Barn Swallow

Hirundo rustica

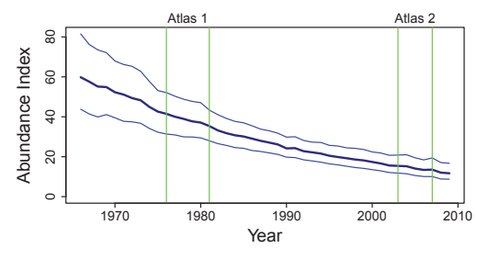
The aerial perambulations of the Barn Swallow, its distinctive forked tail and thin-pointed wings slicing through the sky, are among the most familiar sights in rural Vermont. The Barn Swallow breeds throughout North America, Europe, and Asia, and winters over most of the rest of the world. North American swallows winter as far south as Argentina (Brown and Brown 1999). Although females prefer longer-tailed males, North American males have relatively short tails compared with males of the Old World. Apparently, American males share incubation chores with their mates, and a long tail is disadvantageous when sitting on a nest (Smith and Montgomerie 1991). The Barn Swallow historically nested solitarily on cliffs, in caves, and in hollow trees. Today, it is a close associate with humans throughout its range, nesting almost invariably on or in man-made structures. The Barn Swallow is certainly more common in Vermont today than it was in precolonial days, but may have reached its greatest abundance in the late 1800s, when much of the state was cleared of forests and all farm structures were wooden and lacked features designed to exclude avian visitors (Bent 1964).

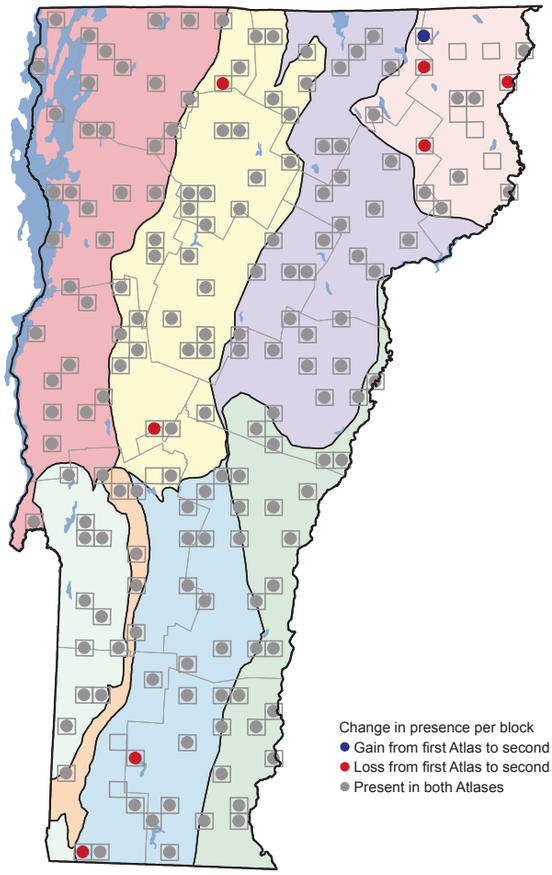
Barn Swallows seek a sheltered, upright surface on which to attach their mud nests, and open fields or marshland to forage over. Barns, sheds, roofed porches, abandoned buildings, bridges, and culverts all serve as nesting substrates. Rural areas are favored, but suburban areas may also be used. Although aggregations of nesting birds occur when conditions permit, individuals defend territories around their respective nests, which are usually placed several meters apart (Brown and Brown 1999). A diurnal migrant, the Barn Swallow returns to Vermont in late April. By early May, pairs start nest construction; frequently old nests are refurbished. Nest building was noted (N = 45) between 10 May and as late as 29 July, the last undoubtedly a second effort. Nests with eggs were found 21 May through 12 July (N = 21); incubation is two weeks. Nestlings were seen 31 May through 14 August (N = 51). Fledglings, the most common source of CO records (N = 78), appeared from 10 June through 31 July. The birds flock and migrate soon after fledging their second brood. By late September, even the more northerly populations have passed through Vermont en route to South America.

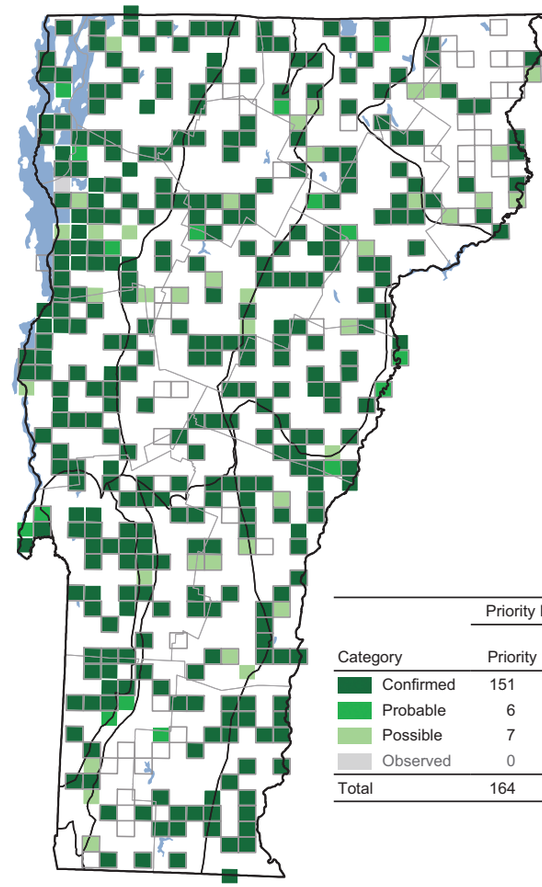
The Barn Swallow may occur throughout Vermont, wherever human structures provide suitable nesting surfaces and open foraging areas are present. The few atlas blocks that failed to host at least a pair were in heavily forested areas of the Green Mountains and the Northeastern Highlands. The second atlas documented a slight decrease in the number of occupied blocks, perhaps due to the loss of foraging areas as open fields have succeeded into forest. Losses were greatest in the Green Mountains and the Northeastern Highlands where forest closure now approaches 100 percent.

New York's second atlas documented a slight decline of 6 percent statewide, but declines in the mountainous Adirondack region neared 28 percent, likely due to forest maturation (Medler 2008). Pennsylvania found a 4 per-

RELATIVE ABUNDANCE OVER TIME







Category	Priority Block Count: Priority 1	Priority 1 & 2
Confirmed	151	295
Probable	6	10
Possible	7	22
Observed	0	0
Total	164	327

CHANGE IN DISTRIBUTION BETWEEN ATLASES

Biophysical Region	First Atlas	Second Atlas	Change	% Change
Champlain Valley	33	33	+ 0	+ 0
Northeastern Highlands	11	9	- 2	- 18
Northern Green Mountains	34	32	- 2	- 6
Northern Vermont Piedmont	30	30	+ 0	+ 0
Southern Green Mountains	25	23	- 2	- 8
Southern Vermont Piedmont	21	21	+ 0	+ 0
Taconic Mountains	11	11	+ 0	+ 0
Vermont Valley	5	5	+ 0	+ 0
Totals	170	164	- 6	- 4

DISTRIBUTION IN CURRENT ATLAS

Biophysical Region	% of region species occupies	% of all records for this species found in region
Champlain Valley	100	22
Northeastern Highlands	59	7
Northern Green Mountains	86	17
Northern Vermont Piedmont	96	19
Southern Green Mountains	80	14
Southern Vermont Piedmont	97	12
Taconic Mountains	100	6
Vermont Valley	100	2

cent decrease in block occupancy statewide (Wilson et al. 2012). In Ontario, the probability of observation decreased by 35 percent (Lepage 2007), but the species remained widespread in the southern region. Breeding Bird Survey data reflected results from atlases in the region: Barn Swallows declined significantly by 3.5 percent per year in Vermont between 1982 and 2007 (Sauer et al. 2011).

Despite a decrease in abundance, the Barn Swallow is expected to remain one of Vermont's most common and best-known birds. Although modern houses and garages with aluminum siding are less suitable nesting substrates than the unpainted wooden farmhouses and barns of the 1800s, the resourceful Barn Swallow is likely to make do using bridges, carports, sheds, and open porches. The inevitable spread of rural residential development into currently forested regions of the state will likely benefit this species over many others.

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