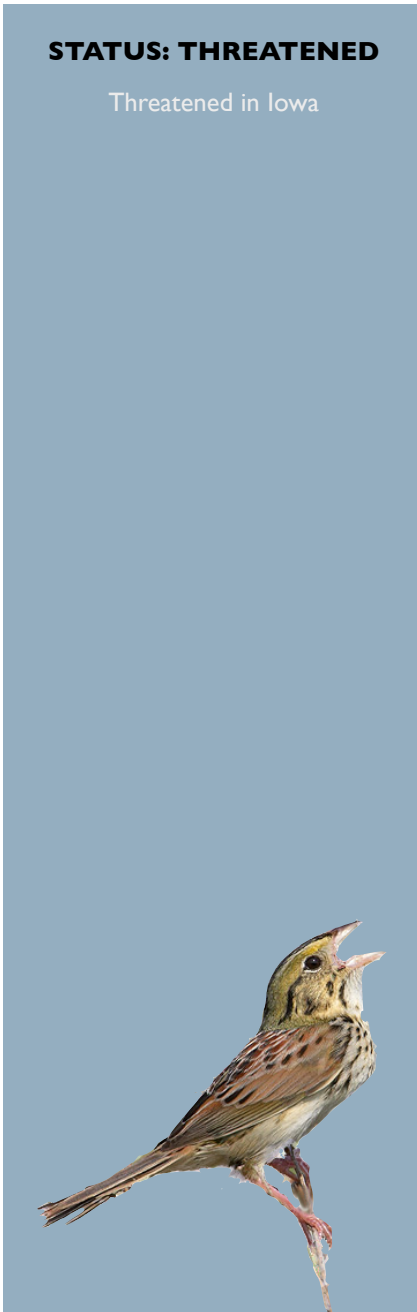


**STATUS: THREATENED**

Threatened in Iowa



Henslow's Sparrow

Ammodramus henslowii

Introduction

Once common on the tallgrass prairies across the Midwest and wet grasslands of eastern North America, but now threatened in Iowa, the Henslow's Sparrow is a remarkably inconspicuous grassland bird. It prefers habitats with tall, dense vegetation and thick litter. Henslow's Sparrow is often difficult to detect because it sings from inconspicuous perches on low forbs, shrubs, or grasses. Even when singing from an exposed perch, it is easy to overlook this sparrow's dry, thin, insect-like song, has been accurately described as a "feeble hiccup."

Henslow's Sparrow populations have declined over the last half-century, and this species has recently been identified as the highest priority for grassland bird conservation in eastern and Midwestern North America. This species' long-term population decline appears to be attributable to the loss, draining, and degradation of grassland habitats throughout its range. More recently, conversion of hay fields and pastures to row crops and other intensively managed forage crops, such as alfalfa, have contributed to the continued population decline, estimated to be -7.5% annually over the last 3 decades (1966–2000), which is the steepest decline for any species of grassland bird in North America.

Very recent (since 1990), local population increases appear to be associated with the creation of undisturbed grassland habitat by the Conservation Reserve Program (CRP). However, it does not appear that these local increases have been sufficient to offset overall population declines. Despite the recent surge in research attention, many aspects of this species' ecology and breeding biology remain poorly understood.

Habitat Preferences

Henslow's Sparrow is a bird of weedy and grassy summer fields where it hides in dense cover and is extremely hard to observe. This species is often absent from habitat that appears to be quite suitable. As native habitats declined, this species moved into additional habitats, in particular hayfields. And some researchers have noted a correlation between the summer range of Henslow's Sparrow and areas of heaviest acreages of hay production in the United States.

Recent quantitative analyses of Henslow's Sparrow breeding habitat have shown that litter density and depth, standing dead residual vegetation, forbs and woody-stem densities, vegetation height and density and field size, are important components of their habitat. Henslow's Sparrow also tends to occupy flatter portions of fields (<7% slope). In general, habitat can be characterized as relatively large fields consisting of tall, dense grass, a well-developed litter layer, standing dead vegetation, and sparse or no woody vegetation.

When flushed it flies away low for only a short distance before dropping back into dense cover. When vocalizing this little sparrow throws its head back, and delivers one of the least impressive of all bird songs, a short tsilick. Despite the obvious lack of vocal ability, the Henslow's Sparrow has beautiful markings when seen well. Local population levels vary considerably from year to year, and overall, this sharp-looking sparrow has become quite scarce over much of its range.

Feeding Habits

The main foods taken by Henslow's Sparrow when it is present in Iowa in summer are mostly insects and seeds. Feeding is done primarily on the ground, where many different kinds of seeds are eaten. And feeding is done individually. Henslow's Sparrow does not associate in

flocks with its own kind or with other sparrows.

Among insects Henslow's Sparrow seems to prefer grasshoppers (Orthoptera) and beetles (Coleoptera). Some research has shown that from April to October, the diet is 82% animal matter and 18% is plant material.

Breeding Biology

Nesting begins in late April, with most first clutches completed by May 20-30. Nesting continues into August, with young in nest occasionally into September.

Nests are an open cup of grass and weeds, and are built primarily by the female, in 4-6 days. Nests are typically placed among layers of thick litter. In areas with little litter, nests are generally placed within large clumps of grass close to ground. Deep litter may contribute to higher nesting success. After construction of the nest, 3-5 eggs are laid at the rate of 1 per day.

Incubation is by the female only, and lasts for about 11 days. Both parents feed the nestlings and the young leave the nest about 9-10 days after hatching. More than one brood may occur in a single season, and a new nest is constructed for each nesting attempt.

Concerns and Limiting Factors

Henslow's Sparrow has declined seriously in Iowa and much of its former range, and is listed as threatened. The loss of proper habitat is thought to be the cause of the population decline, but overall, habitat requirements are not well understood.

Over the past decade or so, local populations have increased in association with the creation of undisturbed grassland habitat by the Conservation Reserve Program (CRP). But it does not appear that these local increases have been sufficient to offset overall population declines. The few native prairie tracts remaining in Iowa may be too small, too isolated, and too

frequently burned to support healthy populations of this distinct little sparrow. The information in the grassland management section should be followed carefully to allow grasslands and hayfields to support as many Henslow's Sparrow as possible.

Loss of suitable nesting habitat has been universally cited as most probable cause for recent populations declines of this species. Activities contributing to breeding-habitat loss for Henslow's Sparrow include: natural succession of vegetation due to fire suppression, conversion of pasture and hayfields to row crops, earlier and more frequent cutting of hayfields, wetland drainage, and urbanization. Since Henslow's Sparrow prefers tall, dense vegetation for breeding, too frequent grazing, mowing, and burning of these vegetation types all generally reduce local breeding densities.

Population numbers are often reported to vary greatly from year to year. Additional research is needed to determine the underlying causes of these local population fluctuations and to determine if populations at larger (multi-state) scales also fluctuate, and by how much.

Habitat Management Recommendations

The primary conservation strategy being used in Iowa for Henslow's Sparrow and other grassland birds are:

- 1) Establishment of larger grassland Bird Conservation Areas (BCAs) along with smaller IBAs
- 2) Following the recommended grassland management practices described in Part 3 of this writing.

If widely implemented, such practices have potential to benefit Henslow's Sparrow, which appears to be habitat-limited and which is known to require large blocks of grassland habitat for breeding.

While the CRP initiative was not specifically intended to benefit this species, CRP has provided relatively large acreages of undisturbed grassland habitat, and Henslow's Sparrows have colonized these fields in many parts of Iowa. Creation of large tracts of undisturbed grasslands through this program appears to have been responsible for recent local reversals of long-term population declines. In other cases, four-to-six-year rotations of mowing, pasturing, and burning, when done correctly, may be beneficial. The best bet on small acreages, is to understand and follow what is provided above in Part 3.