

SPRING 2019 EDITION



We're looking forward to yet another busy summer at New Jersey Sea Grant Consortium, but in the meantime, here's what's happening now:

- Specialists at NJSGC's 17th annual State of the Shore event agree – "Come enjoy our clean and beautiful beaches."
- Scrambling to find fun, educational programs for students during vacation? NJSGC offers marine science day camp and fieldtrips throughout the season.
- NJSGC's Knauss Fellow Omanjana Goswami finds enlightenment and success in Washington, D.C.
- We've already tallied thousands of votes in NJSGC's "Favorite Beaches" poll and "Jersey Shore" photo contest find out the winners before July Fourth!
- Learn about NJSGC's Rip Current Awareness campaign, which provides important tips on beach safety and how to avoid ocean hazards.

Read on for more details!

What a crew! Several NJSGC field guides took some extra time out of their day earlier this month to replace worn-out seining nets. We're so appreciative of the amazing group of workers we have this season!

Record-Breaking Crowds at Ocean Fun Days 2019

Ocean Fun Days takeover! Thousands of attendees celebrated 16 years of energy conservation, coastal sustainability, and environmental awareness with NJSGC at Island Beach State Park and Sandy Hook (May 18-19). Over 50 exhibitors participated, offering an array of informative displays, engaging tours, and interactive workshops.



Highlights included:

- Diamondback terrapin hatchling release with Project Terrapin and Marine Academy of Technology and Environmental Science (MATES)
- NJSGC's "famous" fiddler crab races with Dr. Peter Rowe
- James J. Howard Marine Sciences Laboratory open house, hosted by NOAA's Fisheries Service
- "Rip Currents vs. Sharks" workshop with NJSGC's Dr. Amy Williams

Plus so much more! Keep an eye on the official <u>OFD website</u> for more information about next year's event.







Ocean Fun Days is presented by founding sponsor New Jersey Natural Gas, in partnership with New Jersey Sea Grant Consortium, Asbury Park Press, New Jersey Department of Environmental Protection, New Jersey Division of Parks and Forestry, National Park Service, and National Oceanic and Atmospheric Administration.

NJSGC Hosts State of the Shore Event in Asbury Park



Get the shades and sunscreen out! Several early weather forecasts already predict a hot-and-dry summer season throughout New Jersey, with much less rainfall compared to last year. With sunnier days and warmer temperatures ahead, even more people will be flocking to the Garden State's beautiful coastline over the next several months.

And thankfully, we're ready for them.

- Danica Bellini, NJSGC Communications Specialist



Dr. Jon K. Miller (NJSGC/Stevens Institute of Technology) delivered a promising report at this year's State of the Shore media event, announcing that New Jersey beaches are in prime condition heading into the Memorial Day Weekend (and beyond):

"Overall, New Jersey enters this summer season with its beaches in extremely good shape. The past two winter storm seasons have been relatively mild, which has allowed the beaches to remain fairly robust. Many communities have benefited from the addition of sand through beach nourishment projects since [Hurricane] Sandy, and the majority of that sand remains in the system, ready to absorb the impact of future storms. As is typical in the late spring/early summer, the beaches are currently in their most narrow configuration; however, they will likely regain their width in the coming months as offshore sand bars migrate towards the coastline and reattach. Due to the relatively mild winter, it is likely that the beaches will regain their full width early on in the summer season which is good news for coastal residents, businesses, and visitors.

NJDEP Commissioner Catherine McCabe expressed similar views:

"The beaches are in great shape. The water quality is in great shape. Come to the beaches and enjoy yourselves. And everyone that's not from New Jersey, come to enjoy and discover our beaches."

State of the Shore Event (cont)

View the full report **HERE**.

Dr. Amy Williams, NJSGC's Coastal Ecosystems Extension Agent from Stevens Institute of Technology, also promoted NJSGC's Rip Current Awareness campaign during an impassioned speech about beach safety and ocean hazards.

"More than 80 percent of surf-related ocean rescues are attributed to rip currents," said Dr. Williams. "It is critical that swimmers not panic if caught in one and that they swim parallel to the shoreline until they are no longer in its grasp. At that point, they should be able to swim safely back to shore."



State of the Shore (press coverage):



- NJ TV Online, <u>"A Positive Forecast at the annual State of the Shore Event"</u>
- Asbury Park Press, <u>"Killer Waves: Experts Urge Beachgoers to be Cautious"</u>
- NJDEP, <u>"State of the Shore Event Kicks off Season with Overviews of Water Quality, Public Access, Resilience, and Swimming Safety"</u>
- WHYY, <u>"NJ Beaches 'In Great Shape,' Water Quality</u> 'Excellent,' Official Says"
- My Central Jersey, <u>"NJ Beaches: Ways to be Shore</u> Ready this Summer"
- WBGO, <u>"Report Says NJ Beaches are in Good Shape</u> with Summer Near"

Learn more about rip current safety on NJSGC's <u>website</u>. NJSGC wishes everyone a happy and healthy summer – please stay tuned for more exciting announcements throughout the season!

Voting Closes Soon for Summer 2019!



https://www.surveymonkey.com/r/FavoriteBeach2019

Voters can choose their favorite local "hotspots" from a list of amazing beaches throughout Jersey Shore's four coastal counties – Atlantic, Cape May, Monmouth, and Ocean. NJSGC will announce the winners during a beachside ceremony around the July Fourth holiday.



http://njseagrant.org/photo-contest/

To celebrate NJSGC's revamped "Jersey Shore" photo contest, we'll announce the Top 12 images that receive the most votes right before the July Fourth holiday. These images will be used to create the 2020 NJSGC downloadable desktop calendar, which will also feature useful coastal facts and information that will help locals and visitors learn more about and appreciate the Jersey Shore.

*** Please visit njseagrant.org for further information and updates***

What's Going On at NJSGC?

Take a journey with NJ Sea Grant...

Marine Science Summer Day Camp
Spots are still available for 2019!

Students get to spend time at the beach while learning about marine science and the unique ecology of Sandy Hook. Best summer vacation ever – right!?

Session 1: July 8-12 (4-6 grades)

Oceanography Week

Session 2: July 15-18 (3-4 grades)

Session 3: July 22-26 (7-8 grades)

Session 4: July 29-August 2 (5-6 grades)

Session 5: August 5-9 (7-9 grades)

Using Robotics in Ocean Exploration

Please visit NJSGC's <u>education website</u> for more information on session descriptions and registration, or contact our Special Programs Coordinator Rosemary Higgins.



NJSGC is back on the Asbury Park boardwalk with 94.3 "The Point" all summer long!

Sponsored by New Jersey Natural Gas, live broadcasts will take place every Friday starting at approximately 8:45 a.m. and 6:30 p.m. NJSGC's Executive Director Claire Antonucci will lead a variety of discussions about what makes the Jersey Shore so great. Expect jawdropping fun facts, special guest appearances, and lots of laughs!

NJSGC would like to thank Tom Hayes (Director of Customer Relations at NJNG) for his continued support and dedication. Learn more about Mr. Hayes' wonderful work with "The Point" and beyond: <u>Meet the Man Lou and Liz Co-Host with in Asbury Park.</u>



NJSGC Makes an Impact with Rip Current Awareness Campaign

Above fun and relaxation, safety should always come first at the Jersey Shore. Unfortunately, the state experienced a total of eight heartbreaking fatalities during the 2017 season due to dangerous rip currents. According to reports, this marks the highest number of rip current-related deaths in one year since local branches of the National Weather Service began tracking such statistics.

Thankfully that number dropped in 2018; one fatality due to rip currents, one due to high surf, and another unknown. But starting in 2019, the goal is for that

total to remain at zero along the New Jersey coastline.

To achieve this, NJSGC will continue working with Coastal Ecosystems Extension Agent **Dr. Amy Williams** (creator of the thrilling "Sharks vs. Rip Currents" trivia game) and veteran swimmer **Donald Walsh** (author of the popular children's book <u>Teach the Beach</u>) to better inform and educate beachgoers about water hazards and ocean safety. Dr. Williams and Mr. Walsh continue traveling to schools, libraries, and festivals throughout to state to stress the importance of rip current awareness in a fun, engaging, and educational manner. Hundreds of individuals – primarily students – have already taken part in this extraordinary program, and we'll continue such work throughout the season. Please contact our Communications Specialist <u>Danica</u> Bellini for more information on this FREE presentation.





NJSGC also produces and distributes thousands of signs (available in English and in Spanish) that warn swimmers about the dangers of rip currents and illustrate what to do if caught in one. The signs are posted at high-traffic beach access and bathing points in essentially every shore community along the coast. Rip Current Awareness brochures and handouts are available upon request for municipalities at no charge. Officials interested in obtaining rip current awareness materials can visit our website or call 732-872-1300 x10.

Please help continue spreading the word about safe swimming this summer, and as always, "When in doubt, don't go out!"

Spotlight & Random Notes





We love our volunteers here at NJSGC! Amanda Hawley, a sophomore at Rutgers University – New Brunswick, aims to graduate in fall 2020 with A B.A. in Labor Studies & Employment Relations, a B.A. in Human Resources Management, and a minor in Economics. As part of her Civic Engagement Project, Amanda spent time with Scout Program Coordinator Jody Sackett to help enhance several education outreach tools and programs at NJSGC. Even without a marine science background, Amanda's passion for nonprofit efforts and her love for the Jersey Shore made her an extremely valuable piece of NJSGC's diverse and dynamic fabric.

In Amanda's own words, "I can't wait to come back to Sandy Hook this summer with my friends and show them everything I learned from my volunteer experience at New Jersey Sea Grant Consortium." And we can't wait to have her back!



NJSGC continues working with a group of bright and ambitious students from Asbury Park's Hope Academy Charter School. The students recently joined staff and volunteers aboard the Blue Sea, a 65-foot research vessel owned and operated by the Marine Academy of Science and Technology (MAST), also located at Sandy Hook.

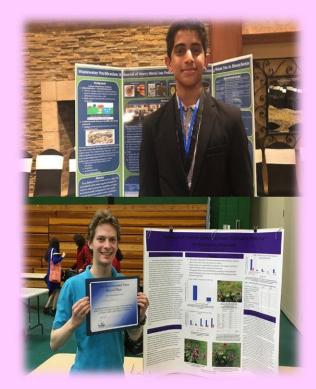
MAST instructors helped these eager-to-learn 6th and 7th graders identify and document a diverse catch of marine species while sailing the Sandy Hook Bay. A tour of the campus culminated in a lesson about 3D printing/design and a visit to the James J. Howard Marine Sciences Laboratory (NOAA Fisheries Service).



Huge thanks to the <u>Central Jersey Club-NANBPWC</u> for planning this very special trip with NJSCG and our good friends over at <u>MAST</u>.

Spotlight & Random Notes





NJSGC took park in Ocean County College's "Jersey Shore Junior Science Symposium" in March, an event which aims to recognize outstanding achievement and experimentation in STEM at the high school level.

Several students throughout the region were acknowledged for their work and expertise in various areas of study. Executive Director Claire Antonucci and Assistant Director of Extension Michael Danko bestowed two NJSGC-sponsored awards for Top Environmental Papers:

First Place: Sourish Jasti, Holmdel High School, "Wastewater Purification: Removal of Heavy Metal Ion Pollutants in Wastewater Using Tea as Biosorbents"

Second Place: Gordon Sherman, Bergen County Academies, "The Impact of Cultivar Status on Insect Pollinator Preference for Echinacea Purpurea"



The Mid-Atlantic Coastal Acidification Network (MACAN) hosted a workshop entitled "Filling the Gaps and Identifying Decision Points" in May. Several Mid-Atlantic Ocean, Coastal, and Estuarine Acidification Graduate Research Fellows participated, including NJSGC Fellow Elizabeth Wright-Fairbanks, a current PhD student at Rutgers University – New Brunswick. Back in March, Elizabeth also led a fascinating discussion as part of a MACAN webinar series entitled "The Development and Validation of a Profiling Glider pH Sensor for High Resolution Observations of Coastal and Ocean Acidification."

The video is public and can now be viewed on YouTube.



Spotlight & Random Notes

The Marine Academy of Science and Technology (MAST) held a Senior Project Exhibit Night in May prior to graduation. NJSGC's Associate Director and Director of Research/Extension Dr. Peter Rowe acted as an advisor for two students. Elizabeth Callahan studied the "Ocean Acidification Effect on Juvenile Horseshoe Crabs" and Sara Timney focused on "The Effects of Low pH on Juvenile Horseshoe Crabs." According to MAST, the yearlong research course is "designed to introduce students to the research process in real world situations."

Elizabeth will attend Eckerd College in St. Petersburg this fall, while Sara heads off to the University of San Diego.





Despite heavy rainfall, scouts traveled from all over the tri-state area to attend NJSGC's sold-out environmental science merit badge program on an early Sunday in May.

NJSGC offers trips for both boy and girl scouts throughout the year – please visit our <u>website</u> for more information.

Patrick Olivero, a photographer for <u>The Two River Times</u>, trailed the scouts and published an amazing photo feature in the Red Bank-based weekly newspaper.





NJSGC & Beyond – "In the News"





And the journey continues for NJSGC's Knauss Fellow!

Omanjana Goswami, a PhD student and Graduate Teaching Assistant at Rutgers University – Newark, is currently working in Washington, D.C. alongside a legislative cohort from Hawaii to expand her knowledge on Earth Sciences within the political realm.

Omanjana was recently featured on the official Knauss blog (NOAA/Sea Grant) in a piece entitled "Never Underestimate the Power of a Free Meal."

As she compassionately reflects:

"I hope my story sets an example for many others like me who'd like to work in science policy, but shy away from their passion (even passions discovered because of a free meal) in fear of doors closing for one reason or another, including because of their citizenship status."



Check out some recent articles, journals, and studies that feature stand-out contributions from NJSGC researchers and extension staff!

"Greater Vulnerability to Warming of Marine versus Terrestrial Ectotherms"

- Dr. Malin Pinksy, NJSGC Researcher, Nature (Internet Journal of Science)
- "Climate Change's Deadliest Effects are Unfolding under the Sea" (Grist)
- "Picture Stockton... Suiting Up for Science While the Surf's Up"
- Kimberly McKenna, NJSGC Researcher, Stockton University
 "Clean Marina Programs See Steady Growth as Programs Seek Initiatives to Attract New Facilities"
- Mike Danko, NJSGC Assistant Director of Extension, *Marina Dock Age*"Coastal Erosion Field Trip at the Sea Grant's Mid-Atlantic Regional Meeting with North
 Carolina Sea Grant Specialist Spencer Rogers"
 - Amy Williams, NJSGC Coastal Ecosystems Extension Agent, *American Shore and Beach Preservation Association (ASBPA)*, "Shores & Beaches"/Coastal Observations