

DIFFERENCES IN BREEDING ECOLOGY OF SEASIDE SPARROWS IN GULF AND ATLANTIC COASTAL MARSH HABITATS

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Abstract: Seaside Sparrows (SESP; *Ammodramus maritimus*) are passerines restricted to coastal salt marsh. They are considered a species of concern by the National Audubon Society, Partners in Flight, and the U.S. Fish and Wildlife Service due to current and projected habitat loss. The Gulf Coast Joint Venture (GCJV) Landbird Monitoring, Evaluation, and Research Team selected this species as an indicator of salt and brackish marsh health, because its life history is tightly linked to this declining habitat. Unlike the Atlantic subspecies (*A. m. maritimus*, *A. m. macgillivraii*), little is known about the ecology of SESP subspecies (*A. m. fisheri*) found along the northern Gulf Coast. The current GCJV habitat model is built on assumptions based on the Atlantic Coast populations; however, marshes along the Atlantic are fundamentally different from those along the northern Gulf Coast. In this study, we compared SESP nesting data from coastal Mississippi to published data from Atlantic populations to test for differences in breeding habitat parameters. Preliminary analysis illustrates differences in multiple measures including nest location, nest survival rates, and causes of failure. This supports our initial hypothesis that significant differences exist between Gulf Coast and Atlantic SESP populations, and suggests that the GCJV model should be revised to consider data from the Gulf Coast subspecies.