

Shore to Please: Marine Fisheries Outreach and Education Efforts

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A WILD Expo

Did you visit with us at New Jersey Division of Fish and Wildlife's WILD Outdoor Expo? There—and at a growing number of special events—the Marine Fisheries Administration (Marine Fisheries) offers an educational and interactive marine resources display including live specimens of local fish, touchable beach finds, useful promotional giveaways and handouts. In addition, a variety of other marine-related treasures are provided along with videos and posters promoting the real value of fisheries surveys and data collection. Based on our popularity and success at select events, Marine Fisheries is expanding our outreach to a greater variety of events statewide.

Pequest Open House. Jen Pyle/NJ Div. of Fish and Wildlife

Community Outreach on Marine Resources

Biologists have reached out to local schools, environmental groups, boat shows, outdoor sporting events, fishing clubs, youth organizations and other audiences that enjoy the marine waters of the Jersey shore. Since 2012, Marine Fisheries staff has attended more than 20 events, most of which are held annually.

At an Earth Day event for an elementary school, our Marine Fisheries staff captured the students' attention about the importance of protecting wildlife in local waterways through smart recycling practices. School activities are adjusted to the age and curriculum of the students. Students had fun participating in a role-playing activity of saltmarsh species interactions as part of a food chain and learned about coastal predator-prey relationships.

Following a discussion about different marine resource-related education and career options with a group of high school marine science students, staff led four, laboratory-like activities: measuring water quality samples, counting horseshoe crabs, collecting biological data from American eels and aging fish by assessing their scales and otoliths, a structure in the inner ear of vertebrates.

Regional boat shows and fishing clubs are great venues for biologists to highlight their research and to connect with the public about hot topics in the fishing industry. These are also great forums to teach people how fisheries research influences commercial and recreational fishing regulations. With audiences primarily made up of active anglers, staff teach about the effects of barotrauma and the different tools that can be used to minimize damage to live fish. Safe fish handling techniques are just one part of reducing the mortality rates of fish populations.

WILD Outdoor Expo. Jen Pyle/NJ Div. of Fish and Wildlife

Green Eggs and Sand in Delaware Bay

In Cape May County, New Jersey, a program is offered for educators interested in teaching their students about the importance of horseshoe crabs. The Green Eggs and Sand workshop takes place on the Delaware Bay, pairing participants with experts in the field as well as getting to the beach to witness the ancient ritual of the horseshoe crabs spawning.

Green Eggs and Sand is a tri-state (Delaware, Maryland and New Jersey) curriculum with activities about the horseshoe crab, its relationship to shorebirds and humans plus how the species is managed. While the workshop is offered only once a year during horseshoe crab spawning season, teachers who attend the workshop can teach about horseshoe crabs all year long.

In 2016, the marine education program partnered with The Wetlands Institute to launch the pilot program of Horseshoe Crabs in the Classroom. Teachers set up a classroom aquarium keeping juvenile horseshoe crabs for an entire school year. Students were involved by learning about water quality importance for horseshoe crabs, while teachers incorporated activities from the Green Eggs and Sand curriculum throughout the school year. This popular and successful program continues to be offered.

Barnegat Bay's Sedge Island

Marine education takes center-stage at New Jersey Division of Fish and Wildlife's Sedge Island Natural Resource Education Center. Located off Island Beach State Park in Barnegat Bay, the converted duck hunting lodge offers residential programs for school groups, summer camps, educators and other users of the resource. The Center is completely off-grid, creating the perfect backdrop for teaching the importance of conservation.

Participants learn about the wise use of natural resources through something as simple as turning a light off when you're not in the room (the facility is solar-powered) to deciding how many clams to keep for today's dinner. Living on an island, participants are completely immersed in the salt marsh environment, allowing them to connect with nature by fishing at sunrise or watching the magic of bioluminescent comb jellies at night from the dock.

Fish and Wildlife's marine resource education programs demonstrate the full circle of a food web starting with the importance of submerged aquatic vegetation as habitat—by exploring eelgrass beds with a seine net—then ending with the importance of fishing regulations and an explanation of why certain fish are kept for dinner but not others. The program has participants learn about water quality through shellfish biology, as well as traditional water quality tests.

Marsh walks give participants a chance to understand the salt tolerance of plants and relate this to the impact of sea level rise on New Jersey's marshes. Participants departing Sedge Island leave with a deeper understanding of New Jersey's marine environment, with real-life changes they can make in their life to help conserve the natural resources they explored in the program at Sedge Island.

See page 31 for more details about Sedge Island Natural Resource Education Center programs.

NJ Audubon Island Explorers Camp at Sedge Island. Darren Dorris/NJ Div. of Fish and Wildlife





Darren Dorris/NJ Div. of Fish and Wildlife

Getting Involved

Do you have an upcoming special event or a classroom full of students interested in learning about New Jersey's marine resources? Are you part of a fishing club looking to learn more about resource management strategies behind marine fish regulations? Are you a curious youth who would love to experience a guided exploration of salt marsh life in our coastal bays? Are you an educator whose students would be intrigued to learn about the fascinating, primitive and highly important horseshoe crab? New Jersey Division of Fish and Wildlife's biologists are ready to present our programs for your group.

To invite the Marine Fisheries staff to visit your school, group or outreach event, contact Jen Pyle at (Marine Fisheries, Jennifer.Pyle@dep.nj.gov) or Jenny Tomko (Shellfisheries, Jenny.Tomko@dep.nj.gov or call at (609) 748-2020.

For more information about Sedge Island programs or the Green Eggs and Sand Workshop, contact Karen Byrne at Karen.Byrne@dep.nj.gov or (609) 748-4347. 

