

Management Strategy: Endangered Species Management

Saltmarshes in the Chesapeake Bay provide habitat for hundreds of species of fish, birds, mammals, and invertebrates¹. Many of the species living on these wetlands are considered threatened (likely to become endangered) or endangered (imminent danger of extinction)². An example of threatened species for the North Atlantic marshes is the Saltmarsh Sparrow (*Ammodramus caudacutus*), a bird that nests on high marsh vegetation (usually saltmarsh cordgrass) that tends to flood less frequently but is at high risk of going extinct due to nest flooding with rising sea levels. The Saltmarsh Sparrow lives in coastal saltmarshes along the United States Atlantic and Florida Gulf Coast, but only breeds in marshes from southern Maine to Virginia, making it a priority species for conservation in the region⁵.



Figure 1. A Saltmarsh Sparrow at Jacob Point, Rhode Island. Credits: Evan Lipton

■ Facilitated bird nesting (Nesting Islands)

Saltmarsh Sparrow nesting island forms is a way to increase microtopography on the marsh and can provide refugia and nesting sites in areas where flooding is a main cause of poor reproductive success for this species. This technique consists of carefully locating sediments and vegetation (e.g., from ditch plug removal projects or peat soils and sods) to create vegetated islands within the breeding areas of the Saltmarsh Sparrow. Location of the nesting islands should be in elevated areas (higher than the tidal range), to allow for more nest site availability and reduce nest failure due to tidal immersion^{6,7}.

The Great Marsh Integrated Restoration Project in Massachusetts is an example where nesting islands are

included in the marsh restoration plans. The project areas are Ipswich, Essex, and Newbury, where they will create a total of 47 nesting islands to enhance wildlife habitat and benefit the Saltmarsh Sparrow⁸.



Figure 2. Sparrow's nest flooding events become more frequent as sea level rise increases. Credits: Jeanna Mielcarek

References:

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