

Magnolia Warbler

Setophaga magnolia



It seems unfortunate that the Magnolia Warbler is named for the tree in which it was first collected instead of some facet of its appearance; it is one of our brightest and most distinctively marked warblers. (The species actually spends little time in magnolias.) An estimated 30 million Magnolia Warblers breed across much of Canada and in the northeastern United States southward to West Virginia (RMBO 2007). Within the United States, northern Maine supports the most abundant breeding populations (Sauer et al. 2008). The winter range includes southern Mexico and Central America. Rare in Vermont in the early 1900s, the Magnolia Warbler increased dramatically mid-century as abandoned farmland reverted to young white pine and spruce stands.

Male Magnolia Warblers begin appearing in Vermont in early May, more than a week before the females. Breeding habitat includes boreal forest, particularly mixed coniferous-deciduous forest, with a fondness for young conifer plantations and fallow fields that are early in the process of reverting to white pine, hemlock, or spruce. Nest building was reported from 24 May through 19 June (N = 4). Nests are placed on horizontal conifer branches and are consequently difficult to find. Although only one nest with eggs was located (on 2 June), it was a week earlier than any of the previously reported egg dates, which extended from 9 June to 12 July (Kibbe 1985). Nestlings were located from 27 June to 16 July (N = 6). Fledglings were found from 13 June to 9 August, and constituted the most frequently used confirmation code (N = 41).

The Magnolia Warbler occurs throughout northeastern Vermont and the Green Mountains but, as in the first atlas, it is much less common in the western portions of the state, where agriculture still dominates the landscape. It appears to have declined in the central Green Mountains and Southern Vermont Piedmont since the first atlas.

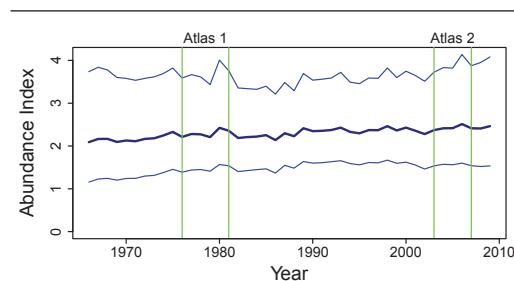
In contrast, New York's second atlas found an increase of 26 percent in blocks with Magnolia Warbler (McGowan and Corwin 2008). In Pennsylvania, another state where Breeding Bird Survey data indicate an increasing population, block occupancy increased by 83 percent (Wil-

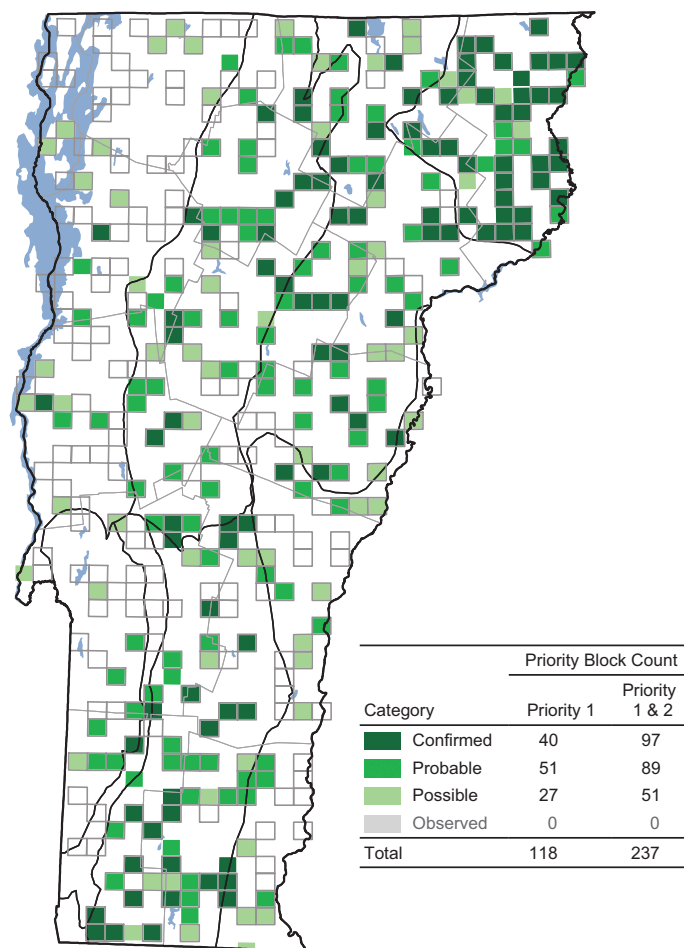
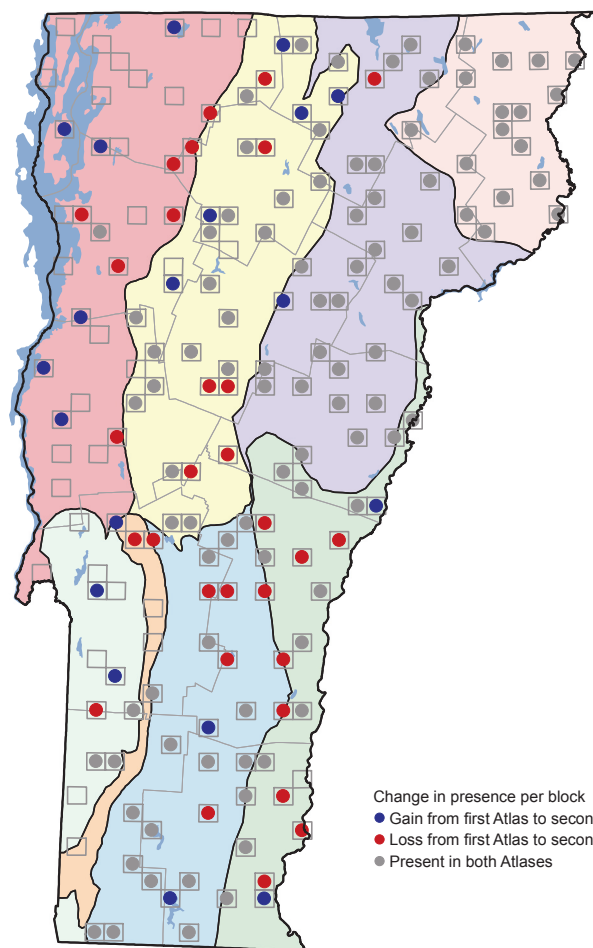
son et al. 2012). The magnolia is one of the most common warblers in Ontario and showed increases in all portions of the province during their second atlas (McLaren 2007).

The decrease in occupied blocks in Vermont may be in part related to changes in available habitat in the southeastern portion of the state. This warbler's fondness for early seral stage conifers is well established, and a slight decrease in the state's Magnolia Warbler population would be expected as the early successional communities on Vermont's abandoned farmland mature into northern hardwoods. Kibbe (1985) predicted that increasing populations would stabilize once early successional areas matured, and this appears to be the case. In the fully forested Green Mountains, logging practices that stimulate regrowth of mixed coniferous stands could result in restoration of Magnolia Warbler populations in the few areas where forest maturation has caused apparent declines.

The Magnolia Warbler appears to be increasing in regions adjacent to Vermont, and will probably increase in western Vermont if agricultural areas there revert to mixed coniferous forest with pine or spruce. It appears likely to retain its strongholds in Vermont. Climate-change models predict that Magnolia Warbler habitat will disappear from all but the northernmost eastern United

RELATIVE ABUNDANCE OVER TIME





CHANGE IN DISTRIBUTION BETWEEN ATLASES

Biophysical Region	First Atlas	Second Atlas	Change	% Change
Champlain Valley	8	7	- 1	- 13
Northeastern Highlands	17	17	+ 0	+ 0
Northern Green Mountains	27	26	- 1	- 4
Northern Vermont Piedmont	29	29	+ 0	+ 0
Southern Green Mountains	25	20	- 5	- 20
Southern Vermont Piedmont	18	13	- 5	- 28
Taconic Mountains	4	5	+ 1	+ 25
Vermont Valley	1	1	+ 0	+ 0
Totals	129	118	- 11	- 9

DISTRIBUTION IN CURRENT ATLAS

Biophysical Region	% of region species occupies	% of all records for this species found in region
Champlain Valley	23	7
Northeastern Highlands	100	16
Northern Green Mountains	80	22
Northern Vermont Piedmont	86	24
Southern Green Mountains	78	19
Southern Vermont Piedmont	52	9
Taconic Mountains	42	4
Vermont Valley	12	0

States (Matthews et al. 2007). In the near future, however, given the marked increases in adjacent regions west and south of Vermont, a decline appears unlikely.

DOUGLAS P. KIBBE