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A Newsletter from the New Jersey Sea Grant Consortium

NJSGC Launches App-ealing New Rip Current Data Tool

Recent rip current related drownings are reminders that they are potentially one of the deadliest natural phenomena. But they generally receive less publicity than other natural hazards because our understanding of them is still somewhat limited. That could all change thanks to a new tool for lifeguards and the National Weather Service that will collect and distribute up-to-the-minute rip current data and related information.

The New Jersey Sea Grant Consortium (NJSGC) and Stevens Institute of Technology held a press conference on June 6th in Spring Lake to officially introduce and demo an exciting new smartphone mobile app developed by a team of Stevens Institute Computer Science students. The device will help lifeguards track potentially deadly rip currents and assist the National Weather Service with data collecting and rip current warnings.

Spring Lake is one of the first New Jersey beach communities to

test and use the mobile application. Six other pilot towns were announced at the press conference including Belmar and Lavallette.

The *Ripcur* app project was coordinated by NJSGC Coastal Processes Specialist

Dr. Jon Miller. The press event and app itself received national and even international attention and interest and the story was picked up by most major TV networks and the Weather Channel.



10th Annual State of the Shore: NJ Beaches Ready for Summer



Bidding a formal farewell to a winter that felt more like spring, the New Jersey Sea Grant Consortium (NJSGC) kicked off the Jersey Shore summer season at its 10th annual *State of the Shore Media Event* on May 24th at Sandy Hook. The event shined a spotlight on the condition of New Jersey's beaches heading into Memorial Day weekend. NJDEP Commissioner Bob Martin as well as Division of Travel and Tourism Executive Director Grace Hanlon were on hand to provide remarks in support of the state's coastal health and thriving beach tourism industry.

The event featured the *State of the Shore Report*, authored and delivered by Dr. Jon Miller, the NJSGC's Extension Program Coastal Processes Specialist, who assured those assembled that Hurricane Irene's late summer landfall on the Jersey coast had done little to affect New Jersey's beaches in the long term.

The proceedings included remarks from Dr. Tom Herrington of Stevens Institute of Technology who was

instrumental in putting together the first *State of the Shore* event a decade ago and officials from several other key government agencies, including Michael Augustyniak of the New Jersey Office of Emergency Management and Mary Colvin of the Federal Emergency Management Agency (FEMA), who both stressed the importance of readiness in preparing for coastal hazards.

Also delivered were the results of the 5th Annual New Jersey's Top Ten Beaches Survey, which asked New Jersey residents and visitors to vote for a favorite beach. Taking the top spot for the third year in a row was The Wildwoods (which includes the trio of Wildwood, Wildwood Crest and North Wildwood), followed by Ocean City, Long Beach Island, Sea Isle City, Belmar, Cape May, Manasquan, Island Beach State Park, Sandy Hook, and Seaside Heights. Grace Hanlon and Dr. Stewart Farrell, Director of the Richard Stockton College Coastal Research Center, whose research helps determine the rankings, presented special certificates and signage to representatives of the winning towns.



NJSGC Associates Share in EPA Environmental Merit Award

The New England Office of the U.S. Environmental Protection Agency (EPA) has awarded the New England Rain Garden Training Team with the Environmental Merit Award in recognition of its exceptional work and commitment to the environment in 2011. Amy Boyajian, Program Associate of the Rutgers Cooperative Extension (RCE) Water Resources Program and former Associate Jillian Thompson are affiliated with the New Jersey Sea Grant Consortium, and Michael Dietz of the University of Connecticut is affiliated with Connecticut Sea Grant.

The Rutgers Cooperative Extension Water Resources Program Rain Garden Training Team and the University of Connecticut Nonpoint Education for Municipal Officials Program collaborated with EPA and cities and community partners in New England over the past two years to provide two-day training to residents, watershed and neighborhood groups, and youth and staff from Groundwork Providence on the function, design, construction and maintenance of rain gardens for stormwater management. They also worked with community partners, mayors, departments of public works, park staff, neighborhood and community groups, Connecticut and Massachusetts DEPs, Providence Housing Authority, Blackstone Stormwater Coalition and academic institutions. Over 500 people have been trained, and rain gardens have been installed at the Beardsley Zoo in Bridgeport, the Magnet School in Hartford, Roger Williams Park Botanical Center, the Manton



Photographed above are Caitrin Higgins of the RCE Water Resources Program, Jillian Thompson, former Program Associate of the RCE Water Resources Program and Water Resources Agent for the New Jersey Sea Grant Consortium, Amy Rowe of RCE of Essex and Passaic Counties, New England EPA Commissioner Curt Spalding, Michael Dietz of the University of Connecticut NEMO and Connecticut Sea Grant, and Chet Arnold of the University of Connecticut CLEAR.

Heights Housing Development in Providence, the Worcester Youth Center, and the VA Central Western Massachusetts Healthcare System Center in Leeds, Massachusetts.

The Rain Garden Team accepted their awards on April 25, 2012 at Faneuil Hall in Boston, Massachusetts.

Seafood Shares Hit the Consumer Market

The Sea Salt Community Supported Agriculture (CSA) program in Galloway Township tested the waters with a newly launched Community Supported Fisheries (CSF) pilot program offering current customers a chance to buy into seafood shares every other week during the 2012 harvest season. Thirty shares of littleneck clams from Nautical Nuggets in Port Republic were delivered to Sea Salt for shareholder pick-up on June 9th. The second seafood species scheduled for late June delivery was squid from Lund's Fisheries in Cape May.

Each pickup includes a fact sheet with species and supplier information and recipes prepared by NJSGC which is helping market and promote the pilot program.



Ryan Lamonaca and Jennifer Lamonaca (owner of Sea Salt CSA).

The Size the Limit

The NJSGC Extension Program has once again partnered with the NJDEP Division of Fish and Wildlife to produce and distribute recreational fishing regulation cards to anglers around the state.

NJSGC started the angling outreach project in 2005, designing a limited number of the water-resistant cards to fit into tackle boxes and be readily accessible while fishing. Demand for the cards soon exceeded supply and in 2012 nearly a quarter million were printed.

The recreational fishing outreach project also provides regulation posters to marinas that participate in an NJSGC Extension Display Case Program, launched in 2006.

For bulk copies of the marine fisheries regulation cards or a copy of the regulation poster, contact Mike Danko, Assistant Director of Extension and Marine Recreation Agent at mdanko@njseagrant.org.





Local Student Barrels Ahead with Sandy Hook Eagle Scout Award Project

The New Jersey Sea Grant Consortium's (NJS GC) headquarters at Sandy Hook is now home to a rain barrel installation project that resulted from a team effort of the Consortium, Rutgers Cooperative Extension Water Resources Program (RCEWRP), and Boy Scout Troop 201 in Rumson, New Jersey. The project was coordinated by Scout



Ethan Sackett of Rumson as part of a service project requirement necessary to receive the Eagle Scout award, one of the highest honors in scouting.

The service activity is a central component of the Eagle Scout award process, which involves developing and leading an initiative to help institutions or organizations within the scout's community. Sackett, whose mother is an educator at NJS GC, chose to work with the Consortium after learning about its

interest and need for landscaping improvements at the organization's Sandy Hook office building. Part of the plan included incorporating rain barrels into the landscaping to provide an even greener method of irrigating the newly planted native shrubs. Sackett took the lead on the project, obtaining three barrels as a donation from the RCEWRP and NJS GC. Additional materials for the project were donated by Twin Industries of Monmouth County, which supplied all the landscaping materials, and Home and Land Development Inc., which donated landscape edging as well as tools and equipment needed for the project. Ethan also worked closely with NJS GC's Water Resources Agent Amy Boyajian, who assisted him in planning the barrel installations.

The planning process began last September and reached fruition this spring when Sackett and a 40-person volunteer team of family, friends, scouts, and NJS GC staff installed the rain barrels and made a significant number of landscape and ground improvements to the exterior of Building #22 over the course of two weekends. "Developing the project was a great experience," Sackett noted. "I learned what it's

like to be a leader. The experience taught me how to be better organized and drastically improved my communication skills, as I had to relay messages to both the volunteers and members of the Consortium."

The rain barrels, which hold approximately 50 gallons, will harvest rainwater that will be used to maintain and nourish the organization's landscaping, which consists of native species shrubberies donated and planted by New Jersey Natural Gas in 2010. Sackett's Scout leaders are currently meeting to evaluate the project and decide on Sackett's Eagle Scout award. Sackett is hoping to receive his award by the end of the summer, which marks the 100-year anniversary of the first Eagle Scout award presented in September of 1912.



Eagle Scout candidate Ethan Sackett (right) with fellow Scout and project volunteer Chris Fuschetti.

Rip Current Awareness: An Innovative Partnership Continues



To better inform New Jersey's beachgoers on the dangers of rip currents, the Jersey Shore Partnership Foundation, Stevens Institute of Technology and the New Jersey Sea Grant Consortium (NJS GC) will team up for the second summer in a row with the Girl Scouts of the Jersey Shore (GSJS). Last year, education programs on rip currents were provided to the GSJS by Stevens and NJS GC staff. Over the summer of 2011, the girls planned their own rip current awareness activities and shared them in their communities and with their peers. A video produced by two girls who participated in the summer 2011 program can be viewed at

http://www.youtube.com/watch?v=SIii2LvRR5k&feature=em-share_video_user.

This summer, the GSJS will continue this project and visit Monmouth and Ocean County beaches to inventory rip current signs and add QR tags to them. When scanned with a smartphone or iPad the tag connects users to the rip current pages of NJS GC's website which includes a video showing how to recognize and escape from rip currents. To view these materials go to <http://www.njseagrant.org/extension/coastal-concerns/rip-current-awareness> or scan the QR tag in this article.

Funding for the rip current awareness program with the GSJS is provided by Jersey Central Power & Light and TD Bank.



Scientists Rise to the Bait

Scientists and Sea Grant Extension Specialists along the East Coast have taken the bait and teamed up to help prevent the invasion of new nuisance species in Mid-Atlantic waters.

Aquatic nuisance species (ANS), or invasive species, are plants, animals and pathogens that have been unintentionally or illegally introduced into aquatic ecosystems. These organisms can cause physical and economic damage to recreational, commercial, environmental, cultural or historic resources and/or create public health problems. Once an ANS has established a population, attempts to eradicate the species are extremely difficult, if not impossible.

There is consensus among scientists, economists and policymakers that a comprehensive approach is needed to address the pathways by which ANS are transported in order to prevent the introduction of invasive species. Now Sea Grant Programs from New Jersey, Delaware, Maryland, Virginia and North Carolina, the Smithsonian Environmental Research Center (SERC) and the University of Maryland are working on a project that integrates research and outreach to meet this need.

The project focuses on the pathway that plants, animals and pathogens are transported to areas outside of their normal range through the sale of marine baitworms and packing algae from Maine. Live aquatic organisms such as worms and crabs imported from other countries and regions of the United States for use as bait, are often

packed with algae from the area they are harvested from. The Sea Grant team comprised of ecological and social scientists, and extension professionals, plans to develop, implement and assess a live bait pathway (vector) prevention plan. To accomplish this, they will describe the potential pool of species, identify management opportunities along the invasion pathway to limit or eliminate the movement of hitchhiking species with baitworms/algae, and test the effect of advisory labels/informational materials on the behavior of fishermen buying baitworms in the Mid-Atlantic.

The project began this spring when suppliers in Maine shipped approximately 1,200 marine baitworms to SERC. Scientists carefully picked through the worms and algae to document species quantity and diversity. The worms were then repackaged and shipped to extension professionals in Sea Grant Programs from New Jersey to North Carolina. For three weeks extension staff surveyed anglers to assess their use of the blood worms as bait, how they disposed of packing material and leftover bait, knowledge of ANS, and willingness to participate in reducing the spread and introduction of ANS. The worms were used as a give-away to thank anglers for participating in the survey effort. This summer, scientists will continue to document the potential pool of species and extension staff will implement a more extensive survey.



CURRENT EVENTS

Ocean Fun Day Science Fair Winners



Students from Oradell Public School took first place honors in the third and fourth grade category with their project entitled "The Good, The Bad and The Jelly Fish" at the Ocean Fun Days Science Fair held on Sunday, May 20 at the New Jersey Sea Grant Consortium (NJS GC) at Sandy Hook. Pictured with the winners are (L to R): Tom Hayes, Director of Customer and Community Relations at New Jersey Natural Gas (Founding Partner of Ocean Fun Days), Claire Antonucci, NJS GC Executive Director and Rosemary Higgins, NJS GC College and Special Programs Coordinator.



Students from the Lanoka Harbor Elementary School took first place honors in the third and fourth grade category with their project entitled "Oyster Biomass" at the Ocean Fun Days Science Fair held on Saturday May 19 at Island Beach State Park.

Not pictured is the winning team in the fifth and sixth grade category at Sandy Hook from Cedar Drive Middle School, Colts Neck. Their project was entitled "How Does Sunscreen Affect Sea Life on the NJ Shore?"



Students from the Berkeley Township Elementary School celebrate at Island Beach State Park with their first place trophy as winners of the fifth and sixth grade category for their project entitled "Runoff and Permeable Surface."



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