

A Smart Investment in Massachusetts' Coastal Economy



WHOI Sea Grant is one of 34 Sea Grant college programs and is based at the Woods Hole Oceanographic Institution.

Highlights from WHOI Sea Grant's work in 2022* are detailed below.

In 2022, a federal investment in WHOI Sea Grant of \$1.3 million resulted in:

\$12.7 Million

Economic Benefit

877%

Return on Investment

Business
Continuity
Planning
\$7,305,310

Shellfish
Propagation
Program
\$1,956,120

Discounts on
Flood
Insurance
\$456,000

Teacher
Training
Workshops
\$2,445,065

1,707

Acres of coastal habitat protected, enhanced or restored as a result of Sea Grant activities

People engaged in Sea Grant-supported informal education programs

37,226

17,000 +

Recreational harvesters who benefit from the shellfish propagation program

* Metrics reported to National Sea Grant Office in June 2023 for work completed Feb. 2022 to Jan. 2023

Notable Program Accomplishments



SHELLFISH DISEASE MONITORING AND RESEARCH

Veterinary diseases of oysters and clams can cause economic loss to shellfisheries. Farmed oysters and clams are valued at \$32.6 million. Our program has monitored and studied shellfish disease since 2012 to help identify pending outbreaks and support a sustainable aquaculture industry. The research conducted by our postdoctoral investigator also adds to our understanding of shellfish disease.



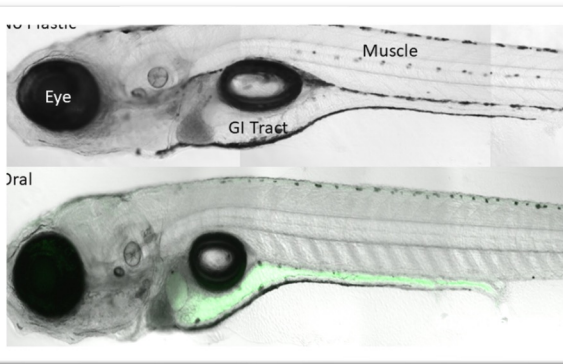
BUSINESS CONTINUITY PLANNING

With Barnstable County, our program developed a template to help small businesses anticipate, mitigate, and recover from unplanned economic hardships, including the COVID-19 pandemic and natural coastal hazards. Our team used this template to help nine businesses create their own Business Continuity Plans. This pilot program increased the economic and social resilience of two Massachusetts counties and generated over \$7 million in economic impacts.



WORKSHOPS FOR EDUCATORS

Twice a year, our program brings researchers and educators together on WHOI's campus to explore a topic of ocean science. The daylong workshops share cutting-edge research and relevant classroom activities that teachers can add to their curricula. Each educator earns six professional development points towards their ongoing teacher certifications.



MICROPLASTICS RESEARCH

With funding from our program, a team of WHOI scientists and students assessed microplastics concentrations in the water and fish at several locations in Massachusetts and found that microplastics accumulated in the tissues of fish. This study begins to address questions in a topic not yet well understood: How do the microplastics accumulated in marine environments impact animals and human health?