

Northern Rough-winged Swallow

Stelgidopteryx serripennis

The Northern Rough-winged Swallow, named for the stiff barbs on the outer primary feather's leading edge, breeds throughout the lower forty-eight states and across the southern edge of Canada. In British Columbia, the range extends northward almost to Alaska. Vermont is 200 miles south of the species' northeastern breeding limit (De Jong 1996). Population density is generally lower in the Northeast than in the Midwest and western United States (Sauer et al. 2008).

The Northern Rough-winged Swallow prefers to nest in riverbanks and forage near water. They generally nest in holes constructed by other species (such as kingfishers or small mammals) in cutbanks, or in natural crevices in cliffs, often solitarily. However, this swallow will also seek out and use vacant burrows in Bank Swallow colonies. In this case, several pairs may be in residence, depending upon the number of nest burrows available. Its choice of nesting substrates appears to have expanded; it often uses man-made structures and disturbed sites (including quarries) as nest sites (De Jong 1996).

Northern Rough-winged Swallows return to Vermont in late April. Vermont egg dates from the first atlas extend from 15 May to 20 June (Norse 1985). Four adults were observed feeding five young in a nest on Grand Isle (Hoag 2000), an unusual cooperative behavior triggered by the failure of another nearby nest. Fledglings were seen as early as 27 June in the second atlas, with a mean date of 6 July (N = 8). By late August, family groups may be en route to their wintering grounds in southern Mexico and Central America.

As was the case in the first atlas, Northern Rough-winged Swallows were found in every biophysical region; however, there were only 2 records in the Northeastern Highlands and relatively few records in the Northern Vermont Piedmont and Northern Green Mountains. Suitable cutbanks for nesting along streams and rivers may be a limiting factor in these mountainous areas. The greatest concentration of records appears to be along the shores of Lake Champlain, where water and steep banks pro-

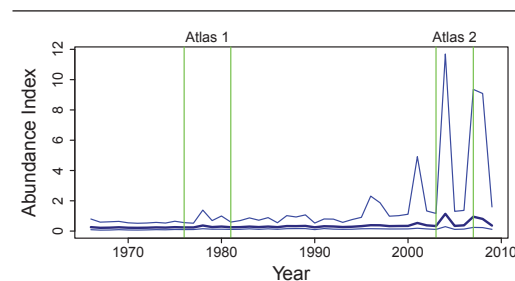


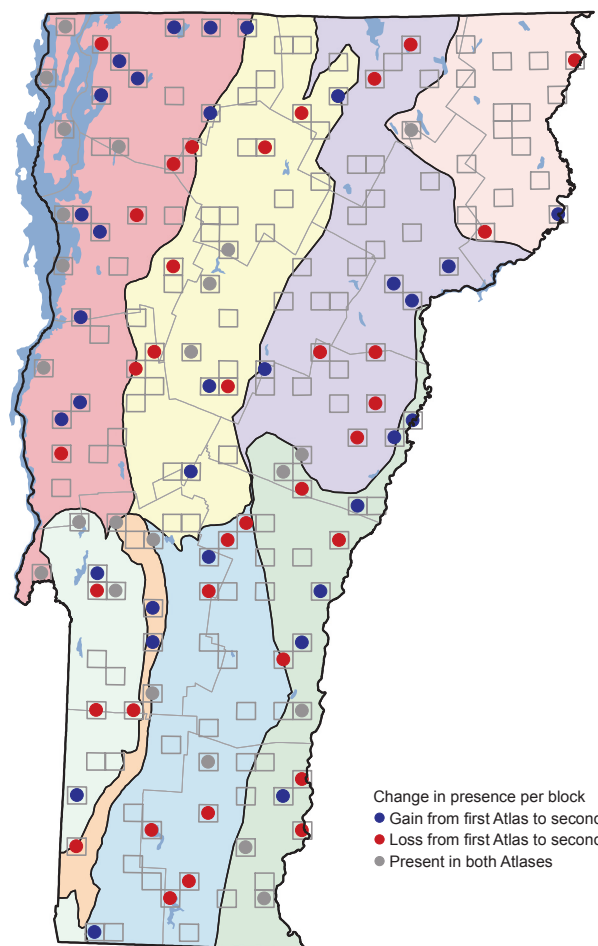
vide ideal habitat. An apparent absence of confirmed reports from the Connecticut River, which appears to have excellent habitat, begs explanation. Additional coverage would likely reveal more nesting sites along the Connecticut River and other major eastern waterways. Birds nesting in Bank Swallow colonies are relatively easy to locate, but many Northern Rough-winged Swallows nest in Vermont as isolated pairs along streams, making them more difficult to locate.

The Northern Rough-winged Swallow has been extending its range in Vermont and the northeastern United States since the early 1900s (Norse 1985). Data from the second atlas indicate the species is expanding in the northwestern portion of the state, while declining in the mountains and in the Northeastern Highlands. Overall, block occupancy decreased by 5 percent.

The slight decline in occupied blocks in Vermont contrasts with a 21 percent increase in the number of occupied blocks in New York (McGowan and Corwin 2008). Pennsylvania found an even greater increase (43 percent) between first and second atlases. The Ontario atlas, however, found a decrease in the probability of observation of 29 percent (Cadman et al. 2007). Ontario concluded that

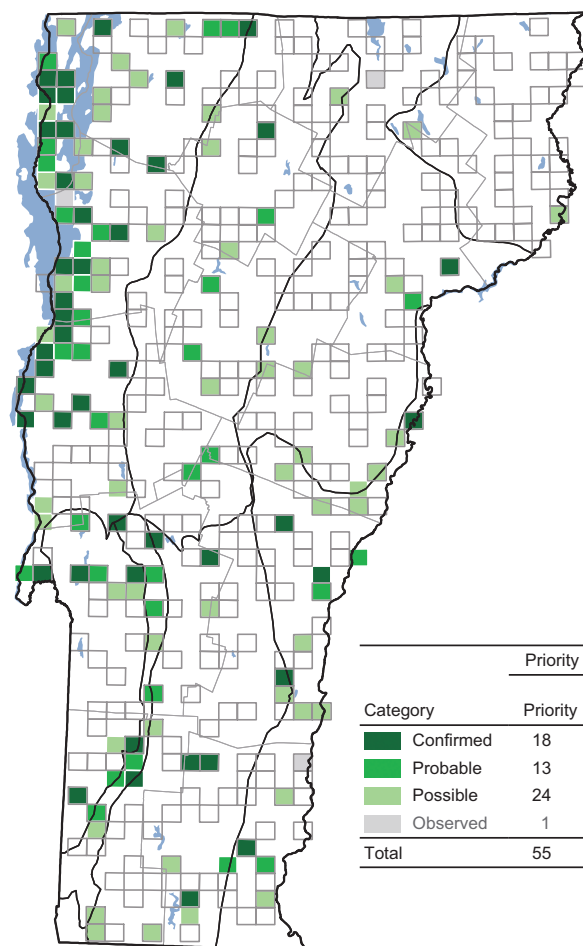
RELATIVE ABUNDANCE OVER TIME





CHANGE IN DISTRIBUTION BETWEEN ATLASES

Biophysical Region	First Atlas	Second Atlas	Change	% Change
Champlain Valley	13	20	+ 7	+ 54
Northeastern Highlands	3	2	- 1	- 33
Northern Green Mountains	9	6	- 3	- 33
Northern Vermont Piedmont	7	6	- 1	- 14
Southern Green Mountains	10	5	- 5	- 50
Southern Vermont Piedmont	9	9	+ 0	+ 0
Taconic Mountains	5	4	- 1	- 20
Vermont Valley	2	3	+ 1	+ 50
Totals	58	55	- 3	- 5



Category	Priority Block Count	
	Priority 1	Priority 1 & 2
Confirmed	18	37
Probable	13	23
Possible	24	44
Observed	1	2
Total	55	104

DISTRIBUTION IN CURRENT ATLAS

Biophysical Region	% of region species occupies	% of all records for this species found in region
Champlain Valley	60	42
Northeastern Highlands	5	2
Northern Green Mountains	15	10
Northern Vermont Piedmont	13	9
Southern Green Mountains	25	13
Southern Vermont Piedmont	32	13
Taconic Mountains	33	7
Vermont Valley	62	5

the Northern Rough-winged Swallow population was shifting southward after having expanded in the province during the mid-twentieth century (Sandilands 2007).

The Northern Rough-winged Swallow appears to be in no danger of disappearing from Vermont in the near future. Because they generally occupy existing holes rather than excavating their own, availability of nest sites may be a limiting factor.

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