## **Grasshopper Sparrow**

Ammodramus savannarum

Grasshopper Sparrows are typically found in relatively sparse, open, dry grasslands whose key characteristics, according to Wiens (1969, 1973), include patchy and relatively thin plant litter and short, narrowleaved grass cover with a good representation of forbs. Whitmore (1979) calculated optimal conditions for the species during a study of birds inhabiting reclaimed surface mines in West Virginia; these included 73% litter cover, 24% bare ground, and 28% grass cover. Patches of clover or alfalfa appear to be a constant in fields inhabited by Vermont Grasshopper Sparrows. Johnston and Odum (1956) noted that in Georgia the species was absent from fields with greater than 35% shrub cover. Another factor that probably influences habitat selection is the presence of song perches, as males prefer to defend their territories from a commanding position.

Grasshopper Sparrows are often difficult to detect. Their song is high-pitched and undistinguished, poorly differentiated from those of surrounding insects. The species tends to stay out of sight in the vegetation, venturing into the open only to sing. The most reliable method of locating these birds is to survey appropriate fields on foot. Confirmation of breeding is difficult, although nests may be detected when a sitting bird is flushed. Sometimes the parents may be seen carrying food, and the inconspicuous fledglings may occasionally be flushed by an observer. The song, which consists of two high, sharp tics followed by a dry-toned buzz, is one of the first to go unheard when an observer loses high-range hearing. Another, longer song consists of a burst of complex squeaky trills.

This species returns to Vermont somewhat later in the spring than other grassland sparrows, usually appearing during the first weeks of May; occasional individuals turn up in April. Although there are Vermont data on only three clutches, egg dates range from May 30 to August 6. The size of Ver-



mont's three clutches ranged from 3 to 6 eggs; clutches usually number 4 or 5 eggs (Harrison 1978). There are no nestling dates for the species in Vermont. Fledglings have been reported from July 28 to August 8. Grasshopper Sparrows sing into August, but their departure from Vermont is poorly documented. Presumably most leave in September. There is a single December record for the species.

The Grasshopper Sparrow has the dubious distinction of being one of 30 continentwide species to appear on American Birds' Blue List for reasons of chronic, noncyclic decline. Tate and Tate (1982) reported a decline "from the Dakotas and Nebraska east to New York and Maryland," and Grasshopper Sparrow is proposed for Species of Special Concern status in Vermont. Smith (1963) noted that while the species is notorious for its population fluctuations, early cutting for silage causes this sparrow to abandon fields during nest building. Haying later in the season apparently does not have this effect, though it often exposes nests to predation and the elements and disrupts territorial boundaries.

Vermont has apparently always been at the northern periphery of the Grasshopper Sparrow's range. Early authors (Allen 1909; Forbush 1929; Fortner et al. 1933) indicated that the species was a rare to uncommon summer resident in southern and western Vermont; this remains an accurate assessment of the species' current status. Atlas Project records indicate that the Grass-

346 Species Confirmed as Breeders in Vermont



No. of priority blocks in which recorded TOTAL 4 (2%)

| Possible breeding:  | o (o% of total)  |
|---------------------|------------------|
| Probable breeding:  | 2 (50% of total) |
| Confirmed breeding: | 2 (50% of total) |

## Physiographic regions in which recorded

|                     | no. of<br>priority<br>blocks | % of<br>region's<br>priority<br>blocks | % of<br>species<br>total<br>priority<br>blocks |
|---------------------|------------------------------|--|--|
| Champlain Lowlands  | 3                            | 10                                     | 75   |
| Green Mountains     | 0                            | 0                                      | 0  |
| North Central       | o                            | 0                                      | o  |
| Northeast Highlands | 0                            | 0                                      | 0  |
| East Central        | 0                            | 0                                      | 0  |
| Taconic Mountains   | 0                            | 0                                      | 0  |
| Eastern Foothills   | I                            | 4                                      | 2.5  |
|                     |                              |  |  |

hopper Sparrow is largely limited to the Connecticut River valley and Champlain Lowlands, although it is very rare and sporadic in the former. The species is native to warm temperate climates largely south of Vermont; therefore it is interesting to note that its Vermont breeding distribution (probable and confirmed Atlas Project records) is entirely below the 20° C (68° F) isotherm for July.

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