

ECOLOGY AND BREEDING BIOLOGY OF THE SWAMP SPARROW
(MELOSPIZA GEORGIANA) IN A SOUTHERN RHODE
ISLAND PEATLAND

BY

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ABSTRACT

The territorial behavior, habitat selection, nest ecology and breeding biology of the swamp sparrow (Melospiza georgiana) were studied in a 14.2-ha peatland in Richmond, Rhode Island, during the 1978 and 1979 breeding seasons. Twenty-four territories were delineated in 1978 and 21 in 1979 by plotting the location of singing males. The height of the singing male above the surrounding vegetation, the height of the bird above the substrate and the height and species of each songpost were recorded in 1978. The vegetation within the entire study area was systematically sampled and 39 plant communities were recognized. Nest dimensions, the position of the nest within the vegetation, the density of plants immediately surrounding each nest and the percent cover of plant communities around each nest were determined in both years. Nests were monitored at least twice each week, and often daily, throughout the season and information was recorded on all aspects of the nesting cycle.

Territory size ranged from 0.04 to 0.63 ha and averaged 0.21 ha over the 2 years. Twelve of 24 color-banded males and 11 of 21 color-banded females returned to the study area in 1979. Fifty-nine percent of all returning males occupied the same territories in successive years; 68.7 percent of all returning females selected nest sites within 65 m of the