

FEATURE ARTICLES

**LARGE-SCALE MOVEMENTS AND HABITAT CHARACTERISTICS OF KING EIDERS THROUGHOUT THE NONBREEDING PERIOD**

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*Abstract.* King Eiders (*Somateria spectabilis*) breeding in western Canada and Alaska molt wing feathers and spend the winter in remote areas of the Bering Sea, precluding direct observation. To characterize timing of migration and habitat used by King Eiders during the nonbreeding period, we collected location data for 60 individuals (27 females and 33 males) over three years from satellite telemetry and utilized oceanographic information obtained by remote sensing. Male King Eiders dispersed from breeding areas, arrived at wing molt sites, and dispersed from wing molt sites earlier than females in all years. Males arriving earlier at wing molt sites molted flight feathers at higher latitudes. Distributions of molt and winter locations did not differ by sex or among years. Of the variables considered for analysis, distance to shore, water depth, and salinity appeared to best describe King Eider habitat throughout the nonbreeding period. King Eiders were located closer to shore, in shallower water with lower salinity than random locations. During the winter, lower ice concentrations were also associated with King Eider locations. This study provides some of the first large-scale descriptions of King Eider migration and habitat outside the breeding season.

*Key words:* *distribution, habitat, migration, satellite telemetry, Somateria spectabilis, wing molt, wintering.*