

## SUSTAINABLE AQUACULTURE AND FISHERIES

Aquaculture, or farmed seafood, provides food security and jobs, reduces pressure on Maryland’s natural resources, and supports local economies. Maryland Sea Grant (MDSG) has supported the development of aquaculture as **an exciting new commercial opportunity in Maryland.**

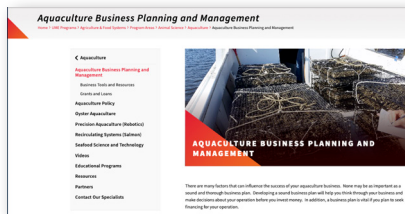


## OUR WORK

### Projects

Maryland Sea Grant supports research, education, and extension aquaculture projects. In collaboration with fish farmers, NGOs, and regulatory partners, we achieve far-reaching impacts. Look at some of the projects we’ve supported in 2022 and 2023:

To help aquaculture businesses plan for start-up costs and remain profitable, MDSG Extension launched an **online business planning tool** that provides income projections customized for individual businesses. The tool, developed with input from oyster farmers, has been accessed by **more than 180 users** since its November 2022 launch.



MDSG Extension and partners convened a meeting of **115 salmon aquaculture professionals**, researchers, and Extension specialists in Baltimore for the 2023 Sustainable Aquaculture Systems Supporting Atlantic Salmon (SAS<sup>2</sup>) project. The



group shared project updates for the **\$10M in USDA funding** addressing critical issues and spurring growth for this U.S. industry.

Through a remote setting aquaculture training program, MDSG Extension assisted and trained **17 oyster growers** in the process of setting their young oysters, and helped the growers complete **67 sets of oysters in 2022**, which were planted on the growers’ leases in 2023.



An MDSG-funded researcher developed cutting-edge experimental tanks to study **oysters’ effects on nitrogen cycling in the Chesapeake Bay**, which could support future additional nutrient credits for oyster farmers.



# OUR WORK

## Projects

In 2023, Maryland Sea Grant collaborated with NOAA and state Sea Grant partners to host stakeholder workshops in the Gulf of Mexico and California to **improve tools for identifying aquaculture sites**.



In cooperation with an oyster farmer, **two collaborative research projects** funded by Maryland Sea Grant investigated how oyster aquaculture affects the nearby ecosystem, including patches of bay grass.



Photo: Chesapeake Bay Program

In a first step toward reviving Maryland's soft-shell clam aquaculture industry, MDSG-funded researchers at Morgan State University evaluated six methods to determine which ones **accelerated clam growth** and improved survival. The researchers received a **provisional patent** for their new methods.



## The Economic Impacts of Oyster Aquaculture

**\$13.3 million**



Total economic impact of oyster aquaculture industry on Maryland in 2022.

**10,000%**



After revision of leasing regulations in 2009, the Maryland oyster aquaculture industry expanded more than 10-fold to **478 oyster farming leases** in Maryland today.

**94,257 bushels**



Maryland's 2022 oyster aquaculture harvest was the largest since the modern leasing program took effect.

From *Maryland Shellfish Aquaculture at a Glance 2022* and the Maryland Department of Natural Resources.

### Contact Maryland Sea Grant

Fredrika Moser, Director: [moser@mdsg.umd.edu](mailto:moser@mdsg.umd.edu)

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

[mdsg.umd.edu](http://mdsg.umd.edu)

