



# DELAWARE SEA GRANT



February 2018

Delaware Sea Grant is one of 33 Sea Grant college programs and is based at the University of Delaware College of Earth, Ocean, and Environment.



University of Delaware students in the Robotics Discovery Lab prepare autonomous underwater vehicles for use in research. Credit: Christopher Katalinas, NOAA Sea Grant

### Delaware Sea Grant Investment Sparks Cutting Edge Robotics Discovery Lab

Delaware Sea Grant support helped establish the University of Delaware Robotics Discovery Lab (RDL) to provide opportunities for students to participate in research projects as an essential component of graduate education in the field of marine studies. Delaware Sea Grant continues to support RDL with funding to advance technology development for coastal applications, such as drone and autonomous vehicle applications for coastal resilience, including shoreline management and pre- and post-storm mapping.

[deseagrant.org](http://deseagrant.org)

2,100

Workshop and conference participants



10,900

K-12 Students reached

25

Undergraduate and graduate students supported



Metrics reported to National Sea Grant Office in June 2017 for work completed February 2016 to January 2017



RESEARCH

EXTENSION

EDUCATION

## Plankton Sampling Method used in the Search for Microplastic Debris



Delaware Sea Grant-supported students sample for microplastics as part of a Teach-the-Teacher workshop. Credit: Christopher Katalinas, NOAA Sea Grant

Microplastics are an emerging marine pollution issue with implications for the health of aquatic species, including those harvested from Delaware Bay for human consumption, such as oysters. Delaware Sea Grant-funded researchers developed a standard operating procedure for the sampling and identification of zooplankton in the Delaware Bay. This “Zooscan technology” has now been applied to sampling microplastics in the Bay. The results will be of immediate use to project partners at the Delaware Department of Natural Resources and Environmental Control as they explore strategies to investigate the extent and implications of microplastics in Delaware Bay.

[deseagrant.org/microplastics](http://deseagrant.org/microplastics)

**“The waterfront redevelopment project along the Broad Creek provides many opportunities that can really help support economic redevelopment and preservation of the Broad Creek shoreline and area open space.”**

- Don Phillips, Laurel Town Councilman

### Broad Creek Kayak Launch Enhances Waterfront Access



A new kayak launch installed by the Nanticoke Rotary Club was the result of a Delaware Sea Grant-produced waterfront redevelopment plan for the Broad Creek waterfront in Laurel, Delaware. Town officials report an increase in the number of paddlers using Broad Creek following the opening of the new kayak launch.

### Improving Coordination in Flood Prediction and Response



Coastal flooding is a frequent occurrence in Delaware, but there has been no central coordination or cross-agency data synthesis to assess the impacts of flood events. Support from Delaware Sea Grant helped a state agency partnership install 15 water level sensors to monitor coastal flooding in the town of Slaughter Beach, which will serve as a model for other coastal communities in Delaware.

### Diving Under the Scope to Improve K-12 Education



Delaware Sea Grant researchers and education specialists worked together to develop a successful research-based educational website ([www.underthescope.udel.edu](http://www.underthescope.udel.edu)). Teachers participating in the Under the Scope education program take part in a research cruise and classroom workshop to help develop activities and lesson plans they can then bring back to their classrooms.