

NOAA Tracks Hurricane Irene, Tropical Storm Lee Impacts in the Region

Hurricane Irene made landfall in North Carolina on August 27, 2011 as a category 1 storm and continued north, producing strong winds, heavy rain, and storm surge. More than a dozen states dealt with significant and dangerous flooding, downed trees, and property damage. NOAA's National Weather Service meteorologists and hydrologists in the North Atlantic tracked and forecasted the storm's path with extreme precision and also issued warnings and predictions ahead of the devastating flooding in Vermont, Massachusetts, and New York.

NOAA's Satellite and Information Service maintained critical satellite observations at their facilities, two of which were directly in Irene's path (Wallops, Va. and Suitland, Md.). Both continued 24/7 operations throughout the storm without losing any data from the GOES satellite scanning the hurricane. NOAA's satellite downlink facility at Wallops Island, Va., experienced winds gusting to 73 mph. Despite these conditions, operators stayed onsite, providing satellite operations support for three GOES satellites and safely securing six of the installation's delicate satellite receiving dishes before winds gusts rose and risked damage.

NOAA National Ocean Service personnel and NOAA's Office of Marine and Aviation Operations worked together to rapidly survey navigation channels with the NOAA ships *Bay Hydrographer II* and *Ferdinand Hassler* to allow the Port of Virginia to re-open for maritime commerce. Office of Coast Survey emergency response teams also scrambled into action to support the re-opening of the Port of New York/New Jersey, and other important coastal ports in the wake of the storm. The National Geodetic Survey conducted aerial surveys to assist emergency managers and other responders with assessing the damage caused by Irene. NOAA tidal predictions, and real-time measurements from tide and water level gauges were also essential tools for forecasters and the public to use in preparation for storm surges occurring on top of the typical high tides.

NOAA's Chesapeake Bay Interpretive Buoy System had record numbers of real-time data downloaded from buoybay.noaa.gov before, during, and after the storm as users tuned in to get the latest information on winds and waves produced by Irene. NOAA scientists also used the monitoring buoys and satellites to track potential changes to the Bay's sediment and oxygen levels caused by the flooding in the Bay watershed from Irene and Tropical Storm Lee.

NOAA collaborated across the entire coast to predict, and help communities prepare for and respond to these extreme weather events. We echo Dr. Lubchenco's thanks to the NOAA staff who worked around the clock "to make sure Americans up and down the densely populated East Coast were properly alerted to this large and destructive storm."

NOAA Buoy Launched at the Mouth of the Chesapeake Bay

On August 17, 2011, the NOAA Ship *Thomas Jefferson*, deployed a NOAA Chesapeake Bay Interpretive Buoy at the mouth of the Bay. This buoy, located near the Chesapeake Bay Bridge-Tunnel, is the tenth “smart buoy” in the Chesapeake Bay Interpretive Buoy System (CBIBS), and is managed by the NOAA Chesapeake Bay Office.

The placement of the buoy completes the observational “backbone” of this system, which provides real-time data on local meteorological, oceanographic, and water quality conditions for a variety of users. The data from the buoys are relied on by National Weather Service meteorologists, marine safety personnel with the U.S. Coast Guard, tug boat and ferry boat captains, scientists and recreational boaters and fishermen. CBIBS is also an important coastal component of the Integrated Ocean Observing System (IOOS).

CBIBS data can be accessed on <http://buoybay.noaa.gov> (<http://www.buoybay.noaa.gov/m> for mobile devices) and by toll-free phone at 877-BUOY-BAY (877-286-9229). This information is also available via free Android and iPhone applications.

Through a partnership with the National Park Service, the buoys also mark and interpret the Captain John Smith Chesapeake National Historic Trail. For more information contact Andrew.W.Larkin@noaa.gov.

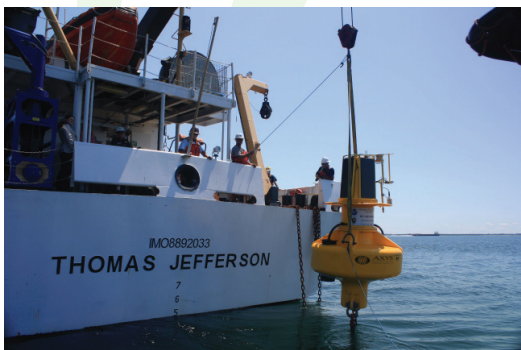


Image Credit: Deep Atlantic Stepping Stones Science Party, IFE, URI-IAO, and NOAA.

A close-up of the deep sea coral *Iridogorgia*.

Deep-Sea Coral Workshop

Deep-sea corals, also referred to as “cold-water corals,” are a diverse collection of organisms that occur in deeper or colder oceanic waters. Unlike tropical corals, these corals inhabit deeper waters on continental shelves, slopes, canyons, and seamounts in waters ranging from 160 feet to more than 6,500 feet in depth.

Twenty scientists from NOAA and other resource management partners conducted a workshop on deep sea corals on August 9-10, 2011, at NOAA's James J. Howard Marine Laboratory at Sandy Hook in Highlands, New Jersey. Their purpose was to further define the exploration and research priorities laid out in the NOAA Strategic Plan for Deep-Sea Coral and Sponge Ecosystems, and more specifically to identify critical information needs for deep-sea coral and sponge ecosystems off the eastern coast in the U.S. North Atlantic Region. The ultimate goal of the workshop was to identify steps to improve the understanding, conservation, and management of these ecosystems.

Building upon these results, the NART is supporting a workshop this fiscal year to support development of a deepwater corals predictive model that will improve understanding of these ecosystems and allow for improved management by multiple NOAA line offices.

Contact Christopher.Boelke@noaa.gov for more information.



NART Supports Development of StormSmart Coasts New England

On September 28, 2011, NOAA and partners completed the expansion of the StormSmart Coasts websites for all of New England's coastal states. The website (<http://stormsmartcoasts.org/>) has state and region specific information and strategies for improving resilience against coastal hazards such as nor'easters, tropical storms, and hurricanes.

The Northeast Regional Ocean Council (NROC) requested support from NOAA's North Atlantic Regional Team (NART) to expand the original StormSmart Coasts resource for Massachusetts developed in partnership by NOAA and the Massachusetts Office of Coastal Zone Management. The StormSmart Coasts New England network will provide information on key adaptation and resilience programs, initiatives, and pilot projects in the region. The expansion included the development of a state specific page for Maine, New Hampshire, Rhode Island, and Connecticut as well as a New England page. The New England group page is <http://stormsmart.org/groups/new-england>, which brings users to the interactive forum for New England.

NROC is using the StormSmart Coasts New England page to build a "community of practice" for coastal resilience professionals. NROC has developed a webinar and moderated online forum that mirrors the content of the network. NROC has also used the site to post information

regarding the New England Municipal Coastal Resilience Grant Program and will continue to share progress and results from the grant program with the Network. There are currently 500 members of the StormSmart Coasts community, with a growing number coming from the New England region.

Contact Adrienne.Harrison@noaa.gov for more information.



DID YOU KNOW?

This fall, the NOAA Ship *Thomas Jefferson* has been surveying 228 square nautical miles of the sea floor off the coast of New York, Connecticut, and Rhode Island, as part of a multi-year effort to update nautical charts for Block Island Sound and keep large ships and commerce moving safely. The hydrographic data acquired by the *Jefferson* will also support a seafloor mapping initiative by Connecticut and New York.

NOAA staff members and guests toured the *Jefferson* while the ship was in Boston on October 7th. The ship will be available for tours on October 29th in New London, Conn. at the U.S. Coast Guard pier from 10:00 am until 2:00 p.m. Contact Brent.Pounds@noaa.gov for more information.

NOAA People in the North Atlantic Region

NART Member

Sylvain De Guise is Director of the Connecticut Sea Grant College program and an Associate Professor in the Department of Pathobiology and Veterinary Science at the University of Connecticut. As a Sea Grant director, he oversees research, outreach, and education programs in the state. He is also heavily involved in regional initiatives including serving as the Sea Grant representative on the NART, chairing the Northeast Sea Grant consortium, and leading a Greater New York Bight regional planning initiative.



His research interests focus on the influences of man-made and natural toxics on the health of aquatic organisms, with a focus on their immune system. He has a degree in veterinary medicine (1988) and a residency in veterinary pathology at Université de Montréal, as well as a Ph.D. in immunotoxicology at the Université du Québec à Montréal (1996). He lives in Coventry, Conn., where he and his wife Jean enjoy boating and skiing.

NART Background

The NART is one of eight regional teams created by NOAA's Regional Collaboration effort. It is composed of 18 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/

NOAA Places in the North Atlantic Region

NOAA Fisheries Northeast Regional Office

The **NOAA Fisheries Northeast Regional Office** (NERO) is located in Gloucester, Mass., and manages living marine resources and their habitats for approximately 100,000 square miles of the northwest Atlantic.

NERO has primary responsibilities for fishery resources, protected species such as marine mammals, and ocean habitats. It manages commercial and recreational marine fisheries working with the New England and Mid-Atlantic Fishery Management Councils and the Atlantic States Marine Fisheries Commission.

The Regional Office is comprised of five divisions: Sustainable Fisheries, Habitat Conservation, Protected Resources, Fisheries Data Services, Analysis and Program Support, and Operations and Budget Division, Information and Resource Management. Patricia Kurkul is the NERO Regional Administrator.

NERO works on a variety of issues including developing and implementing regulations to manage federal commercial and recreational fisheries, determining whether to list species under the Endangered Species Act and consulting on other federal projects to minimize or avert impacts on habitats and protected species including threatened and endangered fish, marine mammals and sea turtles.

Colocated with the NERO organization in Gloucester are NOAA's Office of Law Enforcement, Office of General Counsel, Highly Migratory Species Division, Seafood Inspection and Habitat Restoration.

For more information about NERO, go to <http://www.nero.noaa.gov/>

