

Satellite Telemetry Tracking of Three Species of Seaducks along the Atlantic Flyway (2001-09)

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During an 8-year period (2001-09), three species of seaducks (Tribe Mergini) were studied with implantable satellite transmitters (PTT-100; Microwave Telemetry, Inc.) to determine movement and habitat use. Scoters were instrumented with 39g transmitters, whereas long-tailed ducks (*Clangula hyemalis*) with 26g transmitters. Wintering surf scoters (*Melanitta perspicillata*) instrumented in Chesapeake Bay migrated to staging areas and then to breeding areas mainly in the boreal forest. Staging black scoters (*Melanitta nigra*) instrumented on the Restigouche River of New Brunswick, Canada, migrated to breeding areas mainly in transitional areas between the boreal forest and the tundra. Males of both scoter species migrated to James Bay or the Labrador coast for molting. Surf Scoters were also instrumented while molting in Labrador and migrated in October to wintering areas along the Atlantic Coast. Long-tailed ducks instrumented in Nantucket Sound in December 2007 and 2008 traveled to Chaleur Bay and Saint Lawrence River for staging in May and then to the Hudson Bay area. One female long-tailed duck traveled approximately 3000 km to Baffin Island within two weeks. The Saint Lawrence River and Chaleur Bay were major staging areas during northern migration, and Nantucket Sound and Chesapeake Bay were major wintering areas. Mortality was less than 10% for late winter to spring instrumentation of scoters, but was 35% for molting surf scoters and over 50% for early wintering long-tailed ducks. One surf scoter was shot by a hunter two years after instrumentation. However, mortality that did occur was recorded most during first 2 weeks after instrumentation.