are built in the upright fork of a bush, sapling, or tree. Nest height can range from 0 to 15 meters (49 feet), but most are found between 0.6 and 2.8 meters (2 to 9.2 feet; Lowther et al. 1999). Females incubate 4 to 5 eggs for 11 to 12 days; the nestling period lasts 10 days (Bigglestone 1913, Lowther et al. 1999). Brown-headed Cowbirds frequently parasitize this species, and females' responses range from acceptance of the intruder's eggs to desertion of the nest to building a second nest atop the original one (Lowther et al. 1999). In Vermont, adults initiate their pre-basic molt early (mean date: 29 June), while still providing parental care (Ryder and Rimmer 2003). Dependent fledglings were observed as late as 5 August during the second atlas.

Limited historic accounts report Yellow Warbler as common at the base of Mount Mansfield, along streams in the Champlain Valley, and on the islands of Lake Champlain, but rare in northern Vermont (Perkins and Howe 1901). During the second atlas, Yellow Warblers were ubiquitous throughout the state, occupying at least 97 percent of priority blocks in four biophysical regions. Breeding was confirmed in only 5 fewer blocks (3 percent) than in the first atlas. The number of occupied blocks remained fairly stable in all biophysical regions except the Northeastern Highlands. Breeding Bird Survey

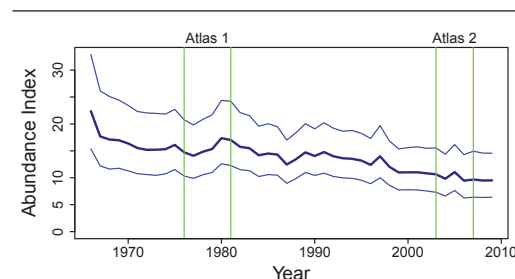


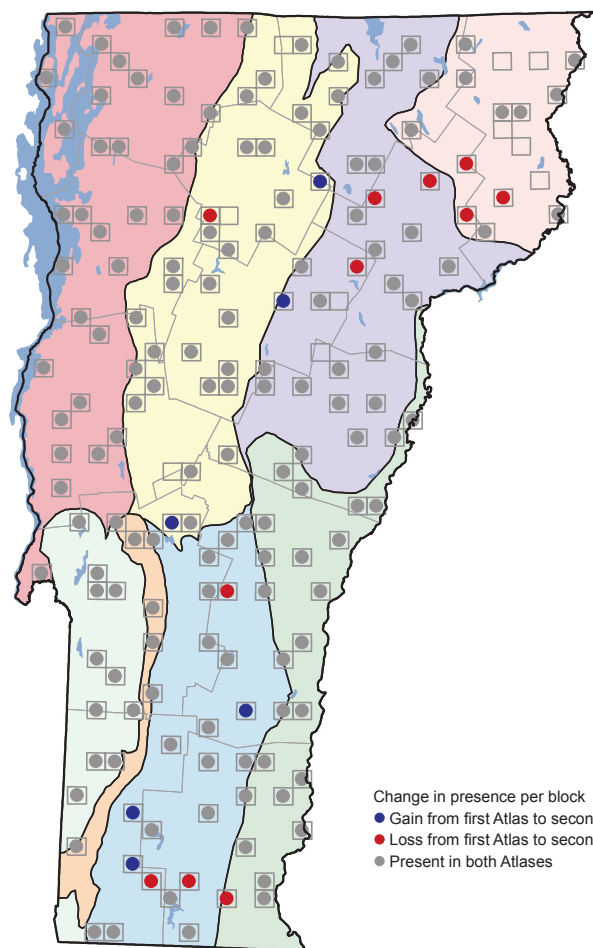
data, however, indicate that abundance declined significantly from 1982 to 2007 by 1.8 percent per year in Vermont (Sauer et al. 2011).

In New York, Yellow Warbler distribution showed almost no change between the first and second atlases, gaining 7 blocks to a total of 4587 (McGowan and Corwin 2008). The species was also abundant during the second Pennsylvania atlas, with occupied blocks increasing from 3984 to 4300 (an 8 percent increase; Wilson et al. 2012). Breeding Bird Survey data from 1982 to 2007 revealed slightly different trends than did atlas data for both states, with a significant 0.6 percent annual decline for New York and no significant trend for Pennsylvania (Sauer et al. 2011).

The decreasing population densities in Vermont may be due to the increasing age of the state's woodlands. A major threat faced by this species is loss of early successional and wooded riparian habitats. It may be critical to maintain linkages among patches of suitable habitat, as adults are not necessarily site-faithful and will disperse to

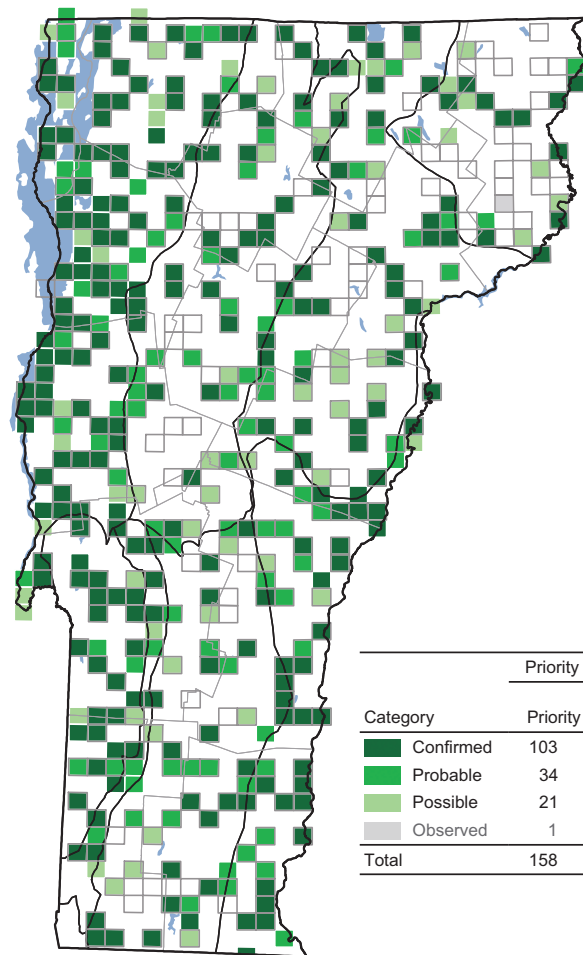
RELATIVE ABUNDANCE OVER TIME





CHANGE IN DISTRIBUTION BETWEEN ATLASES

Biophysical Region	First Atlas	Second Atlas	Change	% Change
Champlain Valley	33	33	+ 0	+ 0
Northeastern Highlands	12	9	- 3	- 25
Northern Green Mountains	30	31	+ 1	+ 3
Northern Vermont Piedmont	27	25	- 2	- 7
Southern Green Mountains	24	24	+ 0	+ 0
Southern Vermont Piedmont	21	20	- 1	- 5
Taconic Mountains	11	11	+ 0	+ 0
Vermont Valley	5	5	+ 0	+ 0
Totals	163	158	- 5	- 3



Category	Priority Block Count	
	Priority 1	Priority 1 & 2
Confirmed	103	205
Probable	34	63
Possible	21	39
Observed	1	1
Total	158	307

DISTRIBUTION IN CURRENT ATLAS

Biophysical Region	% of region species occupies	% of all records for this species found in region
Champlain Valley	100	24
Northeastern Highlands	45	6
Northern Green Mountains	76	16
Northern Vermont Piedmont	81	17
Southern Green Mountains	82	15
Southern Vermont Piedmont	97	13
Taconic Mountains	100	7
Vermont Valley	100	3

nearby habitats from year to year (Cilimburg et al. 2002). By causing direct habitat loss, channelization of Vermont streams can have a strong negative impact on the abundance of this species (Possardt and Dodge 1978). Forestry practices can benefit Yellow Warbler by providing a combination of cover types and timber size classes, using patches with live softwoods greater than 23 centimeters in diameter at breast height (dbh) or live hardwoods greater than 30 centimeters in dbh (DeGraaf and Chadwick 1987). More frequent El Niños resulting from climate change could also reduce Yellow Warbler reproductive

success and annual survival (Mazerolle et al. 2005). Overall, while Yellow Warblers are currently abundant in Vermont, future populations may face threats as habitat is impacted by human behavior and ecological succession.

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