



Maryland Sea Grant (MDSG) is a federal-state partnership program of the University System of Maryland that works to:

- Promote a sustainable coastal economy.
- Support science education, from K-12 to graduate fellows.
- Fund and apply scientific research to protect and restore the Chesapeake and Maryland Coastal Bays and enhance the state's marine resources.
- Communicate scientific research and findings to help leaders and communities solve our state's major environmental challenges.

COVID-19 Response

MDSG has continued to work hard for our constituents during the COVID-19 pandemic. We have modified our programming to adapt to a virtual environment. Some examples include: enhancing online resources for teachers and students, assisting The Nature Conservancy and The Pew Charitable Trusts to buy surplus oysters from local farmers, and initiating the first virtual Watershed Stewards Academy.



Online resources for teachers and students



Assisting local oyster farmers



First virtual Watershed Stewards Academy

Community Resilience

MDSG has a long history of providing resources and assistance to our coastal communities. During 2020, our Extension agents and staff engaged hundreds of constituents in shovel-ready projects, resilience planning, and education events to restore habitats and prepare communities for a changing climate.

405 Participants engaged in MDSG climate informal education programs

8 Extension specialists working to help our coastal communities

21 Number of communities that adopted and/or implemented sustainable economic and environmental development practices and policies as a result of MDSG activities

Economic Impacts

MDSG's programming leverages federal dollars for larger state and regional economic impacts. We are working closely with the seafood and aquaculture industries to support businesses and advance new technologies. One growing initiative is expanding the salmon recirculating aquaculture industry and another is supporting a new experimental oyster hatchery in Maryland.

\$2.6 M
in economic impacts from our programmatic efforts

\$10 M
grant to advance the salmon recirculating aquaculture industry

8 aquaculture specialists and Extension agents working to help expand the industry

1 law & policy fellow dedicated to clarifying coastal and aquaculture policy issues

\$270,000
in low-interest loans and grants obtained by Maryland oyster farmers to build and grow their businesses

\$523,000
estimated value of K-12 teachers' time participating in MDSG-created program development

All data from 2020 unless otherwise noted.

Workforce Development

MDSG's K-12, undergraduate, and graduate education programs support teacher professional development and student research programs, internships, and fellowships. Thousands of students are provided STEM educational opportunities, locally, nationally, and internationally. Diversity, equity, and inclusion are core principles for recruitment and programming.

K-12 Education

1,286

students reached through our trained educators and programs in 2020

Collegiate

158

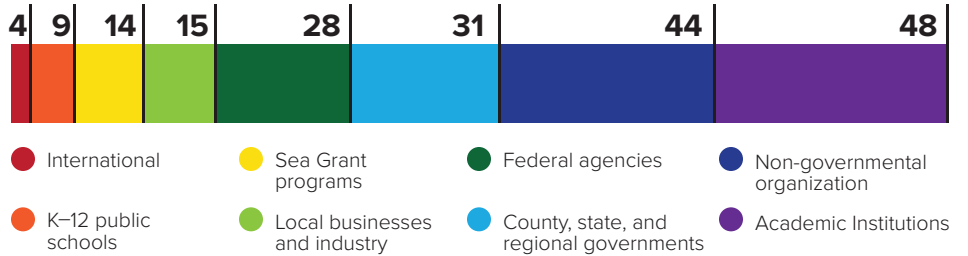
undergraduate and graduate students supported by MDSG funding in 2020

Post-Collegiate

55 MDSG-supported students became employed in jobs related to their degree within two years of graduation (2017-2020)

Partnerships

Maryland Sea Grant partners with a variety of organizations to advance research, education, and outreach programming and to impact local communities and economies. We continue to develop partnerships with HBCUs, underserved communities, and other minority-serving organizations to provide more equitable access to programs, resources, and funding.



Applied Research

MDSG funds applied research that has the potential to impact the policies and management of the Chesapeake and Maryland Coastal Bays and our coastal communities. Some recent projects explored stream monitoring, marsh restoration, water quality, and aquaculture technologies.

34

research projects supported in 2020

23

peer-reviewed publications in 2020 as a result of funding

114

public or professional presentations in 2020

Program Highlight: Diversity, Equity, and Inclusion

Research



MDSG helped support an oyster geneticist from Morgan

State University, a minority-serving institution, to develop broodstock oysters that thrive in low-salinity waters.

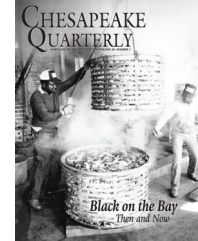
Education



In 2021, the MDSG-supported Chesapeake Bay Landscape Professional program had its first training in Spanish and is currently working

on translating the exam and other key materials for Hispanic audiences.

Outreach



MDSG's communication team released an issue of *Chesapeake Quarterly* and a webinar on how Black Marylanders have been integral to Chesapeake Bay communities throughout history.

Maryland Sea Grant is a federal-state partnership program that is part of the University System of Maryland. Our offices are located in College Park, Maryland, and are administered by the University of Maryland Center for Environmental Science. Our Sea Grant Extension faculty are administered by the University of Maryland, College Park and located in offices around the state. The National Sea Grant Program is a network of 34 university-based programs in coastal and Great Lakes states as well as Puerto Rico and Guam.

www.mdsg.umd.edu

Let us be your resource!

Fredrika Moser, Director
301-405-7500
moser@mdsg.umd.edu