

Vesper Sparrow, *Pooecetes gramineus*

Status:

State: Endangered

Federal: Not listed

Identification

The “bay-winged bunting,” as it was formerly known, was given the name “vesper sparrow” because it frequently sings during the early evening hours and well into the night. The rich, musical song of the vesper sparrow, which is reminiscent of the song sparrow's (*Melospiza melodia*) melody, consists of a pair of repeated notes, represented as, “here-here where-where,” followed by a series of descending trills. The first two notes are long, slurred, low-pitched whistles while the latter two notes are higher-pitched. The call of the vesper sparrow is a short “hsip.”

The vesper sparrow is a stocky, short-tailed, grayish-brown sparrow with a streaked breast. The upperparts are pale gray-brown and marked with black streaking. The breast is grayish white and streaked with black. A brown cheek patch, which reaches behind the eye, is adjacent to a white sub-mustachial stripe that extends down from the bill. A thin, dark malar stripe (mustache) also extends from the bill, separating the white sub-mustachial stripe from the white throat. There is a white eye-ring that stands out against the brown cheek. Rich brown lesser coverts appear as chestnut shoulder patches on adults. However, the brilliance of these patches is variable and, depending on the view of the bird, may be difficult to see. The wings are marked with a pair of narrow, white wing bars. The tail, which is a key diagnostic indicator in flight, is notched and black with white outer tail feathers, similar to that of a junco (*Junco hyemalis*). The bill is conical-shaped with a dark upper mandible (jaw) and a flesh-colored lower mandible. Likewise, the legs are flesh colored. The iris is reddish brown to dark brown. Although males are slightly larger, the sexes are otherwise similar. Juveniles resemble adults but are buffer overall, have broader wing bars, and lack the chestnut shoulder patches.



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Habitat

Inhabitants of open areas, vesper sparrows reside in cultivated fields, grasslands, fallow fields, and pastures. Agricultural fields containing crops of corn, soybean, alfalfa (*Medicago sativa*), hay, timothy (*Phleum* spp.), wheat (*Agropyron* spp.), or strawberry may be occupied. Farmed areas that are adjacent to fallow fields or contain uncultivated strips along fence-rows are favored. These fallow areas provide nesting habitat, cover, foraging sites, and singing perches. On active farmlands, human disturbance and crop

harvesting can threaten nesting sparrows. Fallow fields and grasslands provide a safer haven for nests.

Vesper sparrow habitats are typically sparsely vegetated with patches of bare ground, low vegetation (1 to 8 in.), and scattered shrubs or saplings. Habitats are typically dry and well drained. Nests are placed within clumps of herbaceous cover that afford protection from predators. Elevated perches, such as fence posts, shrubs, or weeds, provide singing posts from which males can advertise their territories and attract mates. Territory size may range from 0.5 to 3.2 hectares (1.2 to 7.9 acres). Similar habitats are used throughout the year.

Status and Conservation

The vesper sparrow was formerly a common, widespread breeding species within agricultural fields and pastures in the Garden State. Turnbull (1869), Stone (1894a, 1894b), Griscom (1923), Hausman (1935), and Cruickshank (1942) considered it to be a common to abundant summer bird in open cultivated areas of northern New Jersey and the Pine Barrens. However, even at this time, these authors noted its rarity in areas with suburban development. By the 1950s and 1960s, the vesper sparrow, which was by then considered an uncommon breeding species, had undergone population declines resulting from increased development of rural farmlands. Further declines in the Northeast were noted during the mid-1970s and early 1980s. The number of vesper sparrows detected on New Jersey Christmas Bird Counts plummeted from an average of 44 per year in 1971-1973 to four per year in 1983-1985. Likewise, numerous breeding populations documented in the state in the early 1980s were absent by the mid-1990s. The Breeding Bird Survey has shown a significant annual decline in the number of vesper sparrows detected on surveys in the New Jersey from 1966 to 1999 (Sauer et al. 2000).

Due to its dependence on habitats created by farming, the vesper sparrow has suffered significant population declines resulting from the ebb of agriculture in New Jersey. Consequently, the vesper sparrow was listed as a threatened species in New Jersey in 1979. As the breeding population continued to decline and nesting habitat dwindled, the status of the vesper sparrow was reclassified as endangered in 1984. Currently, it is a rare and local breeding species in the state. The New Jersey Natural Heritage Program considers the vesper sparrow to be “demonstrably secure globally.” yet “imperiled in New Jersey because of rarity” (Office of Natural Lands Management 1992). The National Audubon Society included the vesper sparrow on its Blue List of Imperiled Species from 1978 to 1980 and listed it as a local problem species in 1982 due to declines in the eastern population. Throughout much of the Northeast, the vesper sparrow has declined and, as a result, has been listed as endangered in Connecticut and Rhode Island, threatened in Massachusetts, and of special concern in New York.