



NOAA in the North Atlantic



NOAA's North Atlantic Regional Landscape

NOAA's Regional Collaboration mission is to identify, communicate and respond to regional needs, catalyze collaboration, and connect people and capabilities to advance NOAA's mission and priorities. One of the network's goals is to exchange both national and regional insights that inform action. To that end, on an annual basis NART members compile what we refer to as a regional landscape, a broad overview of changing regional conditions and issues that can be used to inform local, regional and national decision-making. This issue of NOAA in the North Atlantic includes excerpts from this authoritative document updated in April 2015, organized by the broader NOAA priorities championed by Dr. Sullivan. The full product can be accessed on google docs [here](#).

Providing Information & Services to Make Communities More Resilient

Aquaculture: Current collaborative projects in the North Atlantic region include the permitting of an off-shore mussel project off of Gloucester, Massachusetts as part of the National Shellfish Initiative, a study to look at the differentiation of cultured from wild fishery products in the marketplace, and the streamlining of regulations for an expanding aquaculture industry. NOAA is also monitoring and analyzing of pathogens of the genus *Vibrio*, an activity directed at maintaining shellfish safety.

Climate Impacts to Coastal Communities: NOAA's National Centers for Environmental Information (NCEI) Regional Climate Services (RCS) program is working with NOAA's National Ocean Service and regional ocean partnerships to plan for and respond to the impacts of climate change (primarily sea level rise) on coastal communities, regional infrastructure, coastal habitats, and shoreline management efforts. Planning for and adapting to the projected impacts from extreme weather is also a major priority for the region. In FY15, NART sponsored state-level climate information roundtables to bring tools and resources together to meet state-specific needs in planning for hazard mitigation, carbon sequestration, human health vulnerabilities, and infrastructure design. NOAA and our regional partners have also been working to design and build state-level websites for climate information, including the New York Climate Clearinghouse and the New Jersey Adapt site.

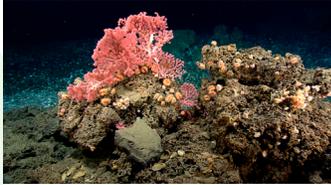
Highly visible priorities and activities in the North Atlantic include post-Sandy projects, ongoing groundfish management, habitat focus area implementation, offshore lease auctions, maritime commerce changes, Marcellus shale gas exploration and production, new national marine sanctuary nominations, and construction of the National Science Foundation-funded Ocean Observatories Initiative and Pioneer Array.

Coastal & Ocean Acidification: The North Atlantic may be especially susceptible to ocean acidification (OA) due to local factors like relatively low temperatures, significant riverine discharge, organic carbon remineralization, nutrient loading, hypoxia, and productivity. Understanding these processes, predicting the consequences for marine resources, and devising local adaptation strategies will enable local communities and dependent industries to better prepare and adapt to such changes. In June and July 2015, NOAA's OA Program will support the third of its (cont. p. 2)

(cont. from p. 1) long-term surveys, this one spanning the East Coast, to investigate the primary controls on coastal ocean's carbonate chemistry.

Deep-Sea Corals and Offshore Canyon

Research: NOAA's Deep Sea Coral Research and Technology Program, Office of Exploration and Research (OER), Office of Coast Survey and other NOAA partners continue ongoing fieldwork to locate and characterize coral and sponge communities within the northeast and mid-Atlantic offshore canyons between Virginia and Maine. Several cruises to survey the northeast offshore canyons are planned in 2015, focusing on studies of habitat suitability and modeling, population genetics, sea pen sampling, and investigations of hanging coral gardens.



Did You Know?

In late April, while the NOAA Ship *Thomas Jefferson* was transiting to its survey project area off the coast of Charleston, South Carolina, it made a scheduled stop to provide the Monitor National Marine Sanctuary with updated sonar imagery of the USS Monitor wreck site.

While the *Jefferson* was conducting sea trials and sonar system calibrations, it needed a deep site to calibrate its multibeam echo sounder. The NOAA ship was able to calibrate its survey systems and at the same time share full multibeam bathymetry and side scan sonar imagery of the wreck site. The *Jefferson* then continued on its way to collect hydrographic data at the South Carolina survey site on behalf of the NOAA Office of Coast Survey.

The wreck was last surveyed several years ago, and the new sonar imagery will contribute both to the site's management and the public's access to information about the historic Civil War ironclad vessel.

Ecological Forecasting: In 2015, National Centers for Coastal and Ocean Science (NCCOS) sponsorship and in-house scientists continue to lead efforts to expand operational NOAA harmful algae blooms, or HABs forecasting in the Gulf of Maine. Scientists at Woods Hole Oceanographic Institution will deploy multiple environmental sample processors in the western Gulf of Maine during the Alexandrium bloom season continuing a five year NCCOS Monitoring and Event Response for Harmful Algae Blooms (MERHAB) project. In Long Island Sound, MERHAB investigators from Stony Brook University, NOAA, and New York DEC will continue to monitor water and shellfish for blooms and their respective toxins on both shores of Long Island.

Ecosystem-Based Fisheries Management & an Integrated Ecosystem Assessment:

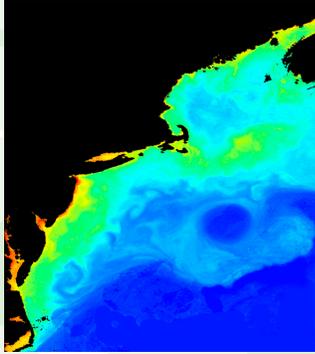
Ecosystem-Based Fisheries Management (EBFM) is a new way of looking at the management of living marine resources. Although management units are based on a combination of factors, when regional groupings show a time series change in productivity, it can profoundly affect the management of these stocks. Both the fishery management councils are working to expand capacity to manage these stocks in a climate change context. The International Council for the Exploration of the Sea Working Group on Northwest-Atlantic Regions Seas, which includes NOAA scientists, is focusing on the development of scientific support for an integrated ecosystem assessment of the Northwest Atlantic region.



Integration of Climate Science & Fisheries:

Incorporating climate change information (e.g., ocean acidification, temperature change, projected habitat shifts) in the management of trust resources is a high priority for NOAA. In FY14, NART partnered with the Northeast Fisheries Science Center and NCEI/RCS program to host a workshop that scoped the content and design of tools and products being developed for fishermen and fisheries management scientists. With support from the Cooperative (cont. p. 3)

(cont. from p. 2)
Institute for North Atlantic Research (CINAR) and NCEI/RCS, outcomes from this meeting have informed the FY15 development of a dashboard for climate impacts, climate variables, and associated scientific tools developed in support of this sector.



Ocean Planning: In response to President Obama's National Ocean Policy, the North Atlantic region established the first two Regional Planning Bodies (Northeast and Mid-Atlantic) in the Nation tasked to develop regional coastal and marine spatial plans stretching from mean high water to 200 miles offshore. These two regions are the only ones nationally required to complete ocean plans in 2016 as part of this Administration's legacy. NOAA is the federal lead in the Northeast and an active member in the Mid-Atlantic. Two regional ocean partnerships in the North Atlantic (NROC and MARCO) have received over \$9 million in financial support from NOAA and other sources to assist with this work. Both regions have also developed and will strive to maintain regional data platforms that assist managers in integrating and applying information and products to a variety of spatial management issues.



Sand Mining: Sand mining for beach nourishment occurs on a routine basis in the North Atlantic region, primarily from New York south to Virginia, and the need to identify offshore sand resources has increased recently due to shoreline damage caused by Hurricane Sandy in 2012. The US Army Corps of Engineers recently

completed a study to explore options for beach nourishment, and the Bureau of Ocean Energy Management is funding a \$5 million project to identify sand resources for potential use in future coastal restoration projects. NOAA is engaged in each of these initiatives to assess and minimize adverse effects to fish habitat and threatened and endangered species.



Significant Fisheries Issues: The Atlantic Herring Fishery Management Plan will be the subject of review and amendment in the coming year. Herring is a keystone forage species so managers want to specifically take into account the role of herring in ecosystem food webs. The recreational fisheries for had-dock and Gulf of Maine cod will open later in 2015, and due to low stock size, managers want to implement accountability measures for these recreational fisheries. Ideas include gear modifications to reduce discard mortality, possession limits, closure periods, and size limits.

Urban Waterways Restoration: Communities are facing expensive regulatory mandates and are working to restore ecological services and functions related to water quality as a result of negative impacts to water resources from past industrial practices. There are several partnership actions, including the Urban Waters Federal Partnership (UWFP), which are addressing these issues in the North Atlantic. Of the 18 locations for the UWFP nationwide, six are in the North Atlantic. NOAA is the Federal co-lead in only one of the 18 focus areas (Delaware River), but is working to connect line office activities across the region in support of this significant regional priority. (cont. p. 4)

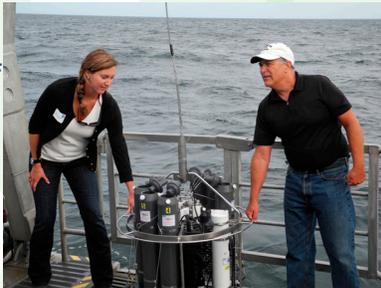


(cont. from p. 4) regional scale or for high-priority sites. Network design can be used in support of coastal elevation data and mapping resiliency, coastal change monitoring, coastal hydrology and storm surge, environmental quality and contaminants, and coast ecosystem impacts.

Achieving Organizational Excellence

Engagement of District Congressional Staff:

In December 2013, the NART held its inaugural NOAA roundtable with district Congressional staff. It was the first in a regional, multi-year effort to educate congressional staff in the region on the value of NOAA products and services to their constituents. In FY14, more than two dozen congressional staffers from 10 different congressional offices in Rhode Island, Maine and Delaware attended one-day events with NOAA employees and partners. In all, over 50 NOAA employees from every line office provided their critical expertise to the discussions. They were paired with more than 20 different partner institutions, non-governmental organizations, and local or state government agencies in explaining how these activities make a difference in that state. Feedback from the staffers has been resoundingly positive. In 2015, there will be additional roundtables in Virginia, Connecticut and New Jersey.



National Ocean Service All Hazards Drill: The primary purpose of this May 2015 drill is to exercise elements of the NOS Concept of Operations (CONOPS) Exercise. This training event is designed to exercise NOS's capability to establish incident coordination. The exercise will be held jointly with NOAA's Homeland Security Program Office (HSPO). NOAA staff, facilities, and missions will be impacted and challenged even if only through simulated exercises. The primary focus of the exercise is to provide training related to the CONOPS Plan and build greater capacity within NOS for the next real event.

Contact Nicole.Bartlett@noaa.gov for more information.

NOAA Place in the North Atlantic

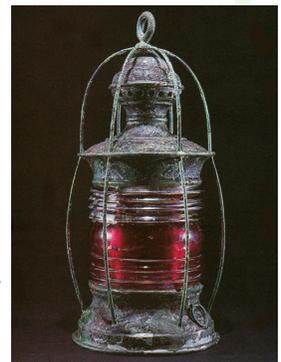
Monitor National Marine Sanctuary Office

The *Monitor* National Marine Sanctuary is located off the coast of North Carolina, but has offices co-located with The Mariners' Museum in Newport News, Virginia. The *Monitor* Sanctuary preserves the wreck of the USS *Monitor*, the famous Civil War era, ironclad warship.

From the office in Newport News, *Monitor* sanctuary superintendent, David Alberg, leads a team that includes three maritime archaeologists, an educator, a research coordinator, an IT specialist, and a NOAA Corps officer. They manage the sanctuary, study and conserve its artifacts in cooperation with the museum, and provide public education and outreach on the historic role and relevance of the *Monitor*.

In 1862, the *Monitor*, a Union vessel, faced off against the Confederate ship *Virginia*, marking the first time in history that two ironclad vessels engaged in direct combat. The encounter was a draw, but changed the course of naval history.

In the 1990s, NOAA initiated plans to preserve the wreck site and decided to undertake a partial recovery of iconic pieces to conserve and tell the *Monitor's* story. Working with the U.S. Navy, NOAA recovered key artifacts, culminating with the recovery of the rotating gun turret and cannons in 2002. The turret, as well as many other artifacts can be seen at the USS *Monitor* Center, a wing of The Mariners' Museum.



Go to monitor.noaa.gov for more information.

NOAA People in the North Atlantic Region

Christine Lipsky

Acting NOAA Regional Coordinator

What are your duties and areas of responsibility?

At NMFS's Northeast Fisheries Science Center (Maine Field Station), I primarily conduct research on endangered Atlantic salmon and their ecosystems, which includes studying fish communities in estuaries and near-shore environments. One recent project entails investigating the predation of diadromous fish by groundfish. I am also the Science Center's contact for both Atlantic and short-nose sturgeon, and am an Associate Editor of the North American Journal of Fisheries Management.

What do you consider your most significant achievements as a NOAA employee?

I have been working on a team conducting research on the Penobscot River Estuary in Maine. Surprisingly little work had been done documenting the fish community in the area, and with the removal of two major mainstem dams as well as stocking river herring in the drainage, we realized the importance of determining what fish are using the river and estuary, when they are using these areas, and how their populations are changing over time.

How does what you do impact the public and why is it important?

My work on endangered species aids managers in determining the best way to protect them. It is our responsibility to protect this public resource so that it

may be enjoyed by future generations.

Do you have any achievements outside of NOAA that you would like to mention?

In 2002, I was appointed as a Lieutenant in the Richmond-Carolina Volunteer Fire Department. I was the first female officer in the history of the department.

What is your favorite part of your job that makes you feel most fulfilled?

I really enjoy collaborating with colleagues throughout NOAA as well as from other agencies and universities on projects that would not have been possible otherwise. It is the perfect example of the whole being greater than the sum of its parts.

What is your favorite motto? And/or your favorite hobby?

My favorite motto is "One day at a time". It is very easy to become overwhelmed with everything that life can throw at us. I find that things are much more manageable when they are broken down into bite-sized pieces.

What would you recommend to those who want to begin a career at NOAA?

I would recommend talking to as many NOAA employees as possible in your area of interest to see where you might fit in. You should also familiarize yourself with the application process, since that is an often undervalued but critical step.



NART Background

The NART is one of eight regional teams created by NOAA's Regional Collaboration effort. It is composed of 17 members from five line offices and is currently led by Jason Tuell. Christine Lipsky is the acting NART Regional Coordinator. For more information on team members and activities visit: http://www.regions.noaa.gov/north_atlantic