

Refuges - Division of Natural Resources

Regional Project Updates

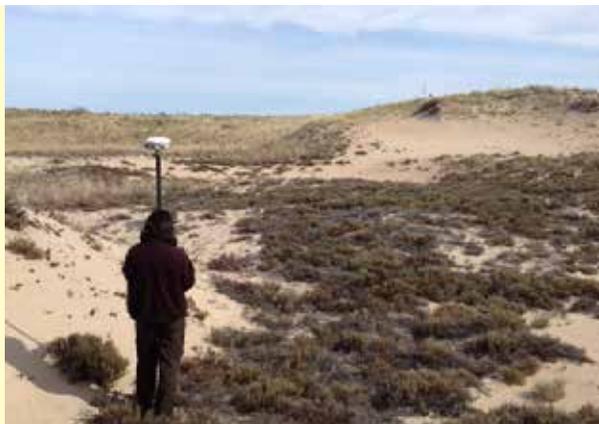
May 2013

Water Resources and Assessment

A water resources inventory and assessment (WRIA) is a reconnaissance-level collection and evaluation of information on water quantity and quality on NWRS. The inventory component gathers existing information about each refuge's water features, supply, water quality, water rights, water-related infrastructure, needs and threats. Each assessment will help guide water resource management for a refuge.

- Region 5 DNR/I&M is working with a contractor, Atkins North America, to complete WRIAs.
- Two WRIAs have been completed under this contract (Bombay Hook and Montezuma) and four have been initiated (Canaan Valley, Parker River, E.B. Forsythe, and Great Meadows).
- Completed two WRIAs (Patuxent and Cape May) prior to contract with Atkins.
- WRIAs will be initiated at three other refuges (Chincoteague, Silvio Conte, and Sunkhaze Meadows) during FY13.

Project Contact: Fred Wurster
(fred_wurster@fws.gov)



Coastal Shoreline Surveys

Coastal refuges are affected by the magnitude and rate of change on their beaches and dunes. These changes may impact natural and cultural resources as well as refuge infrastructure. Coastal shoreline surveys are part of a long-term dataset that focuses on seasonal and annual variation in shoreline position, as well as beach/dune elevation and migration.

- Fourteen refuges participate in shoreline position surveys, 7 of which also participate in beach-dune topography surveys.
- Improves our understanding of the coastal geomorphological system.
- Increases our capacity for adaptation planning.
- Collaboration with National Park Service and Rutgers University Department of Marine and Coastal Sciences.

Project Contact: Kelly Chadbourne
(kelly_chadbourne@fws.gov)
Laura Mitchell (laura_mitchell@fws.gov)

Bat Baseline Inventories

White-nose syndrome is a disease that is estimated to have killed more than 5.5 million bats. Northeast refuge biologists are seeking to increase their understanding of bat populations and their habitat use to prepare for conservation and recovery efforts. A draft inventory protocol was developed by regional staff and piloted by field staff in 2012.

- Nine refuges participated in the pilot in 2012, 30 refuges will be involved this year.
- Draft protocol developed in collaboration with other Service programs and partners
- Data will be analyzed during the winter 2012/2013.
- Data collected will provide species occupancy information, identify areas of high bat activity, and inform additional work, such as the presence of species of conservation concern.
- Two refuges also used radiotelemetry to locate maternity roosts.

Project Contact: Laura Eaton
(laura_eaton@fws.gov)



Photo credit: Melissa Lesh

Structured Decision Making

Structured decision making (SDM) is an iterative process for dealing with uncertainty in a structured, inclusive and transparent way when choosing among possible actions. SDM emphasizes careful thought when identifying the problem or issue, the objective(s) required to address it, and the associated actions, consequences and trade-offs involved with the resulting decision. Refuges in the Northeast Region have adopted this framework to guide management, and subsequent monitoring, of natural resources such as salt marshes, freshwater impoundments and other habitats and their associated communities. SDM applied repeatedly is adaptive management, which is the foundation of Strategic Habitat Conservation.

To learn more about regional projects, please contact:

Jan Taylor, Chief, Division of Natural Resources (jan_d_taylor@fws.gov)

Bill Thompson, Northeast Region Inventory and Monitoring Coordinator (bill_thompson@fws.gov)



Integrated Waterbird Management & Monitoring

Integrated Waterbird Management & Monitoring (IWMM) is a landscape scale adaptive management project that encompasses the Mississippi and Atlantic flyways (31 states; 7 Migratory Bird Joint Ventures; the Service's Midwest, Southeast and Northeast regions; and 7 Landscape Conservation Cooperatives). For more information on the IWMM effort, please see iwmmprogram.ning.com.

- Waterbird and habitat data collected using standardized protocols at 164 sites on NWRs, state management areas and private lands.
- Sixteen refuges participated in 2012.
- Habitat protocol validation study conducted in 2012 as part of continuing evaluation process.
- Developing decision support tools for managing waterbirds and their habitats at local, regional and flyway scales.

Project contacts:

Chuck Frost (charles_frost@fws.gov)

Bill Thompson (bill_thompson@fws.gov)

Development of a North and Mid-Atlantic Coast Salt Marsh Integrity Index (SMI)

Salt marshes on the Atlantic Coast have been altered since European colonization, including salt marsh haying, ditching and draining for mosquito control, and filling for roads and development. With the development of a salt marsh integrity index, refuges will have an empirical way to assess the capability of salt marsh holdings to achieve system integrity and health objectives, and to determine where there is a need for management or restoration.

- 2008 SDM workshop conducted with USGS and University of DE.
- 2009 Pilot study conducted on 9 Northeast refuges to determine most efficient monitoring metrics.
- 2012 Two SDM workshops were conducted to develop saltmarsh management decision support tools for 3 pilot refuges.
- 2012 Implementation at 11 Northeast refuges.
- 2013 Data analysis, Year 2 data collection, and continued implementation.

Project contacts:

Susan Adamowicz (susan_adamowicz@fws.gov)

Laura Mitchell (laura_mitchell@fws.gov)



Conserving the Nature of America

