Maryland Sea Grant receives financial support from Congress through the National Sea Grant College Program within the National Oceanic and Atmospheric Administration, as well as, support from the University System of Maryland and other external grants and contracts.

Expanding Maryland’s Aquaculture and Fisheries Industries

Maryland Sea Grant has committed significant research, education, and outreach capacity toward sustaining Maryland’s seafood industry. We strive to ensure seafood fishers and farmers remain profitable and follow the latest food safety guidelines, and that the state continues to attract entrepreneurs to expand our seafood economy.

To achieve this, Maryland Sea Grant’s core sustainable fishing and aquaculture staff include:

- 7 fisheries and aquaculture Extension agents who are dedicated to supporting the industry in Maryland
- 3 educators advancing aquaculture programs in Maryland high schools
- 1 national aquaculture extension coordinator working with coastal ocean stakeholders in aquaculture siting and development

Our Work

Maryland Sea Grant’s (MDSG) sustainable fishing and aquaculture portfolio includes a range of research, education, and extension projects. In collaboration with diverse stakeholders—from fishers and farmers to NGO and regulatory partners—we achieve far-reaching impacts:

- MDSG’s Aquaculture in Action program supported aquaponics systems in 11 classrooms and provided a four-day workshop for teachers and administrators on microcomputing needs for aquaculture systems.
- MDSG-funded researchers successfully mapped the genome of the blue crab, which will provide fisheries managers and researchers with a new tool to better understand the Chesapeake Bay’s most iconic and economically important species.
- Alongside industry and NGO partners, MDSG trained 25 oyster growers to operate remote setting systems, deploying over 320 million oyster larvae on aquaculture leases in Maryland. Five of these growers are now independently operating their own systems, although MDSG continues to provide technical advice.

MDSG and partners in NOAA hosted a workshop to refine a process for co-production and encourage two-way communication with users of computer-based mapping tools to assist in aquaculture siting and development in the Mid-Atlantic.
In addition to extension and education activities, MDSG funds applied research that has the potential to impact coastal policies and management across the state. MDSG has recently funded more than 14 sustainable fisheries and aquaculture projects, including:

- **Effects of Oyster Aquaculture on Submersed Aquatic Vegetation Habitat**
  Cassie Gurbsiz, St. Mary’s College of Maryland

- **Quantifying Nitrogen Removal Potential in Oyster Reefs Versus Aquaculture in Response to Hydrodynamic Setting and Water Quality**
  Jeremy Testa, University of Maryland Center for Environmental Science, Chesapeake Biological Laboratory

- **Production of Reproductively Sterile Atlantic Salmon to Maximize Cost-Effective and Environmentally-responsible U.S. Aquaculture**
  Ten-Tsao Wong, University of Maryland Baltimore County

- **Diversification of Maryland Shellfish Aquaculture: Development and Assessment of a Subtidal Grow-out Method for Culture of Soft-shell Clams (Mya arenaria)**
  Ming Liu, Morgan State University

- **Advancing Monitoring and Management of Mid-Atlantic Alosine Fishes with eDNA Analysis**
  Louis Plough, UMCES, Horn Point Laboratory

For more information, on these and other projects, visit our website: [mdsg.umd.edu](http://mdsg.umd.edu)