NART Meets on Hudson & Plans for Fiscal Year 2015

NOAA’s North Atlantic Regional Team (NART) held its annual meeting in July at the Norrie Point Environmental Center in Staatsburg, New York. Norrie Point is the location of the Hudson River National Estuarine Research Reserve (NERR) offices. Invited guests included the Hudson NERR Reserve Manager Betsy Blair as well as research and communications staff, Meteorologist-in-Charge Ray O’Keefe, Steve DiRienzo and Britt Westergard from the Albany Weather Forecast Office, Northeast Regional Climate Center Director Art Degaetano, New York Sea Grant extension agenda Nordica Holochuk, Ed Levine and Lisa Rosman from NOAA’s Office of Response & Restoration, NOAA’s new Northeast Navigation Manager Meghan McGovern from the Office of Coast Survey, and NOAA Western Regional Collaboration Team Coordinator, Timi Vann.

The team learned about NOAA’s activities in and around the Hudson River watershed and vetted and discussed twenty possible activities for fiscal year 2015 (FY15). In the end, our 17 current NART members settled on a suite of a dozen projects to focus NOAA’s regional collaboration efforts in FY15. Many projects continue existing work, including NART support of the Northeast Coastal Acidification Network pilot stakeholder engagement meetings that will take place in Maine, Massachusetts, and two Mid-Atlantic states this winter. The NART wave run-up project is now in its third year, and is making an exciting transition from research to experimental operations, as well as expanding into the southeast U.S. The NART will execute its second joint internship in partnership with the Mid-Atlantic River Forecast Center and NOAA’s Chesapeake Bay Office, and fund an additional internship in Fiscal Year 2016. The NART will also strengthen internal coordination to improve NOAA’s ability to drive and benefit from the Bureau of Ocean Energy Management environmental studies and monitoring for offshore wind projects.

The NART is sponsoring NOAA travel to convene roundtables with state agencies on climate data and information needs in partnership with other federal agencies. The NART will also provide funding for NOAA staff in support of their effort to coordinate NOAA ocean planning efforts on the regional planning bodies in the Northeast and Mid-Atlantic.

Other NART projects are focused on developing new partnerships, including a collection of projects linked to fisheries. The NART has initiated a National Weather Service/NOAA Fisheries...
Since 2011, the Stellwagen Bank National Marine Sanctuary, in collaboration with Massachusetts Audubon, has been conducting the Stellwagen Sanctuary Seabirds Stewards program. Scientists and volunteers have been working to collect baseline data on seabirds within sanctuary boundaries to compare populations over time, to educate the public about seabirds and to connect residents with their sanctuary. The project leaders have also trained a group of observers to join scientists in this survey. The resulting data is being used to compare relative seabird abundance to help NOAA and partner agencies understand populations within the sanctuary and their possible impacts on local ecosystems. The population data will also be used to determine if the seabird population is a barometer for other changes in the environment.

The program uses cruises on the R/V Auk and monitoring trips on five whale watch company partners’ vessels operating out of ports from Gloucester to Provincetown, Mass. This program has been partially supported by NART funding. Program Manager Anne-Marie Runfola is working with NOAA modelers to try and incorporate the program’s data into final products that the Northeast Regional Planning Body will share with the NOAA Office of Marine Sanctuaries, the Bureau of Ocean Energy Management, the U.S. Fish and Wildlife Service, and NOAA Fisheries.

For more information, contact Anne-Marie.Runfola@noaa.gov
Regional Collaboration on Eco-Forecasting

On July 18, the NART sponsored a Virtual Workshop on Applications of Ecological Forecasts. The web-based meeting was attended by almost 40 participants from every NOAA line office, partners like the New England Fisheries Management Council and the Island Institute, representatives from the Cooperative Institute for the North Atlantic Region and even the US Geological Survey.

The goals were to let the community know what sort of seasonal forecast products are out there, what products are coming, and the limitations of these products, and well as gauge the range of potential applications for seasonal forecast data and obtain feedback on level of skill and type of variables needed from forecast systems for ecological applications. Practitioners were given the opportunity to share information and develop synergies to address the general problem of ecological forecasts in marine ecosystems.

The workshop followed two sessions held last year by the NART. The NART supported a May 2013 workshop to discuss ecological forecasting in the Northeast and then a smaller, follow-on meeting was held in August 2013 specifically to facilitate direct work with forecast data. It was evident from these meetings that much of the community was unaware of the developing range of forecast data, which was an impediment to the development of forecast products. The NART saw the value of additional work to get the word out and help stimulate interest in forecast data. The role of the workshop was expanded by linking with a NOAA-funded project to develop applications of seasonal to decadal-scale climate predictions to marine resource management. This workshop was also intended to inform NOAA’s Ecological Forecasting Roadmap initiative.

Contact NART member and workshop chair Kevin.Friedland@noaa.gov for more information.

NOAA Place in the North Atlantic Profile

NOAA-University of New Hampshire Joint Hydrographic Center

The NOAA-University of New Hampshire Joint Hydrographic Center is located in Durham, N.H. on the campus of the university. The Center was founded in 1999 to develop tools to advance ocean mapping and hydrography and to train the next generation of hydrographers and ocean mappers.

The Center is a formal cooperative partnership between the University of New Hampshire (UNH) and NOAA’s Office of Coast Survey. The university’s Center for Coastal and Ocean Mapping is a complementary institution that expands the scope of ocean mapping interaction and collaboration with the private sector, other government agencies, and other universities.

The center boasts state-of-the-art technology, including a Telepresence Console, a “Geowall” high-resolution display system, as well as an acoustic test tank, labs, and classrooms. The university’s new pier at nearby New Castle provides berthing for the NOAA ocean mapping vessel Ferdinand R. Hassler and UNH research vessels.

Recently, scientists from the Joint Center discovered a new undersea mountain in the Pacific Ocean that is estimated to be more than 1100 meters high.

NOAA’s Andy Armstrong and UNH’s Larry Mayer are Co-Directors of the Joint Hydrographic Center. For more information about the Center, go to http://ccom.unh.edu/
Sim D. Aberson  
Atlantic Oceanographic & Meteorological Laboratory, Hurricane Research Division  
What are your duties and areas of responsibility?  
I am a research meteorologist with AOML’s Hurricane Research Division. Our main effort is in improving forecasts of tropical cyclones, especially those making landfall in the U.S. My own particular work involves studying small-scale features in the hurricane eye and eyewall and their impact on intensity change, looking at ways to optimize observations to get the best model forecasts, and, most important for the northeast, understanding how tropical cyclones change as they move northward into cooler midlatitude waters and impact the northeast. To do this, I participate in the annual Hurricane Field Program, in which we use NOAA aircraft to fly into hurricanes to learn about them.

What do you consider your most significant achievements as a NOAA employee?  
Tropical cyclones move with what we call the environmental flow, the winds that surround the hurricane from just above the surface to the top of the troposphere, about 14 km. From 1982 to 1996, I worked on an effort to improve model forecasts of hurricane tracks by sampling these areas around the hurricanes with dropwindsondes. We were able to show that the data improved forecasts, so NOAA procured its Gulfstream-IV aircraft and helped to develop a new dropwindsonde system to do this on an operational basis. During the next ten years, I worked on techniques to optimize the sampling of the environment, since the planes can only fly so much each day. I found that there were some places in which adding observations make no difference to the model forecasts, but there are also places which, when sampled in a certain way, the forecasts are the best. This system was officially transitioned to operations at the NOAA National Centers for Environmental Prediction in 2008.

How does what you do impact the public and why is it important?  
The improved forecasts allow for greater lead time and more accurate forecasts for people in harm’s way from hurricanes. For example, people in the northeast had at least five days’ notice that Hurricane Sandy was going to impact the area, something unheard of just a decade before.

What is your favorite part of your job that makes you feel most fulfilled?  
Working with great scientists within NOAA and outside NOAA, including in the international community. Being able to regularly fly into hurricanes is definitely a plus!

What is your favorite motto? And/or your favorite hobby?  
I love to cook, including making my own dairy products like butter, yogurt, and cheeses. I also collect tropical fruit trees and rare palms in my yard at home.

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. Nicole Bartlett is the NART Regional Coordinator. For more information on team members and activities visit: http://www.regions.noaa.gov/north_atlantic