



Figure 1. Grasshopper Sparrow at Syracuse Airport, Onondaga Co., New York, 20 June 1976. Photograph by Paul DeBenedictis.

GRASSHOPPER SPARROW AT PLATTSBURGH AIR FORCE BASE

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The Grasshopper Sparrow (*Ammodramus savannarum*) is classified as a species of Special Concern in New York State. Data from Breeding Bird Survey routes show that this species is declining in New York State (Smith and Smith 1992). The breeding distribution of this species show it to be an uncommon to rare grassland sparrow that breeds in only scattered locations in the North Country (Andrle and Carroll 1988). The most significant clusters of sightings occurred 1) in the Eastern Ontario Plains of Jefferson County in the vicinity of the Perch River Wildlife Management Area and Fort Drum, 2) just north and west of Oneida Lake, 3) in the upper Hudson Valley of Saratoga and Washington Counties, and 4) in more scattered locations on the St. Lawrence Plains/Transition, particularly in northern Franklin County.

A review of *The Kingbird* (1980 to 1994) indicates that some of the favored locations for Grasshopper Sparrow are airports, cemeteries and places like Saratoga Battlefield National Historical Park. Grasshopper Sparrow is often closely associated with these man-made habitats. For example, Floyd Bennett Field, once the municipal airport for New York City and now part of the Gateway National Recreation Area (Snell 1994), is an important nesting area for the Grasshopper Sparrow. It has been reported by many that Grasshopper Sparrow populations can fluctuate widely from year to year. For example, at the Gateway National Recreation Area, at least 12 nests were reported each year from 1981 to 1987. Then in 1988 and 1989 the number of nests dropped drastically to 5 and 4 respectively (Schiff and Wollin, 1989).

HISTORY

On 24 June 1993, the Base Realignment and Closure Commission recommended to the President that Plattsburgh Air Force Base (PAFB) be closed. The U.S. Air Force has announced the closure date of 30 September 1995. The Plattsburgh Intermunicipal Development Council was formed on September 1993 to develop a reuse plan for the base. The fate of the various habitats that now exist on PAFB very much hinges on how the base will be developed. Whether portions of it will be set aside for as wildlife management areas or whether it will be commercially

developed was still in question as of December 1994. There is a high potential for dramatic changes in the land use patterns at the base, as it changes from military to civilian use.

During the spring and summer of 1994 the author was under contract to the New York Natural Heritage Program to conduct rare animal surveys at PAFB. Given the history of Grasshopper Sparrow favoring similar habitats for nesting, it was not a surprise to find them along the runway of PAFB. In fact, I heard from various servicemen that during the time period of the Atlas (1980-1985) Grasshopper Sparrow was present along the runway. Grasshopper Sparrow was observed here between 1986 and 1992 (Peterson, 1994). However, when field work on the Breeding Bird Atlas was taking place, PAFB was a Strategic Air Command Base and off limits to civilians. As a result it was not possible to gain access to the interior portions of the base. Observers were limited to what they could see and hear from the various roads that run along its periphery. This seriously limited the coverage of the atlas block in which this base was located.

HABITAT

The soil at this site is described as sandy and very well drained. The habitat is very dry and barren. Most of the vegetation cover is tufts of grass. Along most of the 3.6 miles of habitat there is no shrub growth. Only as you get toward the southern portion of the runway is there a few percent coverage of shrub growth, consisting of immature Pitch Pine, Black Chokeberry, Sweetfern, blueberry, huckleberry, some small White Pine, and a few small Gray Birch. Other plant growth includes Bristly Sarsaparilla, Sheep Laurel, raspberry, horsemint, wintergreen, knapweed, spurge and Trailing Arbutus. The climax type at this site is pitch pine-heath (blueberry, huckleberry and sweetfern) understory.

How extensive is this grassland habitat along the runway? The runway itself is 11,760 feet long and about 300 feet wide. The best habitat for the Grasshopper Sparrow is a narrow strip of grassland between the periphery road (access road) and the runway, totaling about 150 acres. This strip of grassland is 300 to 400 feet wide in most places and a little bit wider toward the southern end of the runway. Nowhere is it any more than 800 feet wide. On the west side of the periphery road the habitat (about 200 acres) is more mature. The vegetation is taller, there is more shrub cover, and generally fewer grassland birds. There are also some other grassland islands on the east side of the runway, to which I did not have access. It may also have nesting Grasshopper Sparrows.

There are metal posts along the access road. These rather fat posts are about two and one-half feet tall and serve as convenient perches for Grasshopper Sparrow.

Airplane traffic along the runway was light. Grasshopper Sparrow perched within a few feet of the runway as jets raced by them with a thundering noise. The birds appeared to be oblivious to the noise, however.

GRASSHOPPER SPARROW OBSERVATIONS

My first visit to PAFB was on May 19. Even at that early date many Grasshopper Sparrow had already set up territories and were singing. That day I located nine individual birds along a 3.3 mile stretch of the runway. At this point I realized that the short grass habitat along the periphery of the runway was home to a colony of Grasshopper Sparrow.

With the impending change soon to occur at the base, I felt it was important to try to quantify the size and extent of the population. It was important to begin to develop baseline data before the base was closed. On 16 June I conducted a thorough inventory of grassland birds along a 3.6 mile stretch of habitat parallel to the runway. I stopped every tenth mile to listen to and observe grassland birds. This two hour (7:30 to 9:30 AM) inventory turned up 17 Grasshopper Sparrow, 12 Vesper Sparrow, 19 Savannah Sparrow, 3 Horned Lark and numerous Eastern Meadowlark.

I also observed an adult Grasshopper Sparrow perched on a metal post with a grasshopper or green caterpillar in its bill. The bird was reluctant to go to its nest until I drove the car further down the access road. Having done that, it quickly jumped off its perch to the ground. I thought I would try to locate the nest, I assumed it was going to. The nest was within twenty feet of the perch. As I got to within about two feet, the adult flushed. It tried to lead me away from the nest by appearing to be injured and giving a distress call (distraction display).

Most of the ground surrounding the nest was covered with tufts of short grass with bare sandy patches between the tufts. The nest was concealed from the top by a canopy of grass. This not only concealed the nest, but provided shade for the young. The entire nest was covered by this canopy, except the entrance, which faced the perch. The nest seemed to be sitting in a depression in the earth. The canopy did not rise any more than about three inches above the ground. I found 3-4 young in the nest. Each was covered with a fairly dark gray coat of downy feathers. Andrle and Carroll (1988) give 29 June to 19 August as dates for

unfledged young. This nesting represents the earliest report of unfledged young in New York State by 13 days. More information about the chronology of breeding Grasshopper Sparrows at PAFB would be useful in managing this species.

A visit to this grassland site on 29 July revealed many Grasshopper Sparrow still singing, but not yet in their adult plumage. A later visit on 4 August still found a good number of them singing. There are reports of a protracted breeding season for this species (Smith and Smith, 1992). All the other grassland sparrows were quiet by this time, however.

DISCUSSION

A review of *The Kingbird* indicates that this may be the largest concentration of Grasshopper Sparrow in the North Country. This short grass habitat along the runway at PAFB supports a very high population of Grasshopper Sparrow and other grassland birds. The habitat appears to be close to ideal for nesting Grasshopper Sparrow.

This grassland is currently maintained by a schedule of mowing. Vegetation is not allowed to get any taller than fourteen inches. Then it is cut down to a level of six to eight inches. Given the rather dry habitat here, plant growth early in the season is slow. The first mowing was fairly late (mid July) in the season, after many of the grassland birds had completed nesting. As pointed out earlier, the nest did not rise any more than three to four inches above the ground. Therefore, cutting the grass to the level of six to eight inches would not disturb Grasshopper Sparrow nests, unless the tires of the machinery ran directly over the nest. The present mowing regime does not seem to conflict with nesting of this species.

I hope that when the assets of the base are evaluated, the short grass habitat with its colony of Grasshopper Sparrow is recognized as rare to the region, and therefore worthy of protection and wise management.

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