

Aquaculture Research and Business Incubation at the Darling Marine Center

The Darling Marine Center has facilities available to new and experienced aquaculture producers looking to refine and improve current methods, and to serve as integrated space for research, demonstration, and education in shellfish and seaweed farming. Located on the Damariscotta River estuary, with flowing seawater laboratories and intertidal and subtidal aquaculture leases, the DMC is an ideal place to develop and improve your aquaculture business.

The DMC hosts several aquaculture startups in business incubator space coordinated by the Maine Aquaculture Innovation Center (MAIC) in Walpole, Maine, 50 miles NE of Portland. The business incubator offers laboratory and flowing seawater infrastructure as well as technical expertise. With a year-round research community at the DMC and both MAIC and Maine Sea Grant staff on site, incubator clients have all the resources needed to develop new growing methods and value-added products. New businesses are encouraged to contact us to learn more about the facilities and to explore whether there is a good fit.

Maine Aquaculture Innovation Center

- Assistance with business planning
- Entrepreneurship training
- Grants for equipment and business development
- Technical support and training

Maine Sea Grant

- Assistance with collaborative research
- Technical support and training including: site selection, equipment requirements, animal husbandry, permitting and licensing, biosecurity, and marketing
- Networking with producers, service providers, and professional resources

Darling Marine Center

- Experimental aquaculture lease with space to grow shellfish and seaweed
- Flowing seawater space, laboratories, and small boats to facilitate research and training in partnership with UMaine scientists and students
- Library access to aquaculture-related resources
- Complete shellfish hatchery production facilities: algal production, larval care, setting, post-settlement, and juvenile rearing

Do you want to learn more?

For inquiries on the **Research/Demonstration Aquaculture Leases** at the DMC, contact Dana Morse, Maine Sea Grant Extension Associate, at 207.563.8186 or dana.morse@maine.edu. For inquiries regarding the **Aquaculture Business Incubator or lab-based aquaculture research** at the DMC, contact Chris Davis, at 207.832.1075 or cdavis@midcoast.com. UMaine's Aquaculture Research Institute (ARI) is an additional resource. Contact the director, Deborah Bouchard, at 207.581.2767 or deborah.bouchard@maine.edu. Darling Marine Center: <https://dmc.umaine.edu/>, 193 Clarks Cove Road, Walpole, ME. 04573.

Aquaculture research opportunities at the Darling Marine Center

History

Shellfish aquaculture started in Maine in the 1970s at the DMC with the construction of a hatchery and projects growing American and European oysters, softshell clams, and scallops. Oyster-related research has been a major focus - including projects ranging from genetics to biofouling to disease. Additional DMC aquaculture studies have included:

- hatchery and growout technologies and strategies for sugar kelp,
- blue mussels, softshell and razor clams,
- Maine adaptation of the Japanese ear-hanging method of growing scallops,
- effects of ocean acidification on Eastern oysters,
- longline production of oysters

Aquaculture in Maine is closely linked to the Damariscotta River estuary and the University of Maine's Darling Marine Center. The Damariscotta River's clean, salty, and nutrient-rich water is ideal for growing shellfish and over 80% of oysters produced in Maine are grown on the Damariscotta River.

Aquaculture research at the DMC occurs both in the laboratory and in the field. The flowing seawater laboratories, shellfish hatchery, and experimental lease sites in Lowes Cove provide spaces to investigate the biology and ecology of diverse, commercially valuable shellfish species. DMC scientists are working statewide to investigate the best ways to farm seafood in Maine waters.



Jordan Kramer of the Winnegance Oyster Company measures oysters for an experiment in Lowes Cove at the DMC.



Sara Rademaker, founder of American Unagi, uses business incubator space to raise American eels and develop methods to profitably deliver them to local markets.

Our decades-long presence in aquaculture research and innovation has helped to make aquaculture a valuable industry in Maine, and current projections indicate strong potential for further growth throughout the state. UMaine researchers work closely with industry and community members on aquaculture-related research, to ensure that aquaculture can continue to be a sustainable and viable industry for Maine's working waterfront communities, and the marine environment that supports us all.

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