



NOAA in the North Atlantic



Field team on Penobscot (left); telemetry receiver deployment (below).



Spotlight Species Gets Some Love From the National Weather Service

In February, NOAA Fisheries launched its “Species in the Spotlight: Survive to Thrive” campaign, a concerted, agency-wide effort to spotlight and save highly at-risk species. The Atlantic salmon - one of eight Species in the Spotlight, is the primary focus of the Northeast Fisheries Science Center’s Northeast Salmon Team based in Orono, ME, and has recently benefited from collaboration with the National Weather Service, thanks to a North Atlantic Regional collaboration Team (NART) activity from 2014.

NART alum David Vallee, Hydrologist-in-Charge for the Northeast River Forecast Center (NERFC), and John Kocik, head of the Northeast Salmon Team for the Northeast Fisheries Science Center (NEFSC) were paired together at the Maine congressional roundtable in May 2014 to present on changing conditions in Maine. Vallee presented information on Northeast precipitation patterns; Kocik on the challenges of recovering diadromous fish (those that migrate between freshwater and saltwater) in these changing conditions. To date, the NART has hosted nine NOAA congressional roundtables in six states (RI, ME, CT, DE, NJ and VA), with almost 50 staffers, 65 NOAA representatives and over 100 different partner presenters. These roundtables have been an effective way to engage congressional district staff on various aspects of NOAA’s mission in their state. They also have advanced NOAA’s organizational excellence goal by increasing collaboration in the region.

“Without that session, I would have never known about this need in NMFS for one of our products,” said Vallee.

Vallee listened with interest as Kocik presented on salmon monitoring related to river flow, and discussed how NEFSC has used telemetry on Maine’s largest river, the Penobscot, since 2005 to assess the effect of different rearing environments on smolt migration timing and survivorship. They talked during a few of the breaks and then connected again at the second Maine roundtable in August. NERFC staff visited the Orono field station in November and held a more broad information exchange. In 2015, the partnership took off. Vallee and his team provided bi-weekly briefings on river flow predictions in the Penobscot and Kennebec which allowed NEFSC fisheries staff to plan field sampling, as well as identify potential impacts on fish passage at dams. As a result, the safety of NEFSC crew that deploys telemetry receivers was enhanced, and staff time and equipment use were optimized.

In 2016, NERFC has been briefing both NEFSC and staff from NOAA Fisheries Greater Atlantic Regional Fisheries Office on weather patterns and short-medium range flow forecasts. With no field operations in the Kennebec this year, the focus is on the Penobscot River to inform estuary sampling work, telemetry deployments, and continued monitoring of impacts to salmon migration. NERFC has placed the Narraguagus River at Cherryfield, ME and the Sheepscot River at North Whitefield, ME on their list of new service locations to be calibrated based on an NEFSC request. These are key monitoring rivers for smolt (juvenile salmon) production within the Gulf of Maine salmon populations. (cont. pg. 2)

(cont. from pg. 1)

Having a flow prediction in each of these coastal salmon rivers will help keep smolt monitoring safe and more effective.

Beyond incorporating new service sites, other ways to advance the knowledge and benefit Atlantic salmon are to utilize these projections to predict run timing of smolts and management of dam operations to promote survival at hydro facilities. "Run timing" refers to the period when smolts are move from their freshwater rearing habitats to the ocean.

"There is potential for these data to inform safe smolt emigration at dams as more information on passage is gained and RFC refines forecasting. The capability NERFC has developed will help us assess the possible changes in river conditions as they may relate to river temperature," said Kocik.

"This is now a part of our normal operations," said Vallee. "Because of the NART, I was able to identify a need for our products within NOAA. It makes me wonder how much more is out there that we don't know about."



NEFSC uses its rotary screw traps to monitor smolt emigration.

This might be why the National Weather Service has been such an active member of the regional collaboration network. NWS currently has six regional team leads in the network: Ray Tanabe (Pacific Islands), Michelle Schmidt (co-lead, NOAA West), John Ogren (Central), Brian LaMarre (Gulf), Rich Bandy (Southeast & Caribbean) and Jason Tuell (NART).

"The National Weather Service is getting a lot out of our engagement with the regional collaboration teams," said Jason Tuell, NART Lead. "As this example illustrates, the connections to new customer needs in the Eastern Region alone have been invaluable."

NART Completes NJ Roundtable



Roundtable participants discussed community resilience with the Manhattan skyline in the background.

The NART-sponsored roundtable with New Jersey's Congressional district staff was held on Wednesday March 23, 2016 at Stevens Institute of Technology in Hoboken, NJ, overlooking the Manhattan skyline. Stevens is part of the NJ Sea Grant Consortium. There were 35 attendees, including a representative from each of the offices of Senator Booker, Senator Menendez, Representative Pallone, Representative Payne, and Representative Smith. NOAA presenters included NOS/ORR, NOS/CO-OPS, NOS/OCM, NWS/Mt. Holly WFO, and NMFS/GARFO. Partner presenters included NJ Sea Grant, Rutgers University, Monmouth University, Stevens Institute of Technology, Sandy Hook Pilots Association, a scallop captain, Nurture Nature Center, the Partnership for Delaware Estuary, Camden County Municipal Water Authority and NJ DEP.

The roundtable theme of community resilience in the urban environment was well-received as 'resilience' became a common word among communities after Hurricane Sandy. Senator Booker's staffer commented that "it's great to talk about resiliency in a way that means something to constituents."

NOAA's relationship with the local community was also recognized. Staffers thanked NOAA representatives for making it a priority to come to NJ and commented that "it's valuable to have the NJ local nexus put into perspective for those in DC." A fishing industry member also applauded NOAA's efforts saying "It's so important to have this interpersonal connection" in reference to the work NMFS port agents do. This is the ninth roundtable and sixth state in our regional series of NOAA roundtables with Congressional district staff. The NART will hold two more roundtables in FY '16: one in Burlington, VT on June 23, and another in Falmouth, MA on July 7. For more information, contact Nicole.Bartlett@noaa.gov.

Did You Know?

GOES-R Launch Planning Underway

In January, the mission operations team began a series of rehearsals to simulate specific phases of the GOES-R mission. These mission rehearsals use a satellite simulator and the new GOES-R ground system to train operations personnel and test the readiness of operational products and the ground system. The rehearsals simulate both nominal and contingency operations and are conducted at the NOAA Satellite Operations Facility in Suitland, Maryland. Mission Rehearsal One simulated launch, liquid apogee engine burn, and solar array deployment. The second mission rehearsal, in March, successfully exercised critical launch and orbit-raising events, procedures and facilities. The GOES-R satellite is going through final testing to ensure that it can withstand the harsh conditions of launch and the space environment.

A delegation from NESDIS, NASA, and the GOES-R Series Program Office participated in a kickoff meeting with NASA Kennedy Space Center (KSC) to formally begin planning guest operations activities associated with the launch of GOES-R in October.



GOES-R weather satellite is shown on a shaker table before vibration testing at Lockheed Martin in Littleton, Colorado, in December 2015.

GOES-R also completed vibration testing (see left), which simulates the stresses experienced during launch to ensure there are no structural weaknesses. Acoustics testing, which uses high-intensity horns to subject the satellite to extreme high sound pressure that simulates the noises created when the rocket is launched, was completed in March.

GOES-R is currently scheduled to lift off on Thursday, October 13, 2016 Space Launch Complex 41 at Cape Canaveral Air Force Station in Florida. More info at www.goes-r.gov.

NOAA Place in the North Atlantic Profile

Delaware National Estuarine Research Reserve

The 4,930 acre Delaware National Estuarine Research Reserve was designated in 1993 and is managed by the Delaware Department of Natural Resources and Environmental Control (DNREC). This reserve consists of two components: 1,087 acres of freshwater wetlands, ponds, and forest lands in Blackbird Creek, and 5,119 acres of salt marsh and open water habitats on the St. Jones River on Delaware Bay. The Blackbird Creek watershed is a predominantly rural area consisting of wetlands, forests, and agricultural lands. The St. Jones River watershed has significant development in upstream non-tidal area, where urbanized Dover dominates the middle and upper watershed. Downstream portions of the St. Jones River watershed are still primarily agricultural.

The Delaware Reserve is one of 28 areas in the National Estuarine Research Reserve System and is protected for long-term research, water-quality monitoring, education, and coastal stewardship. DNREC, in conjunction with other local partners, manages the site on a daily basis. NOAA's Office for Coastal Management provides funding, national guidance, and technical assistance. Kimberly Cole is the Reserve Manager.

Visit: <http://nerrs.noaa.gov/reserves/delaware.html>



DE NERR staff take NART roundtable participants on a tour of the reserve in September 2014.

NOAA People in the North Atlantic Region

Colleen Coogan

Greater Atlantic Regional Fisheries Office

What are your duties and areas of responsibility?

I am a communications specialist for NOAA Fisheries in the Greater Atlantic Regional Fisheries Office. I work primarily on educational outreach, implementing the New England portion of the NOAA environmental education grant program called B-WET, and facilitating internal communication within the regional office and with our headquarters offices.

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

I've worked on some great teams at NOAA Fisheries, often helping to implement measures to protect resources where outcomes are not quick or clear-cut. In hindsight, most significant is probably the work we did requiring turtle excluder devices (TEDs) on shrimp and summer flounder vessels to allow the fisheries to continue while protected listed sea turtles. TEDs have contributed to measureable increases in turtle populations, including the Kemps ridley population that was doing so poorly when TEDs were first required.

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

Early on in my career, while conducting public workshops and hearings to implement or explain NOAA Fisheries regulations, I became very aware that

the public and our regulated stakeholders often heard our communications, usually full of research results and legislative mandates, as arrogant and clinical. I became increasingly interested in making our mission and our science more accessible to the general public. Right now, I particularly love working with the B-WET grant program, helping educators offer students place-based outdoor educational investigations and stewardship projects. I believe we are growing the stewards needed to face future environmental challenges.

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

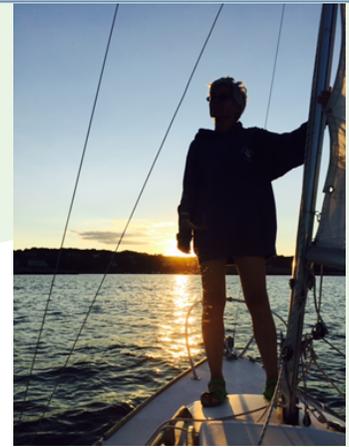
I feel lucky to be a parent that is actively involved with my children's schools. It's my own experiential education opportunity – I see firsthand how kids engage with their world, how they embrace new experiences and are passionate and creative in trying to solve problems.

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

I love seeing the lightbulb go off when helping fishermen, students, stakeholders, or other members of the public, understand the science behind some of our stewardship activities. When a regulation is recognized as needed resource protection and management instead of as an unwelcome or senseless burden, I know I've connected.

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

There are so many great careers within NOAA. I think the universal skills needed here are: curiosity, critical thinking, writing and communication, and a strong work ethic. For those interested in NOAA science and marine policy positions; take rigorous science and liberal arts classes in college. Go to a graduate school that works with NOAA so your professors are well connected to NOAA research opportunities. Take any field research opportunities you are offered. Try to emulate the qualities you like in the mentors that inspire you. Ultimately, the more people in the field you get to work with, and the more you impress them with your skills, the better your chances are of having both the experience and the recommendations that can help you work for NOAA.



Colleen photographed by her daughter during a sailing trip.

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 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