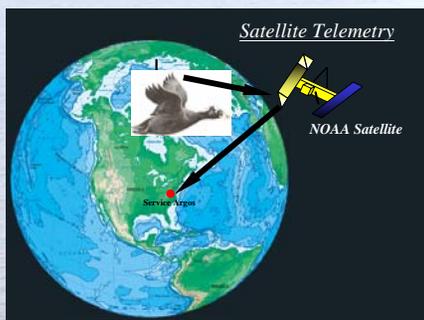


# INFORMATION TRANSFER FOR THE ATLANTIC SEADUCK PROJECT LEADING TO WATERFOWL CONSERVATION

Information transfer techniques developed by researchers can help wildlife resource managers in conserving waterfowl in the future. When technical data are transferred to managers and the public, individuals are better able to make wise decisions to protect and enhance wildlife populations and habitats. For example, the location of breeding and molting areas of some species of seaducks, especially scoters, is uncertain and presently being studied by researchers at USGS-Patuxent Wildlife Research Center. The migrational paths are of interest, and will help to further extend the knowledge concerning the areas used by scoters during various periods of their life cycle.

Research funding has come from the Canadian Wildlife Service, the U.S. Fish and Wildlife Service, the U.S. Geological Survey, and the Sea Duck Joint Venture. Both surf and black scoters are of interest, as little is known about their breeding and molting habitats. Regions of the United States and Canada could in the future, be managed more effectively for seaducks, once habitat specifics are ascertained.



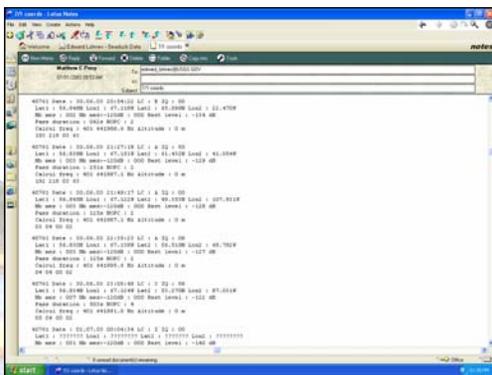
Surf and black scoters are captured and instrumented with a PTT100 satellite transmitter. These are manufactured by Microwave Telemetry, Inc. (Columbia, MD), for satellite telemetry. Service Argos, Inc. (Landover, MD) is responsible for the telemetry data. This is a satellite-based system concerned with environmental data dissemination from both mobile and fixed platforms around the globe.

The French Argos system flies aboard the NOAA Polar-orbiting Operational Environmental Satellites (POES). This system, which is fully integrated, is then able to provide the Argos users with near real-time data on their remote platforms, and for the purposes of this project, locations of the ducks can be determined. Movements of the seaducks have been presented in a variety of ways.

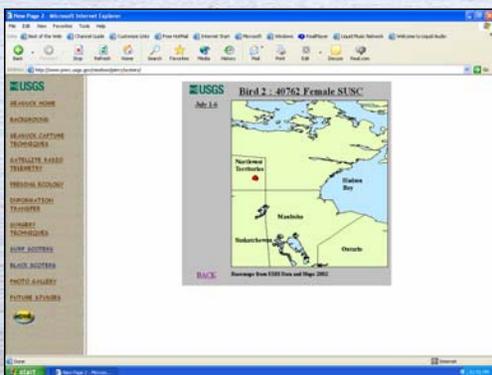
A website <http://www.pwrc.usgs.gov/resshow/perry/scoters> has been developed, and linked to that of the larger USGS Patuxent homepage. These pages contain Argos data in the form of maps showing all the instrumented ducks, and their locations. This information is updated weekly so that students, the public, and wildlife scientists may continually monitor the movements and habitat locations used by the ducks for staging, breeding, molting, and wintering.



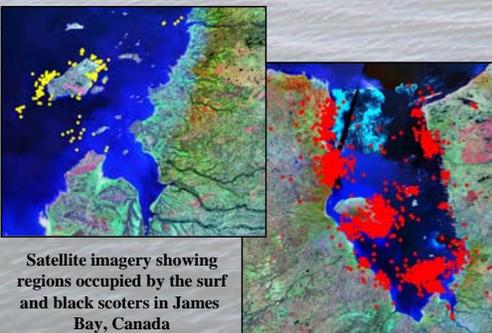
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**12100 Beech Forest Road**  
**Laurel, MD 20708, USA**



A DIAG e-mail giving bird locations



A map on the seaduck website showing the location of a female surf scoter



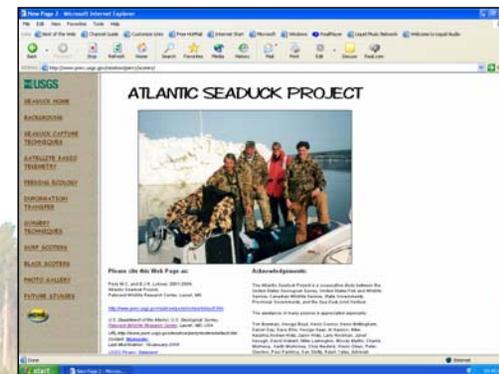
Satellite imagery showing regions occupied by the surf and black scoters in James Bay, Canada

The New York based "Signals of Spring SOS" is collaborating with the Atlantic Seaduck Project as a feature project for student interaction. SOS is funded by NASA and provides students with the opportunity to more fully understand both wildlife and technology. Students and school groups can log on to the SOS website <http://www.signalsofspring.net>, and obtain a variety of information concerning the ducks and their migration.

The SOS provides science curricula material for students and teachers, and this helps to meet the needs of schools by integrating many different subjects allowing students to develop skills in earth sciences, language arts, life sciences, geography, mathematics, and technology. Public schools that partner in this program include: New York City, Newark, Jersey City, Washington, DC, and independent schools in Houston. This is an example of how information transfer has been beneficial to the national curriculum. Other techniques have been developed in presenting information for the public. Several 4' x 3' posters and one large 8' x 12' display have been prepared for presentations at official government and non-government events. Small handouts (8" x 11") are also made available in large quantities so that they can be distributed to the public to increase their knowledge of research activities and conservation efforts for the duck species.

An interactive DVD dealing with seaducks has been produced and developed for a variety of uses including educational purposes, outreach, and the science community. Powerpoint presentations are also used to transfer technical information to conservation and scientific audiences.

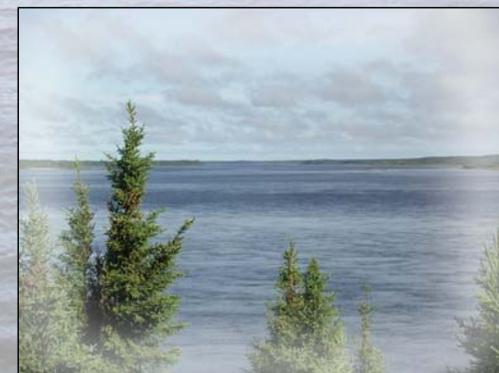
All information described above has been presented to a number of high profile groups and a variety of different conservation audiences. The techniques used in data transfer of seaducks can be applied to a variety of other birds, and also have a large number of applications for other wildlife species. Currently an interactive instructional DVD is being created for another project to assist researchers by explaining field techniques. Information transfer to the public greatly benefits the wildlife resources. It provides facts that can be used in conservation activities by government managers, non-government organizations, and may also help to promote public interest and support for future waterfowl conservation programs. Information transfer of this type is especially important for species that are declining in



Homepage of the Atlantic seaduck project



Editing video of black scoters. The footage was shot in New Brunswick and Québec, Canada



Habitat in Québec, Canada, consistent with areas used by scoters