

Merlin

Falco columbarius

Small, pugnacious, and full of energy, the Merlin is an aristocrat of the northern sky, a highly skilled hunter of small birds that torments larger birds, particularly flickers and Golden Plovers, for sport. Widely distributed across most of Canada southward to Oregon, northern Wisconsin, and Maine (Warkentin et al. 2005), the Merlin has recently extended its breeding range into Vermont.

Merlins nest throughout the northern half of the Northern Hemisphere, usually near open habitats—lakeshores, wetlands, prairie, or tundra—wherever there is space to pursue avian prey. They also readily tolerate human activity and will nest in recreational parks, golf courses, cemeteries, and on old buildings, as well as in more remote locations (Warkentin et al. 2005). The nest is typically located high in a large tree, usually pine or spruce, sometimes in a renovated crow or raptor nest. The second atlas documented nestlings from 20 June to 29 July ($N = 6$) and dependent fledglings between 30 June and 15 August ($N = 8$). The Merlin's well-concealed treetop nest is difficult to see, and some may have been missed during atlasing. The species' conspicuous vocal behavior and propensity to nest near humans, however, make it unlikely that many families went undetected.

Historic documentation of Merlin nesting has not been reported in Vermont, and concrete evidence is also absent in New York (McGowan 2008). The first Vermont atlas made no mention of the species. The state's first breeding confirmation, two adults and four juveniles in Johnson, was not reported until 1997. The Johnson nest site was occupied again in 1998, and another pair in nearby Morristown fledged four young that year. Then, as a nester, the Merlin went unreported in Vermont until 2003, when territorial pairs were confirmed in Rutland, Craftsbury, Burlington, and West Danville. From 2004 to 2007, confirmations were reported in 14 additional blocks throughout the northern two-thirds of the state. Because only 2 of the blocks with confirmed breeding were surveyed during both atlases, a comparison of data fails to depict the magnitude of the species' recent appearance in Vermont.

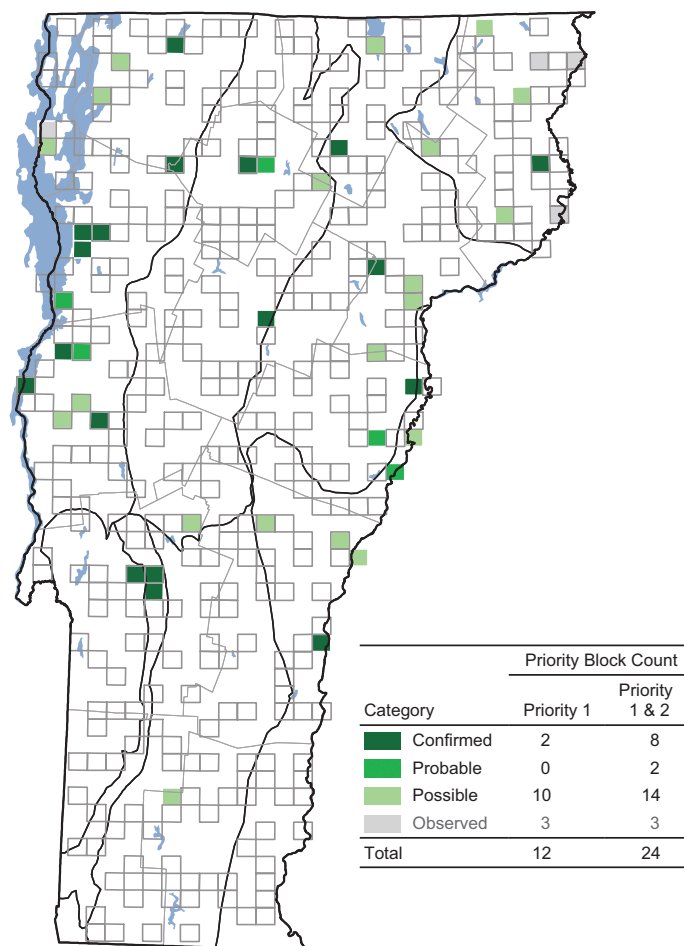
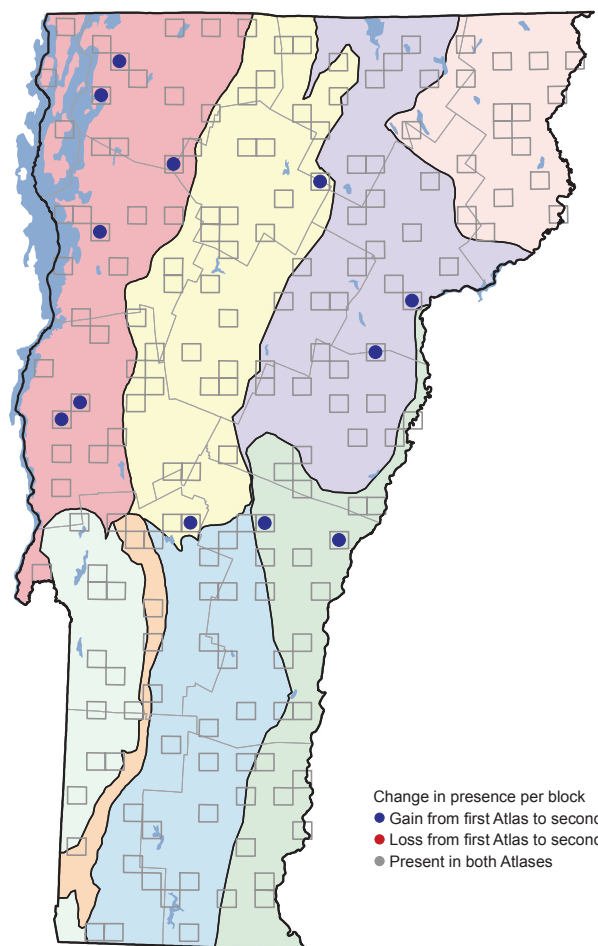


As with other North American raptors, exposure to DDT (through biomagnification in the food chain) reduced historical breeding productivity (Warkentin et al. 2005) and likely triggered subsequent population declines. Because Merlin occupied remote areas without the assistance of targeted management programs and away from prying human eyes, the species' recovery has been less heralded than that of the Bald Eagle and Peregrine Falcon. Despite their population resurgence and southward range expansion, natural nesting sites and foraging habitats continue to be lost to aggressive agriculture in the Prairie Pothole Region (Warkentin et al. 2005). At present, threats to this species in Vermont, however, appear to be minimal.

Results from other second-generation atlases mirror the findings in Vermont and reflect a range-wide increase in Merlin populations. The first New York atlas reported no Merlins, but the second atlas recorded a surge of breeding confirmation (14 blocks), mostly from the Adirondack region (McGowan and Corwin 2008). At the core of its range, Merlin block occupancy increased by 100 percent between the first and second Ontario atlases (Gahbauer 2007).

The Merlin's adaptability bodes well for further population increases, particularly in newly populated areas. Urban or relatively developed areas provide the prey and large nesting trees selected by the Merlin, but current unoccupied habitat also includes recreational areas and more remote forest openings. In Vermont and elsewhere, the Merlin is also likely to occupy more of these habitats in the future. Population recovery, range expansion, and new occupancy of urban areas may raise the public profile of the Merlin in future years.

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CHANGE IN DISTRIBUTION BETWEEN ATLASES

Biophysical Region	First Atlas	Second Atlas	Change	% Change
Champlain Valley	0	6	+ 6	+ 600
Northeastern Highlands	0	0	+ 0	+ 0
Northern Green Mountains	0	2	+ 2	+ 200
Northern Vermont Piedmont	0	2	+ 2	+ 200
Southern Green Mountains	0	0	+ 0	+ 0
Southern Vermont Piedmont	0	2	+ 2	+ 200
Taconic Mountains	0	0	+ 0	+ 0
Vermont Valley	0	0	+ 0	+ 0
Totals	0	12	+ 12	+1200

DISTRIBUTION IN CURRENT ATLAS

Biophysical Region	% of region species occupies	% of all records for this species found in region
Champlain Valley	15	46
Northeastern Highlands	5	8
Northern Green Mountains	4	13
Northern Vermont Piedmont	6	17
Southern Green Mountains	0	0
Southern Vermont Piedmont	5	8
Taconic Mountains	4	4
Vermont Valley	12	4