

THE

VILLAGE



VELIGER

News from the Downeast Institute

Winter, 2018



Progress on DEI's Facility Expansion Continues

Construction of DEI's \$6.6 million expansion is making great progress through the winter. The expansion includes increased laboratory and hatchery space, and the construction of a residence hall to lodge students and researchers.

Specifically, the expansion includes:

- Two dry labs and one clean lab for sample processing, and expanded access to DEI's two existing research mesocosms.
- Quarantine labs for work with invasive/exotic species or work with marine pathogens.
- A running seawater ecology lab for behavioral and pre-field-related studies.
- Increased space for algae production to feed the shellfish.
- Environmental/climate-control rooms to examine effects of climate change on the behavior of local marine species.
- A visitor center with a touch tank, small conference facility, and space for incubating new businesses and hosting scientists.

We thank the Next Generation Foundation, the University of Maine at Machias/Alliance for Maine's Marine Economy (through the State of Maine and the Maine Technology Institute), the Harold Alfond Foundation, and Consortium America, LLC for their investment in our vision of becoming the easternmost marine research laboratory and education center in the U.S.

The construction is expected to be complete this summer, and we will be holding events to celebrate and showcase the new facilities, including a ribbon-cutting ceremony during DEI's **10th Annual Shellfish Field Days on August 11**. Save the date!

DEI 2018 Summer Programming Dates Announced

Coastal Science Academy

A free year-long program for educators
Starts with a workshop retreat
July 17th – 20th, 2018

Marine Science Summer Camps

Grades 4-6: July 23 - 25
Grades 7-12: Aug. 1- 3
Grades K-3: Aug. 7 & 8

For details visit <http://www.downeastinstitute.org/education.htm>



DEI serves as the Marine Science Field Station of



THE UNIVERSITY OF MAINE AT
MACHIAS
Maine's Coastal University



DEI's Ocean Discovery Days in Freeport

Join Us at the Fishermen's Forum

Catch DEI at the Fishermen's Forum on Thursday, March 1 and Saturday, March 3 at the Samoset in Rockport.

On Thursday, Shellfish Focus Day, learn how our research has been applied by towns up and down the Maine coast, how they did it, and what they found. On Saturday, we are participating on a panel where we will discuss our research on green crabs.

Perry and Pembroke Clam Protection Field Trials

DEI Research Assistant Kyle Pepperman will be presenting the results of 2017 Clam Protection Field Trials in Pembroke and Perry on March 28, 6pm at the Pembroke Town Office.

DEI Research News

DEI was one of 15 projects nationally to be awarded funding by Sea Grant to advance the development of a sustainable marine and coastal aquaculture industry in the U.S. The grant of \$249,238 will allow DEI to continue its hatchery and field research on the large-scale culture of blue mussels for the next two years. Currently, Maine's mussel aquaculturists rely on wild mussel spat to seed their farms, but recruitment is highly variable and can lead to bad "crop" years and inconsistent market supply. DEI's research will address this bottleneck in expanding Maine's mussel farming industry.

DEI also received a 2017 NOAA Saltonstall Kennedy (S-K) grant to fund the next two years of our research on Arctic surf clams, *Mactromeris polynyma*. This work demonstrates aquaculture technologies in order to create a supply of cultured Arctic surf clams in the U.S. DEI was one of five grantees from Maine that received funding through this national competition. The work started in eastern Maine in October 2017, and will continue through September 2019.

DEI wrapped up the largest intertidal research project in the history of the state in 2017. Over the past four years DEI has worked cooperatively with local fishermen to conduct twenty-seven large-scale field experiments at 101 locations in Freeport. The experiments evaluated different methods of protecting shellfish from green crabs and other predators, and demonstrated ways to help the fishery adapt to warming ocean waters. Field sampling culminated in *Ocean Discovery Days*, a 4-day outreach event held in partnership with the Maine Clammers Association, to inform shellfish managers and policymakers about the many discoveries made during the course of the research, and how these discoveries apply to Maine's coastal economy and culture now and into the future. Thanks to all who attended.

"Research is creating new knowledge." Neil Armstrong

New Roles and Faces at DEI



Sara Randall

Sara Randall, who previously coordinated DEI's large-scale investigation into the cause of the soft-shell clam decline in Casco Bay, is now DEI's Associate Director. Sara's background in fisheries and ocean science, policy and management, as well as her experience with non-profit management, will help DEI reach the goals of its strategic plan. Sara will be focusing on communications and development for DEI.



Megan Callahan

DEI also recently welcomed Megan Callahan, a Maine Conservation Corps Environmental Steward. Part of the national service program AmeriCorps, MCC volunteers serve in non-profits, state or federal agencies across the state and work to increase conservation and environmental stewardship. At DEI, Megan will be assisting Education Center Director Colleen Haskell in developing and implementing our educational programming, improving DEI's volunteer recruitment and management, and developing a system for tracking marine resource education efforts. Megan is from Lincoln, Nebraska and has a degree in Biochemistry from Simpson College in Iowa. She will serve at DEI for eleven months.



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