

THE FLORIDA GRASSHOPPER SPARROW

By Libby Hopkins



The Florida Grasshopper Sparrow or the *Ammodramus Savaannarum Floridaanus*, as it's known by its scientific name, is a small bird that can reach a length of five inches with a wingspan of eight inches. This species is drab colored with a pale median stripe on top of its flattened head and a light brown breast.

Florida Grasshopper Sparrows inhabit dry open prairies that contain bunch grasses, low shrubs, and saw palmetto. They can be found in south-central Florida in the counties of Polk, Osceola, Highlands, and Okeechobee.

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.

The diet of the grasshopper sparrow primarily consists of grasshoppers and seeds.

From late March to July, males sing from perches on shrubs and grasses to maintain their breeding territories.

The primary song consists of two or three weak introductory notes followed by an insect-like "buzz." A less frequent secondary song is a sustained rambling warble. Adults are sedentary, using the same territory during successive years.

Nests are made of grass, dome-shaped, and are usually located in a slight depression in the ground, well-concealed by clumps of dwarf live oak, wire grass, or saw palmetto. Grasshopper sparrows are bimodal breeders – they breed throughout the year. Three to five eggs are laid and then incubated for 11-12 days by both parents. Grasshopper sparrow eggs are creamy-white with reddish-brown spots on the large end. Young grasshopper sparrows are nurtured upon hatching for about eight days. A second or third nesting attempt may be made within the breeding season.

The sparrow is highly endangered as a result of its exclusive dependence upon Florida's dry prairie habitat, more than 85 percent of which has been destroyed. Most prairie loss has resulted from conversion to domestic pasture grasses, which support more cattle per acre and can support many species of prairie wildlife, but not Florida Grasshopper Sparrows. This "improved pasture" lacks the structure that these birds need.

Research indicates the sparrows need native prairie in prime condition—it should burn every two years and as a result, have virtually no brush or trees. Burns at the end of the dry season (April-June) are considered better than other times of the year.

Despite our detailed understanding of their habitat requirements, sparrow populations have declined on all three con-



servation lands where they remain, with 2019 reporting the lowest counts in history.

Unfortunately, the reasons for the decline are unknown but suspects include suboptimal habitat management, fire ants and other predators destroying nests, diseases, and genetic problems.

In recent years only a few singing males and a handful of successful nests have been detected. Similarly, the counts of singing males at Kissimmee Prairie Preserve State Park declined from 150 a decade ago to only a few found on the entire 50,000-acre property and at Three Lakes Wildlife Management Area, where as many as 140 singing males were counted in 2008, recent counts have been as low as the mid-30s and sliding downward.

Another subpopulation has been found on a private ranch and that landowner has graciously allowed researchers to study those birds, but even with them, in 2019, the total population may have been less than 100 birds. At these population levels, genetic problems become a major concern.

The good news is that in 2014, a captive breeding program was initiated from scratch. No one had ever bred Florida Grasshopper Sparrows before. 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.

The breeding program has been expanded to several facilities and they now have confidence that they can raise many sparrows to release. So many in fact, that decisions on how to repopulate more properties need to be made. This remains a work in progress and many hurdles lie ahead, but Audubon is very proud and impressed with the dedication and hard work of so many entities and professionals.