

## **NYSG Coastal Storm Education & Student Scholar Along NY's Hudson Estuary**

**N**ew York Sea Grant (NYSG) engages the public in diverse ways to enhance understanding of the complex coastal system dynamics that drive ecosystem health and waterfront economies. NYSG extension and outreach programming often works with research entities and student scholars to educate local community leaders and citizens.

In 2016, in partnership with the NOAA Coastal Storms Program and Virginia Sea Grant, New York Sea Grant mentored 2016-2017 Mid Atlantic Coastal Storms Fellowship recipient Chris Nack. This regional fellowship supports graduate student research related to coastal resilience and the impacts of extreme weather events.

### **Research, Scholarship, Extension**

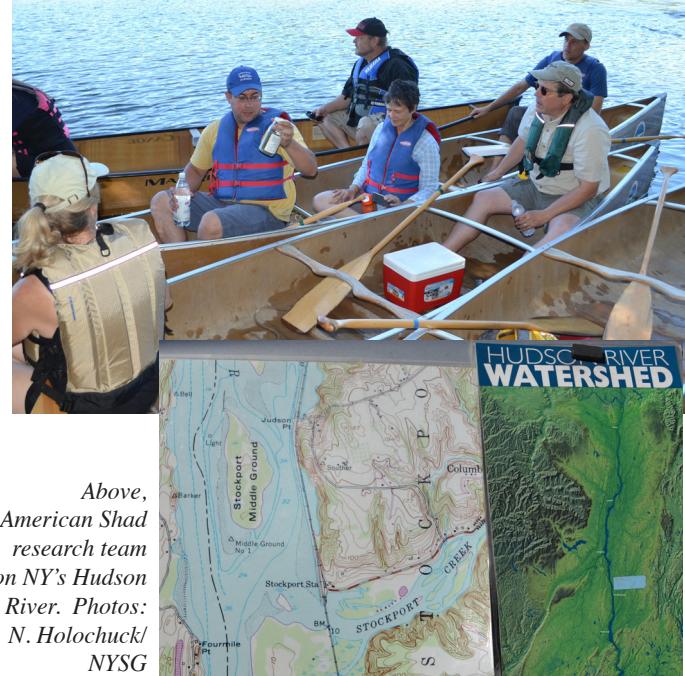
Nack, a SUNY College of Environmental Science and Forestry doctoral candidate, is examining how a Hudson River signature fish species responds to extreme storm events, e.g., Hurricane Irene, Tropical Storm Lee, and Superstorm Sandy.

Nack's ongoing research will provide insight into how storm action impacts in particular the American Shad diet and habitats along the tributaries and marshes in Columbia County, NY, from Hudson to Castleton.

Shad, an historically significant species supporting local commercial and recreational fisheries, has declined and its renewal is a New York State Department of Environmental Conservation priority.

NYSG places great value on helping the public understand what coastal research involves and how it impacts their communities. NYSG has provided Nack with hands-on experience in translating research science and data for coastal stakeholders and has assisted him with designing and implementing outreach to community groups along the Hudson.

Increasing public understanding and protecting the ecological values of the shoreline, marshes and narrow river channels are critical to maintaining and improving Hudson River habitats for numerous



fisheries. In turn, the processes occurring within these fragile habitats help protect waterfront communities from flooding during extreme storm events.

### **Partners:**

- Cornell Cooperative Extension
- New York State Department of Environmental Conservation Hudson River Reserve
- NOAA Coastal Storms Program
- Virginia Sea Grant

### ***The Sea Grant Focus Area for this project is New York Resilient Communities & Economies***

New York Sea Grant is a joint program of Cornell University, the State University of New York, and NOAA.

New York Sea Grant Extension,  
112 Rice Hall, Cornell University, Ithaca, NY 14853

*This project summary was written by  
Hudson Estuary Specialist Nordica Holochuck  
845-340-3983, nch8@cornell.edu, www.nyseagrant.org*