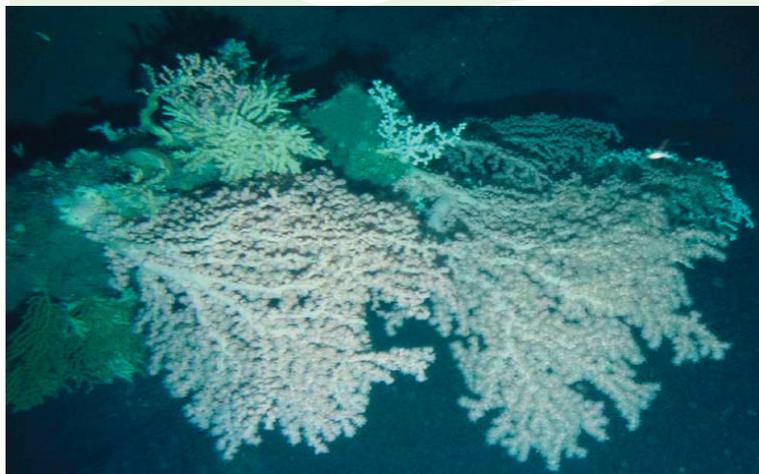




# NOAA in the North Atlantic



Deep coral from Lydonia marine canyon.

NOAA's North Atlantic region spans from the mountains of Maine to the beaches of Virginia and includes all or part of 12 states and the District of Columbia. This newsletter includes highlights of recent activities in our region brought to you by your North Atlantic Regional Team (NART).

## First Federal Fishery Sites Nominated to National System of MPAs

NOAA's National Marine Fisheries Service (NMFS) and the Mid-Atlantic Fishery Management Council have nominated four areas in the North Atlantic region to the National System of Marine Protected Areas (MPAs). The four existing MPA sites are Oceanographer, Lydonia, Veatch, and Norfolk marine canyons and are protected under the tilefish management plan.

Executive Order 13158 established the initiative to identify and develop a comprehensive, science-based, and effective national system of MPAs. The National System of MPAs is a collaborative effort of protected areas that are managed independently, but work together at the regional and national levels to achieve common conservation objectives, including supporting sustainable commercial and recreational fishing. This National System of MPAs is supported by NOAA's National Ocean Service, in collaboration with NMFS.

Clay outcroppings within the four marine canyons are considered highly vulnerable to permanent damage from certain types of bottom fishing gear. Under the tilefish management plan, all four canyons are closed to "bottom-tending mobile gear" to protect these clay outcroppings, which can provide shelter to tilefish.

To be eligible for nomination to the national system, MPAs for marine life must support at least one priority conservation objective (PCO). The four canyons support the following PCOs: ecologically important geological and oceanographic features, unique or rare habitats, and key areas for maintaining a healthy population of important harvestable species.

At the Mid Atlantic Council's December 2009 meeting, it voted unanimously to recommend the inclusion of the four tilefish gear restricted areas in the National MPA System. NOAA received no public comments on the nominations. On February 3, 2011, NOAA nominated the tilefish gear restricted areas to the National System of MPAs.

Including an existing MPA in the national system does not establish any new regulations or interfere with existing agency authorities. Therefore, there is no change to the tilefish regulations due to membership in the national system and thus, the four canyons remain closed to bottom-tending mobile gear only.

To learn more, contact [sarah.thomposon@noaa.gov](mailto:sarah.thomposon@noaa.gov) or go to: <http://www.mpa.gov>.

## NOAA Awards Money to Support Ocean Literacy in New England

The NOAA Office of Education recently announced that The New England Ocean Science Education Collaborative's Families by the Seaside project will be the recipient of a \$500,000 grant to improve ocean literacy for underserved/underrepresented families in New England.

The 3-year program will advance the way informal ocean science education centers reach these families by facilitating and formalizing relationships between five New England informal science education centers and community based organizations. Project partnerships include the Seacoast Science Center & Portsmouth Housing Authority (N.H.), BOAT CAMP & Jumpstart Youth Connection (Newburyport & Amesbury, Mass.), The Marine Science Center & Girls, Inc. (Nahant & Lynn, Mass.), New England Aquarium & Chelsea Intergenerational Learning Center (Boston & Chelsea, Mass.), and the Mystic Aquarium & Subase New London Navy Child and Youth Programs (Mystic & Groton, Conn.).

Each of the five outdoor ocean-science learning experiences is specifically designed for families in their shared service area. Programs will be evaluated and revised repeatedly. Ultimately, the program will combine coastal field experiences with web-based interactive activities which were developed by the Encyclopedia of Life. The science content will be informed and vetted by NOAA scientists and experts from the National Weather Service in Gray, Maine, NERACOOS, and University of N.H. Sea Grant.

"I am confident that our combined efforts will result in the creation of a national model for best practices which will help guide future partnerships," said project coordinator Kate Leavitt.

To learn more about the project and project partners, check out <http://www.neosec.org/projects/families-by-the-seaside>



NOAA Science on a Sphere installation at the Science Museum of Virginia. This sphere is one of 11 located in NOAA's North Atlantic Region.

## DID YOU KNOW?

NOAA recently installed two new Science on a Spheres (SOS) at museums in the North Atlantic. SOS is a spectacular, animated globe that uses computers and video projectors to display planetary data on a 6 foot sphere. The first new SOS exhibit installation in the region took place in January 2011 at the Science Museum of Virginia, located in Richmond. The second new SOS exhibit installed in the region will be at the Nurture Nature Center in Easton, Pennsylvania.

Other SOS locations in the North Atlantic region include the Ocean Explorium (New Bedford, Mass.), Whitaker Center (Harrisburg, Pa.) Maryland Science Museum (Baltimore), NASA Goddard (Greenbelt, Md.), Smithsonian Natural History Museum (D.C.), National Zoo (D.C.), James Madison University (Harrisonburg, Va.), NASA Wallops (Wallops, Va.), Nauticus (Norfolk, Va.), and the Danville Science Center (Va.).

The sphere, which can show data sets as well as movies, is considered an extraordinary tool for teaching environmental sciences to students and adult visitors.

SOS was created by NOAA's Earth System Laboratory. Funding for these exhibits was provided by a grant from the NOAA Office of Education.



An endangered right whale in the waters off New England.

## New England Federal Partners Sign “Statement of Common Purpose”

The New England Federal Partners (NEFP) is composed of regional leaders from 15 federal departments or agencies, including NOAA, that have agreed to work together in New England on the issues of climate change mitigation, climate change adaptation, and coastal and marine spatial planning.

NOAA’s North Atlantic Regional Team Lead, Peyton Robertson and representatives from the other agencies recently signed a “Statement of Common Purpose” that establishes a framework for communication, coordination, and collaboration on these priority issues.

The NEFP meet every few months and are now in the process of establishing sub-committees to work on the three priority issues. The NEFP evolved from the federal agencies working together to support the Northeast Regional Ocean Council and expanded its scope and agency participation to plan and conduct a New England federal interagency climate change meeting in June 2008. Since that time, the NEFP staffed and supported the September 2009 Interagency Ocean Policy Task Force hearing in Providence, RI and a National Ocean Policy Stakeholder Town Hall in December 2010.

The chair rotates between the Environmental Protection Agency - Region 1, NOAA (current), and the Department of Interior, which is due to take over in June.

For more information about the NEFP, contact [Nicole.Bartlett@noaa.gov](mailto:Nicole.Bartlett@noaa.gov)



An oiled marsh in Pass a Loutre, Louisiana in May 2010.

## NOAA Oil Spill Expert Speaks at Blue Planet Forum in Va.

On February 16th, 2011, David Westerholm, the Director of NOAA’s Office of Response & Restoration spoke about the agency’s role in responding to the Deepwater Horizon oil spill as part of the NOAA-sponsored *Blue Planet Forum* lecture series at the Nauticus museum in Norfolk, Virginia. Westerholm was on the scene in the Gulf for the duration of the incident and was a key figure in coordinating NOAA’s efforts to assist the spill clean up efforts and to assess the damage from spilled oil to marine resources.

Westerholm’s remarks focused on the collaborative effort between NOAA line offices and other agencies to use the best available science to assist with response activities, from inspecting seafood to tracking sub-surface oil. He also recognized several NOAA personnel from the Norfolk region who were deployed to the Gulf to assist with the spill response.

Approximately 200 people attended this Blue Planet forum lecture. Previous lectures have featured NOAA Administrator VADM Conrad Lautenbacher and Bill Read, the Director of the NOAA National Hurricane Center.

Contact [Andrew.W.Larkin@noaa.gov](mailto:Andrew.W.Larkin@noaa.gov) for more information.

## NOAA People in the North Atlantic Region

### NART Member

#### Sarah Thompson

Sarah Thompson is a marine ecologist with NOAA's National Marine Fisheries Service (NMFS) Northeast Region in Gloucester, Massachusetts. Sarah started with NMFS in 2003 as a founding member of the National Environmental Policy Act program in the Northeast Region.



Sarah ensures scientific assessments of all potential environmental impacts to NOAA's trust resources are evaluated in support of NMFS' regional regulations and actions, including fisheries management regulations, protected species management regulations, and scientific research projects.

A native of Chicago, Sarah grew up outside of New Orleans, LA and Dallas, TX, and earned a B.S. in Freshwater Ecology from the University of Notre Dame and an M.A. in Marine Ecology from Boston University. She currently lives in Danvers, Massachusetts with her husband, Chris Biegel.

#### NART Background

The NART is one of eight regional teams created by NOAA's Regional Collaboration effort. It is composed of 21 members from five line offices and is currently led by Peyton Robertson. Nicole Bartlett is the NART Regional Coordinator. For more information on team members and activities visit: [http://www.regions.noaa.gov/north\\_atlantic/](http://www.regions.noaa.gov/north_atlantic/)

## NOAA Places in the North Atlantic Region Geophysical Fluid Dynamics Laboratory

NOAA's Geophysical Fluid Dynamics Laboratory (GFDL), located in Princeton, New Jersey, develops and uses mathematical models and computer simulations to improve our understanding and prediction of the behavior of the atmosphere, ocean, and climate. GFDL builds models to support society's need for the latest scientific information relating to hurricane research and prediction, seasonal forecasting, and understanding and projecting climate change.

Since 1955, GFDL has set the agenda for much of the world's research on modeling of global climate change and has played a significant role in the World Meteorological Organization, the Intergovernmental Panel on Climate Change assessments, and the U.S. Global Change Research Program. Dr. V. 'Ram' Ramanamamy, the Director of GFDL, is considered to be one of the world leaders in climate modeling.

Recently, GFDL modelers using a new technique predicted that destructive hurricane activity would increase in the 21st century, leading to a doubling of the frequency of category 4 and 5 storms. Category 4 and 5 hurricanes making landfall account for approximately 48% of all hurricane damage in the U.S.

To create this model GFDL scientists fed results from an ensemble of 18 global climate models into a regional model with much higher resolution. GFDL's operational hurricane prediction model was then used to predict the behavior of each storm generated by the regional model. The models showed a decrease in the total number of hurricanes by the end of this century, yet still produced a doubling of category 4 and 5 hurricanes.

For more information go to [www.gfdl.noaa.gov](http://www.gfdl.noaa.gov)

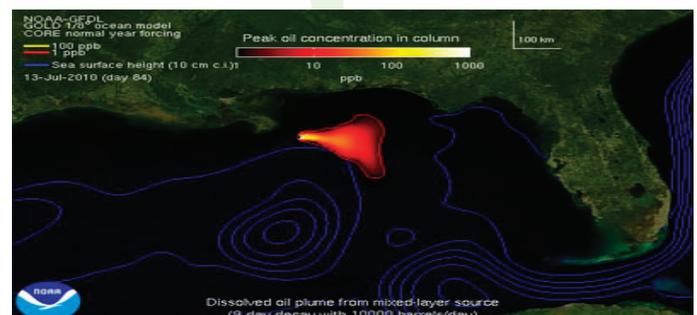


Image from a GFDL model of the toxic effects of the recent Gulf oil spill.