

Population Status of the Seaside Sparrow in Rhode Island: A 25-Year Assessment

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The Seaside Sparrow (*Ammodramus maritimus*) is currently listed as a species of ‘special concern’ in Rhode Island and has been designated as a ‘watch list’ species in the Partners in Flight North American Landbird Conservation Plan. To assess the population status of breeding Seaside Sparrows in Rhode Island, we repeated a 1982 survey conducted by Stoll and Golet. During June and July in 2007 and 2008, 19 salt marshes were surveyed for the presence of breeding Seaside Sparrows. Counts decreased at 10 of the 11 marshes where Seaside Sparrows had been found in 1982, and on average Seaside Sparrow counts decreased 40% during the quarter-century between the historical and recent count periods. To identify possible reasons for the decline in Seaside Sparrows, we used available spatial data to quantify 1) the increase in residential and commercial development within 150 m and 1 km buffers surrounding each marsh, and 2) the loss of salt marsh habitat at each site. During the period between surveys, development within the 150 m buffer increased by an average of 69%, and salt marsh habitat decreased by an average of 14%. It is of anecdotal interest that the single marsh site that showed no decrease in sparrow populations lacked new development in the 150 m buffer, but lost 14% of its marsh area. Our findings document a dramatic decline in Seaside Sparrow numbers on Rhode Island marshes. Further research is needed to compare the local decline of breeding populations and marsh habitat to regional population trends, as well as the changing condition of their wintering grounds.

Impact Statement: The Seaside Sparrow’s worldwide geographic range is restricted to the Atlantic and Gulf coasts of the United States, where it breeds only in salt marshes. Salt marsh habitat is under pressure from development on the landward side, and sea level rise from the seaward side. The research described here will help us to assess the status of the breeding populations of the Seaside Sparrow in Rhode Island, and help us better understand the effects of landscape change on those populations.

Keywords: Seaside Sparrow; *Ammodrammus maritimus*; residential development; salt marsh loss

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