

Recent Trends in Bird Abundance on Rhode Island Salt Marshes

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Salt marsh habitat is under pressure from development on the landward side, and sea level rise from the seaward side. The resulting loss of habitat is potentially disastrous for salt marsh dependent species. To assess the population status of three species of salt marsh dependent birds in Rhode Island, we repeated a survey previously conducted in 2007 and 2008. During June and July of 2013 nine Rhode Island salt marshes were surveyed in their entirety for the presence of Saltmarsh and Seaside Sparrows and Willets. Seaside Sparrow relative abundance declined between 2008 and 2013, similar to a previous decline between 1982 and 2007/2008. Seaside Sparrow relative abundance decreased at four of the six marshes where they had been observed in 2007/2008. No Seaside Sparrows at all were detected in 2013 on two of those marshes on which sparrows had been detected in earlier surveys. The average Seaside Sparrow relative abundance decreased from 8.2 and 11.2 sparrows per marsh in 2007 and 2008 respectively to 5.3 sparrows per marsh in the 2013 survey. Average Saltmarsh Sparrow relative abundance per marsh appeared to not change between 2007, 2008, and 2013 (26, 27.75, and 26.77 sparrows per marsh respectively). Nor did the relative abundance of Willets appear to change (9.7, 13.1, and 12.4 Willets per marsh respectively). Our research indicates a continued decline in Seaside Sparrow relative abundance on Rhode Island marshes while the relative abundance of Saltmarsh Sparrows and Willets appeared to be more stable. Further research is needed to compare the local changes in salt marsh bird populations on our marshes with changes in salt marsh habitat and regional population trends.

Impact Statement:

A number of local bird species breed only in salt marshes. Salt marsh habitat is under pressure from development on the landward side, and sea level rise from the seaward side. This research provides insight into the population status of three salt marsh obligate species in Rhode Island.

Keywords: Seaside Sparrow; Saltmarsh Sparrow; Willet; salt marsh loss

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