Cape May Warbler

Setophaga tigrina

Fate and the rules of zoological nomenclature dealt the Cape May Warbler a hard hand. Collected on and subsequently named for Cape May, New Jersey, this warbler is a contender for the best dressed in any warbler flock, but its splendid appearance is not reflected in the least by its name. Cape May Warblers inhabit Canadian spruce-fir forests during the breeding season and only appear in numbers along the East Coast during fall migration, en route to their Caribbean wintering grounds. Their breeding grounds stretch from northern Alberta to the Maritime Provinces, with highest densities in western Canada (Sauer et al. 2008). In the United States they are restricted to the Great Lakes states and extreme northern New England. Vermont lies on the extreme southern edge of the breeding range. The Cape May was always considered rare in New England and was probably extirpated from Vermont in the 1800s when agricultural clearing and sheep pasturage were at their peak (Forbush 1929).

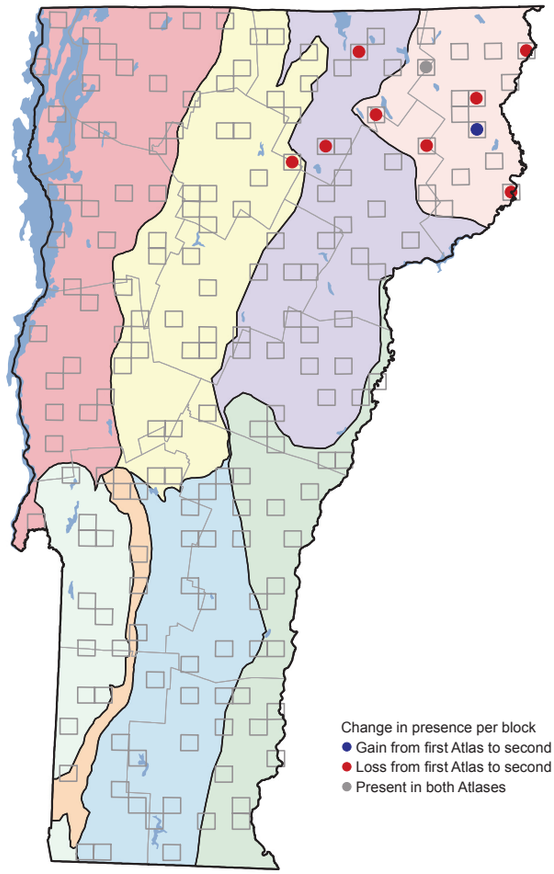
Cape May Warblers breed in boreal coniferous forest, in spruce or balsam fir. Mature stands are preferred, but secondary growth and stunted stands in bogs may be used (Welsh 1987). This species nests so infrequently in Vermont that virtually nothing is known of its nesting phenology. Nests are placed against the trunk high in a spruce tree, making them nearly impossible to find. Vermont's single recorded nest was found in July 1975, but adults feeding young have been reported in June (Oatman 1985). After mid-June, male singing decreases markedly (Baltz and Latta 1998). Cape May Warblers are spruce budworm specialists, and clutch size varies greatly in response to budworm abundance (Baltz and Latta 1998).

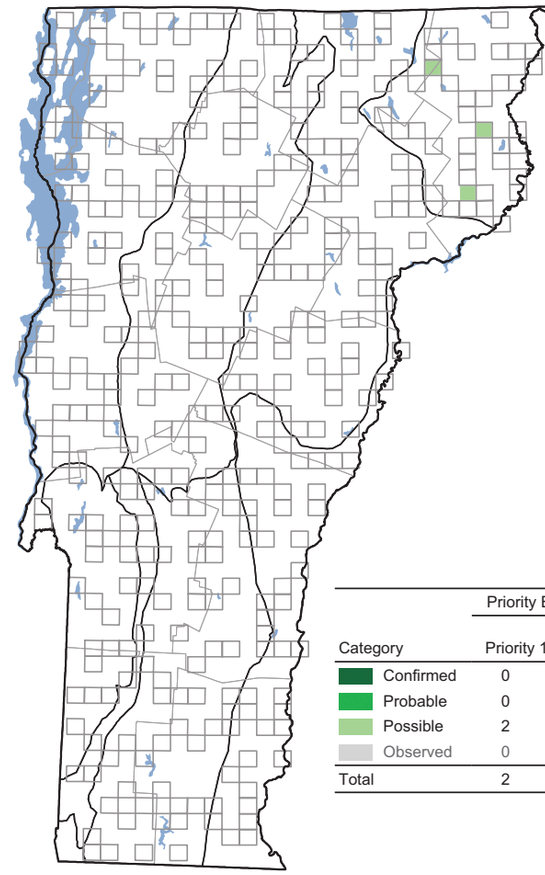
Field research from both Vermont atlases suggests that Cape May Warblers are restricted to the northeast corner of the state (Oatman 1985). There is no evidence that Cape May Warblers are attracted to or are likely to breed in isolated spruce plantations outside of the natural range of spruce-fir forest in Vermont. Results from the second atlas seem to indicate a retraction of its Vermont range—at least temporarily. There were 2 records from the Northeastern Highlands but none from the Northern Vermont Piedmont, where several nesting attempts were suspected during the first atlas. Vermont's breeding population is likely tied to trends in Canada's population, and during the first atlas there was an outbreak of spruce budworm in Ontario and Quebec (Williams and Liebhold 2000).

In New York's Adirondack Mountains, which have hosted a Cape May Warbler population since at least the mid-1900s, there was a 22 percent decrease in block occupancy despite the presence of "increasingly superb spruce habitat" (Peterson 2008). The absence of a spruce budworm outbreak in that region during the atlas period was believed to be the primary factor in the bird's scarcity. In Ontario, a decrease in Cape May Warbler abundance between atlases was similarly thought to be related to a decrease in spruce budworm abundance (McLaren 2007).

The Cape May Warbler appears destined to remain a very minor component of Vermont's northern spruce-fir forests. The entire state population is generously estimated as 200 birds (RMBO 2007), a miniscule portion of the estimated continental population of 3 million. Demands for lumber have resulted in substantial decreases (greater than 50 percent) in the acreage of mature spruce-fir stands in northern New England since 1983 (R. De Geus, VDFPR, pers. comm.). Although it is unlikely that this warbler will increase in abundance in the near future, it has a large reproductive capacity and apparently responds quickly to pest outbreaks. As our forests continue to mature we should watch for such outbreaks and for the colorful species like the Cape May Warbler that respond to them.

DOUGLAS P. KIBBE





Category	Priority Block Count: Priority 1	Priority 1 & 2
Confirmed	0	0
Probable	0	0
Possible	2	2
Observed	0	0
Total	2	2

CHANGE IN DISTRIBUTION BETWEEN ATLASES

Biophysical Region	First Atlas	Second Atlas	Change	% Change
Champlain Valley	0	0	+ 0	+ 0
Northeastern Highlands	6	2	- 4	- 67
Northern Green Mountains	1	0	- 1	- 100
Northern Vermont Piedmont	2	0	- 2	- 100
Southern Green Mountains	0	0	+ 0	+ 0
Southern Vermont Piedmont	0	0	+ 0	+ 0
Taconic Mountains	0	0	+ 0	+ 0
Vermont Valley	0	0	+ 0	+ 0
Totals	9	2	- 7	- 78

DISTRIBUTION IN CURRENT ATLAS

Biophysical Region	% of region species occupies	% of all records for this species found in region
Champlain Valley	0	0
Northeastern Highlands	5	100
Northern Green Mountains	0	0
Northern Vermont Piedmont	0	0
Southern Green Mountains	0	0
Southern Vermont Piedmont	0	0
Taconic Mountains	0	0
Vermont Valley	0	0