

Common Nighthawk

Chordeiles minor

With something resembling a miniature sonic boom, the male Common Nighthawk completes a display dive near his nest site. Beginning in the late 1800s, this species of grasslands and barrens began using urban rooftops as an alternate nesting substrate, and this display became a regular phenomenon in cities across the north-eastern United States. The nighthawk's vast range occupies the entire conterminous United States and extends northward well into the boreal forest of Canada (Poulin et al. 1996); in this context Vermont represents a relatively small portion of the North American population.

Like all North American nightjars, the Common Nighthawk lays its two eggs directly on the ground. Not surprisingly, the most important feature of nighthawk habitat is a well-drained substrate on which to nest. Examples of sites used for breeding in New England include rocky mountaintops, pine barrens and heaths, recently burned or cleared areas, and the aforementioned gravel rooftops. The vast majority of breeding sites in Vermont have been rooftops, but beyond this broad generalization almost nothing is known of nighthawk breeding biology in the state. The determination of its status is complicated by the species' late migration, with northbound birds often recorded into June, at which time they may be mistaken as potential breeders.

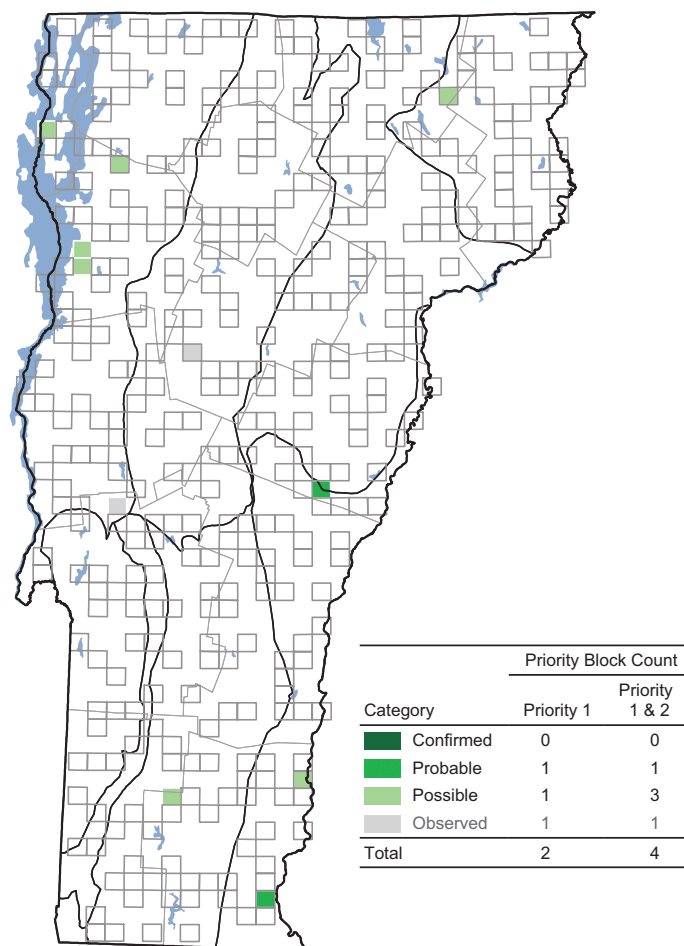
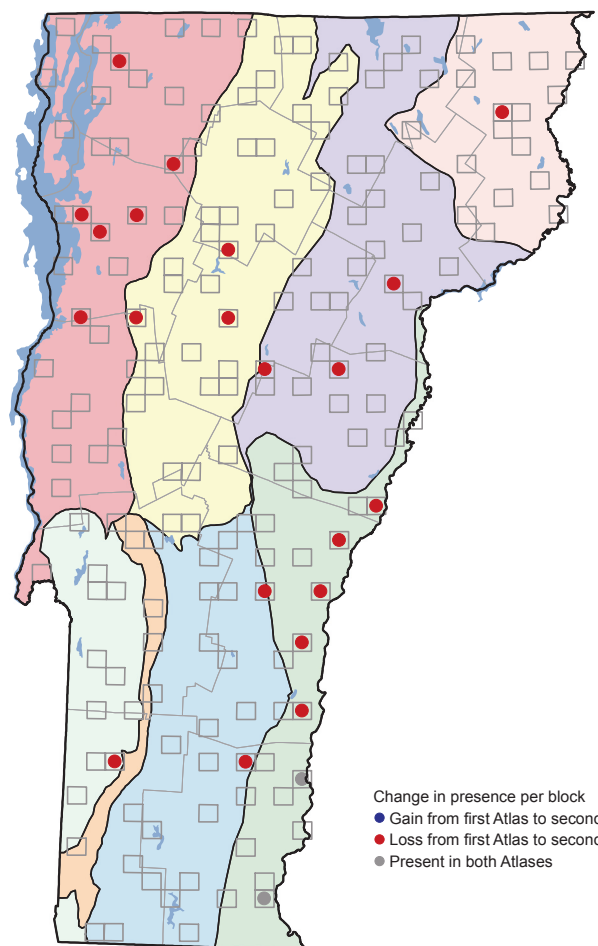
The Common Nighthawk has the dubious distinction of being one of only a few of Vermont's historically breeding birds that was not confirmed during the current atlas. It was never common in Vermont, with most of the PR and CO records in the first atlas coming from urban areas, including Burlington, Rutland, Springfield, Bellows Falls, and Brattleboro. Of these sites, only Brattleboro documented probable breeding during the current atlas; PO records were reported in Burlington and Bellows Falls. The only other PR record was in southern Orange County. In total, the number of occupied blocks dropped from 35 to 9 between the first and second atlases.

This near disappearance in urban areas is not limited to Vermont. More extensive monitoring across the border in New Hampshire documented the species' dis-



appearance in 12 of 16 cities and towns between 1991 and 2002 (Hunt 2003). Between atlases in New York, the Common Nighthawk went missing in almost every major metropolitan area that was occupied in the early 1980s (Medler 2008). Similar stories could be told for Pennsylvania (Wilson et al. 2012) and Maryland (Ellison 2010). Across all three states where atlases have been repeated, nighthawk occupancy declined by an average of 70 percent. Even in Canada, where the nighthawk has always been more widespread, the Ontario atlas documented a 39 percent decline in probability of observation (Cadman et al. 2007); the species was listed as threatened in Canada in 2008 (COSEWIC 2010). In the United States, the Common Nighthawk is considered a priority species by most states in the region, and is listed as endangered in both Connecticut and New Hampshire. In Vermont, the nighthawk is listed as a Species of Special Concern and as a high-priority Species of Greatest Conservation Need.

With populations in New England and nearby states so low as to make detailed study difficult, any explanations of the causes of decline are largely hypothetical. Proposed explanations include conversion of roofing materials from gravel to rubber and other unsuitable substrates, increased predation (from crows and feral cats, for example), and effects of agricultural practices (such as pesticide application) on the South American wintering grounds. Efforts are currently underway in New Hampshire and elsewhere to provide artificial nesting substrate through the installation of gravel patches on urban rooftops (Marzilli 1989, R. Suomala pers. comm.), but none of these projects has yielded results to date. Ongoing efforts to restore fire to pine barrens ecosystems in the North-



CHANGE IN DISTRIBUTION BETWEEN ATLASES

Biophysical Region	First Atlas	Second Atlas	Change	% Change
Champlain Valley	6	0	- 6	- 100
Northeastern Highlands	1	0	- 1	- 100
Northern Green Mountains	3	0	- 3	- 100
Northern Vermont Piedmont	3	0	- 3	- 100
Southern Green Mountains	2	0	- 2	- 100
Southern Vermont Piedmont	7	2	- 5	- 71
Taconic Mountains	1	0	- 1	- 100
Vermont Valley	0	0	+ 0	+ 0
Totals	23	2	- 21	- 91

DISTRIBUTION IN CURRENT ATLAS

Biophysical Region	% of region species occupies	% of all records for this species found in region
Champlain Valley	1	25
Northeastern Highlands	2	25
Northern Green Mountains	0	0
Northern Vermont Piedmont	0	0
Southern Green Mountains	0	0
Southern Vermont Piedmont	5	50
Taconic Mountains	0	0
Vermont Valley	0	0

east may also benefit the species, although the limited amount of potential habitat in Vermont (Thompson and Sorenson 2005) makes such activity unlikely in the state.

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