

**PREDATION OF A FLORIDA GRASSHOPPER SPARROW  
(*Ammodramus savannarum floridanus*) FLEDGLING  
BY A CORN SNAKE (*Pantherophis guttatus*)**

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We report an observation of a Florida Grasshopper Sparrow (*Ammodramus savannarum floridanus*) fledgling consumed by a corn snake (*Pantherophis guttatus*) at Three Lakes Wildlife Management Area, in Osceola County. The Florida Grasshopper Sparrow is a critically endangered subspecies dependent on the dry prairie habitat of south-central Florida (Pranty and Tucker 2006). Snakes are frequent predators of Florida Grasshopper Sparrow nests (Hewett Ragheb and Miller, unpubl. data), but little is known regarding the causes of mortality of Florida Grasshopper Sparrows during the post-fledging period.

We regularly visited the territories of color-banded males to document reproductive behaviors and search for nests as part of an ongoing demographic study of the Three Lakes population. On 8 May 2015 we observed a pair of adult Florida Grasshopper Sparrows carrying food to a single location and disposing of fecal sacs, but we did not locate a nest. On 9 May 2015 we returned to that territory and over a 2-h period observed two adults carrying food to three locations. We concluded that the nestlings had fledged since the previous day's visit and that the adults were tending at least two fledglings.

As we prepared to leave the area, one of the adults replaced its typical and infrequent chip alarm notes with more persistent and agitated chip notes. The adult's vocalizations were accompanied by targeted and repeated fluttering flights to the ground. Investigation revealed a corn snake (*Pantherophis guttatus*) on the ground near the agitated adult sparrow. The snake was approximately 1 m long and had an externally visible bulge that we could see moving posteriorly toward its stomach, indicating a recently swallowed food item. We captured the snake by hand and gently palpated it, causing it to regurgitate its stomach contents. The entire meal consisted of a single Florida Grasshopper Sparrow fledgling (Fig. 1). Based on its size, lack of complete flight feather unsheathing, and visible gape, we assessed the bird to be recently fledged and likely 7-10 days post-hatching. We released the snake unharmed near a depression pond approximately 300 m from the location of the incident in an area known to be unoccupied by Florida Grasshopper Sparrows. The regurgitated fledgling was cleaned and prepared as a round skin for accession to the University of Florida Natural History Museum, Gainesville.

Corn snakes are documented predators of Florida Grasshopper Sparrows, both on adults during the nonbreeding season (Dean 2001) and on eggs, nestlings, and adults during the breeding season (Hewett Ragheb and Miller, unpubl. data). Snakes are documented predators of migratory Grasshopper Sparrow (subspecies not specified) fledglings in grasslands managed using fire and cattle grazing in Iowa (Hovick et al. 2011). However, until this report, snake predation on Florida Grasshopper Sparrow fledglings had not been confirmed.

Little published information exists on the causes of mortality in other *Ammodramus* species during the post-fledging period, but predation caused 49% of mortalities on Grasshopper Sparrow fledglings in Iowa (Hovick et al. 2011). In some passerines,



**Figure 1. Corn snake regurgitating a Florida Grasshopper Sparrow fledgling at Three Lakes Wildlife Management Area, Osceola County, Florida, 09 May 2015. Photo by Lindsay M. Wagner.**

mortality during the post-fledging period has been found to be highest in the three weeks immediately after fledging (Cox et al. 2014), highlighting the need to understand this critical period in avian life cycles. Increasing knowledge of Florida Grasshopper Sparrow predators across all life stages is important for informing future conservation of this federally endangered subspecies.

## ACKNOWLEDGMENTS

We thank the staff at Three Lakes Wildlife Management Area, especially Steve Glass and Tina Hannon, for their management of the prairie and assistance in all facets of this research. We also thank Alison Fox, Heather Kraus, Archer Larned, Mark Nessel, Victoria Olmstead, Neil Pearson, and John Pulliam for their assistance in the field. Andrew Cox, Kevin Enge, Karl Miller, and an anonymous referee reviewed previous drafts of this manuscript. Funding for this project was provided through a U.S. Fish and Wildlife Service Section 6 Endangered Species Grant.

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