

# FLORIDA GRASSHOPPER SPARROW By Libby Hopkins



The Florida Grasshopper Sparrow, or the *Ammodramus* *Savannarum* *Floridaensis* as it's known by its scientific name, is an endangered subspecies of grasshopper sparrow native to the dry prairies of South-Central Florida.

One of four subspecies of Grasshopper Sparrows in North America, the Florida Grasshopper Sparrow does not migrate, living here year-round (endemic). Perhaps the most endangered bird in the continental U.S., few people have seen or even heard it.

The Florida Grasshopper Sparrow is a small sparrow with a short tail and rounded head, averaging 13 cm in total length when fully grown. Like most grasshopper sparrows, their wings are brown, white, and grey in color, with patches of yellow on the alula and supercilium.

Adult sparrows have white undersides with a buff throat and breast, while juveniles have streaked breasts. The Florida Grasshopper Sparrow has a longer bill and tarsi than other subspecies and lacks reddish streaks on its nape.

The song of the Florida Grasshopper Sparrow sounds much like that of a grasshopper, from which it gets its name. Males only sing a few hours a day during the breeding season, and they often perch on twigs or dead palmetto leaves to sing when available. Singing most frequently occurs during the early morning and early evening hours, around sunrise and sunset.

Though some migratory grasshopper sparrows are distributed throughout parts of both North and South America, the Florida Grasshopper Sparrow is a non-migratory species and is thus limited in distribution to the prairie region of South-Central Florida. Counties in Florida where this species has been sighted include Glades, Highlands, Polk, Okeechobee and Osceola counties.

Habitat requirements for the Florida Grasshopper Sparrow are quite



specific. Recommended habitat consists of large tracts of poorly drained grasslands with a frequent history of fire and a limited number of trees (less than one tree per acre). Common plant species found in this habitat include bluestem and wiregrass, with occasional saw palmettos as well. As grasshopper sparrows are largely a ground-dwelling species, some bare ground is necessary as well to provide areas for movement and foraging purposes.

Florida Grasshopper Sparrows are the only subspecies of grasshopper sparrow known to breed in the state of Florida. They are known to nest between April and August on the ground at the base of a small shrub or clump of grass.

Their nests are often constructed of available plant matter nearby, which mainly consists of the leaves of bluestem and wiregrass. Females are known to lay between three and five eggs and the young fledge about 10 days after hatching. Nest success rates are often quite low, with one study observing success rates of between 10-33 percent at multiple sites. Only three locations in Florida are now known to definitively support wild populations of the sparrow, and populations are declining in all three.

Florida Grasshopper Sparrows are omnivores, with most of their diet consisting of insects, such as grasshoppers, crickets, beetles and moths. Most of the vegetation in the sparrow's diet is made up of sedge seeds and star grass seeds. Florida Grasshopper Sparrows forage near the ground, and thus, frequent fires are essential to maintain areas of bare ground for foraging.

Until large scale surveys were undertaken in the 1980s to determine the abundance and distribution of the subspecies, the number of Florida Grasshopper Sparrows present in the wild was largely unknown. Following these surveys, it was determined by the U.S. Fish and Wildlife Service that the Florida Grasshopper Sparrow be listed on the Endangered Species List. Subse-

quent surveys performed in the 1990s estimated fewer than 500 adult Florida grasshopper sparrows and recent work estimates that, under present habitat conditions, there is a 22 percent chance of extinction of the species within the next 50 years. The survival of the subspecies is highly dependent upon habitat availability, with another model correlating a loss of habitat to a 66 percent chance of extinction. Based on population trends, the species was predicted to possibly become extinct in the wild as soon as 2018-2019. However, recent conservation efforts prevented this from occurring.

The good news is that in 2014, a captive breeding program was initiated from scratch. No one had ever bred Florida Grasshopper Sparrows. After many hurdles and lessons learned, by 2019, breeding techniques had become so successful that the Florida Grasshopper Sparrow team released more than 100 sparrows into Three Lakes Wildlife Management Area. About 50 more were released in the spring of 2020 and to everyone's joy, not only did many of the released birds survive but they also successfully nested in 2020, adding to the wild population.

The Florida Grasshopper Sparrow Working Group is composed of managers of properties the sparrows occupy, researchers, federal and state wildlife agencies, and Audubon. The group's short-term emphasis: manage the sparrows' habitat to the best standard possible. The essential longer-term need is to maintain an intensive research effort examining threats like disease, genetics and fire ants, as well as nest success and population change. This effort is being funded principally by the Florida Fish and Wildlife Conservation Commission. The U.S. Fish & Wildlife Service, FWC and others are funding several captive breeding efforts, and other partners, including Audubon, are contributing funds and manpower to cooperative efforts.