

Grasshopper Sparrow

Ammodramus savannarum

The small, chunky Grasshopper Sparrow is one of the few bird species breeding in New England that sings two distinctly different songs. The primary song attracts mates and settles territorial transgressions, while the secondary song may alert females to predators and possibly even distract predators (Proppe and Ritchison 2008). The primary song, reminiscent of a grasshopper's chirping, earned this bird its name. Distinguished by a broad, flat head, unstreaked breast, and short tail, this sparrow spends the majority of the day foraging on the ground for insects and seeds. It breeds in grasslands from the Rocky Mountains to the East Coast, mostly south of the Canadian border (Vickery 1996).

In Vermont, Grasshopper Sparrows nest in pastures, hayfields, and at airports, mostly at drier sites with sparser vegetation. Females build nests, which are usually domed, on the ground. Breeding begins in mid to late May and parental care has been observed as late as 19 July, although this date may represent a second nesting.

During the first atlas, the state's small Grasshopper Sparrow population was concentrated in the Champlain Valley (3 blocks) and also included 1 block in the Southern Vermont Piedmont. During the second atlas, the Grasshopper Sparrow was found in just 1 Champlain Valley block, although additional breeders were documented in other parts of the valley outside of priority blocks.

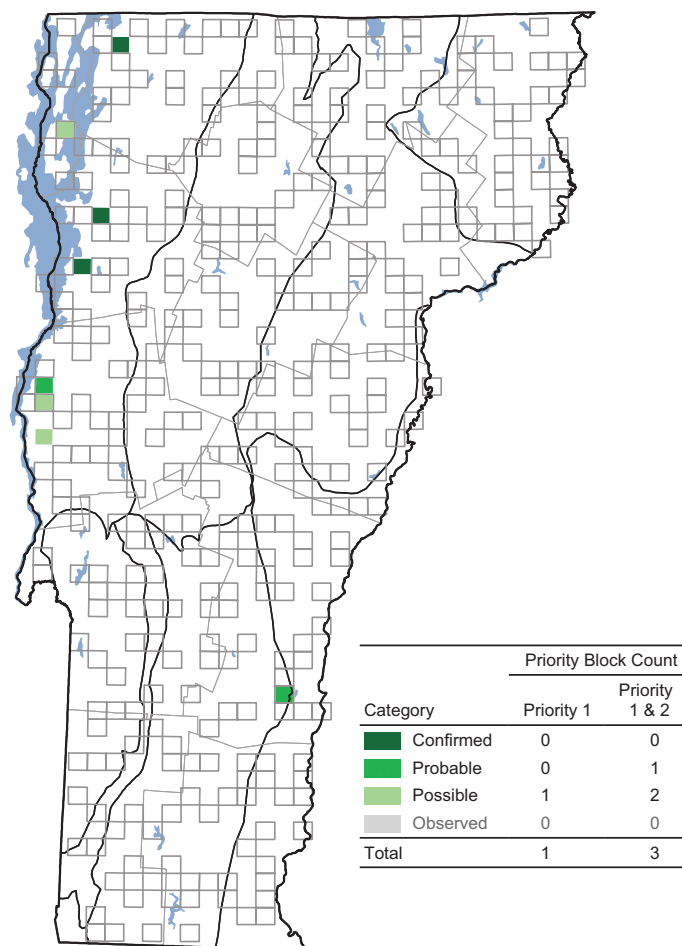
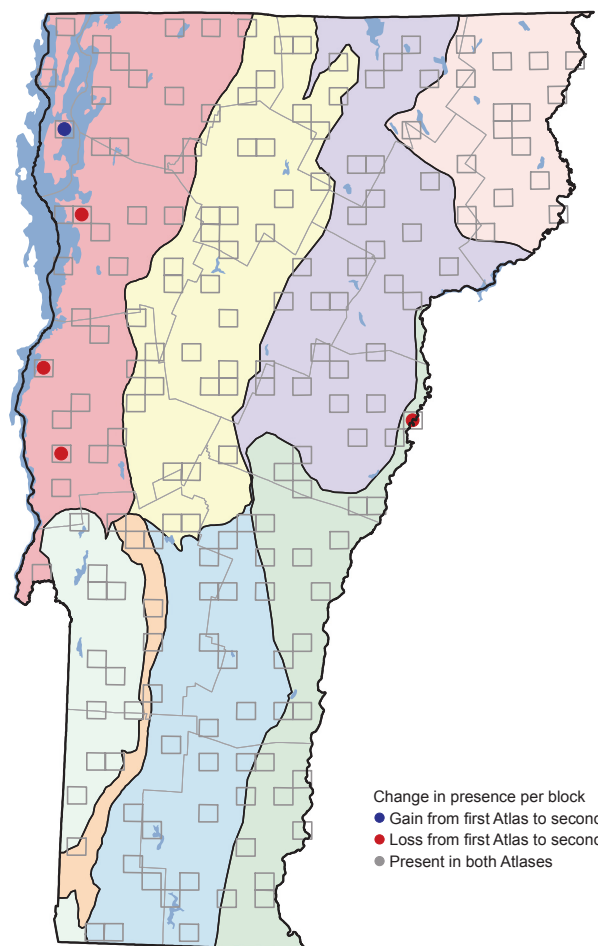
The Grasshopper Sparrow has been surveyed annually at Camp Johnson in Winooski (1999–2007) and at Franklin County Airport (1999–2004, 2007); these sites harbor two of the more stable populations in the state. Between 3 and 11 singing males were documented at Camp Johnson each year, including observations of adults carrying food. Between 5 and 9 singing males were documented annually at Franklin County Airport. From 2003 to 2007, N. Perlut intensively monitored four hayfields and three rotationally grazed pastures in Chittenden County, banding 997 Savannah Sparrows and Bobolinks, but observing only 4 Grasshopper Sparrows (unpubl. data). Of these 4, 1 bird remained for only one day; 2 formed a pair that successfully fledged 3 young (the male disappeared just



prior to hatching); and 1 male maintained a territory for three years, singing vigorously, but never attracting a mate. The bachelor male often visited Savannah Sparrow nests, chasing off the attending male, but did not feed the nestlings (hybridization has been documented; Jones et al. 2003). The 3 breeding birds were all using rotationally grazed pastures. Other documentation of breeding has primarily been of juveniles or of adults carrying food. Further illustrating this species' rarity, 774 point counts taken in 199 hayfields and 18 pastures (totaling 1325 hectares [3273 acres]) throughout Chittenden, Franklin, and Addison counties from 2004 to 2005 yielded only 4 Grasshopper Sparrows (A. Strong unpubl. data). In other regions, clutch size is typically 4 to 5, with as many as 7 documented in Massachusetts (Vickery 1996).

Breeding Bird Survey data from 1982 to 2007 show annual declines of 7.8 percent in New York (Sauer et al. 2011). The Vermont, New Hampshire, and Maine populations were too sparse to estimate population trends. In Pennsylvania, Grasshopper Sparrows were found in 46 more blocks (an increase of 3 percent) during their second atlas (Wilson et al. 2012). This species is listed as endangered in Vermont, Maine, New Hampshire, and Connecticut.

Although it is unlikely that Grasshopper Sparrows were ever abundant in Vermont, the entire grassland suite has been strongly and negatively affected by habitat loss through reforestation, development, and intensified agricultural practices. Small populations persist, however, and undetected isolated pairs and small populations may be scattered throughout the Champlain Valley and possibly the Connecticut River Valley. Management strategies should focus on maintaining or creating connectivity be-



CHANGE IN DISTRIBUTION BETWEEN ATLASES

Biophysical Region	First Atlas	Second Atlas	Change	% Change
Champlain Valley	3	1	-2	-67
Northeastern Highlands	0	0	+0	+0
Northern Green Mountains	0	0	+0	+0
Northern Vermont Piedmont	0	0	+0	+0
Southern Green Mountains	0	0	+0	+0
Southern Vermont Piedmont	1	0	-1	-100
Taconic Mountains	0	0	+0	+0
Vermont Valley	0	0	+0	+0
Totals	4	1	-3	-75

DISTRIBUTION IN CURRENT ATLAS

Biophysical Region	% of region species occupies	% of all records for this species found in region
Champlain Valley	2	67
Northeastern Highlands	0	0
Northern Green Mountains	0	0
Northern Vermont Piedmont	0	0
Southern Green Mountains	1	33
Southern Vermont Piedmont	0	0
Taconic Mountains	0	0
Vermont Valley	0	0

tween breeding populations or historically used habitat, and maintaining heterogeneity in grassland landscapes, including lightly grazed pastures and hayfields with sparse cover. For hayfields and rotationally grazed pastures, ideal management includes a 65-day rest between haying or grazing intervals, particularly when the management occurs before 1 June. Regional airports can potentially offer suitable habitat if mowed after 1 August.

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