

## **Utilizing Education to Develop the Next Generations of Great Lakes Stakeholders**

In 2018, New York Sea Grant (NYSG) educated the next generations of Great Lakes citizens by working with more than 17,000 students and 110 teachers. Utilizing the “teach-the-teacher” approach, NYSG staff engaged teachers and students in experiential learning and provided them with resources and classroom-tested curriculum developed by Sea Grant and the National Oceanic and Atmospheric Administration. Extending science to educators, adults and youth improves knowledge of coastal habitat issues and increases Great Lakes literacy.

Through Great Lakes-focused professional development workshops, teachers from NY’s coastal counties learned about aquatic science, stewardship and STEM (Science, Technology, Engineering and Math) topics. By engaging the teachers in real-life environmental problems and solutions, they realize the fragility of shoreline ecosystems.

During an August workshop along Lake Ontario, teachers replanted beach grass after learning about its importance to the sand dune community. Much of the beach grass was damaged or washed away after high water levels the previous spring. Several teachers have since incorporated beach clean-ups or beach grass planting into coursework for the school year to involve their students in stewardship activities.

NYSG has introduced a new cadre of teachers to Great Lakes Basin Bins filled with educational materials, curricula, information and preserved specimens. The Basin Bins, available on loan, allow educators to efficiently infuse Great Lakes science into existing teaching plans at no expense.

Additionally, during the 2018 Science Exploration Day at the University at Buffalo, 1,000 students (nearly 30% from inner-city schools) and 125 teachers interacted with scientists, visited laboratories, and learned about cutting-edge research and STEM careers.



*Teachers in a NYSG-led professional development workshop replant beach grass. Photo: NYSG/Helen Domske*

In recognition of outstanding efforts in Great Lakes education, NYSG Education Coordinator Helen Domske received awards from the International Association of Great Lakes Research (IAGLR) and Science Teachers Association of New York State. Awards of this caliber demonstrate the quality of NYSG’s educational efforts and dedication to fostering the next generation of environmental stewards.

### **Partners:**

- Center for Great Lakes Literacy
- New York State Department of Environmental Conservation
- University of Buffalo
- U.S. Environmental Protection Agency
- U.S. Fish and Wildlife Service

### ***The Sea Grant Focus Area for this project is Healthy New York Coastal Ecosystems***

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  
Coastal Education Specialist Helen Domske,  
716-645-3610, hmd4@cornell.edu, www.nyseagrant.org*