

Patuxent Wildlife Research Center

Atlantic Seaduck Study: Movements, Habitat Use, and Feeding Ecology of Seaducks in Chesapeake Bay and other Atlantic Coastal Areas



The Challenge: The Atlantic Seaduck Project is being conducted to learn more about the breeding and molting areas of seaducks in northern Canada and more about their feeding ecology on wintering areas, especially Chesapeake Bay. Many factors related to human population increases have been implicated in causing changes in the distribution and abundance of wintering seaducks.



The Science: Satellite telemetry was used to track surf scoters (*Melanitta perspicillata*) wintering in Chesapeake Bay, Maryland and Virginia, and black scoters (*Melanitta nigra*) on migrational staging areas in New Brunswick, Canada. We analyzed characteristics of wetland habitats used by breeding black scoters and surf scoters in the eastern boreal forest and subarctic regions of Canada based on satellite telemetry data collected in the spring and summer. Analyses of the gullet (esophagus and proventriculus) and the gizzard of seaducks collected from hunters (over 1,800) on the Atlantic coast were conducted to determine if changes in feeding ecology were similar to historical data.



The Future: The projects will aid in the identification of potentially critical breeding areas and provide a baseline classification of breeding habitats used by these two species of seaducks. Other seaducks are being analyzed for food preferences and comparisons are made to the two scoter species. Understanding the feeding ecology of seaducks in wintering areas such as the Chesapeake Bay and other Atlantic coastal areas will provide managers with a better understanding of the changes in the distribution and abundance of these ducks and their ecological relationships.