



Sea Grant's Role in the NOAA Aquaculture Portfolio

A Presentation to the
NOAA Science Advisory Board

Jonathan Pennock
Director, National Sea Grant College Program

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Purpose

- *To provide an overview of NOAA's integrated aquaculture program as it stands today with particular focus on OAR/Sea Grant*
- *To explore how NOAA's integrated aquaculture program partners can assist the SAB in developing their aquaculture work plan*





Issues

- Sea Grant, the NMFS Aquaculture Program and NOS/NCCOS work closely to deliver NOAA's aquaculture investment.
- Sea Grant has a long history of supporting aquaculture development through university – based research and extension
- Sea Grant network includes ~100 aquaculture experts



Issues

- Sea Grant has a 10-year stakeholder driven aquaculture vision developed in 2016
- Congress has a specific budget line item for OAR/Sea Grant to fund extramural research on aquaculture
- Additional funds and staffing dedicated to aquaculture research and support of the industry through core Sea Grant budget



Sea Grant and Aquaculture



Extramural Research

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Sea Grant Aquaculture budget line in millions	3.6	4.8	1.7	4.7	4.3	4.3	4.3	4.4	4.4	8.7	9.3	11.5

U Miami received \$967k through 2017 funding; one of 32 public-private partnership projects





Sea Grant and Aquaculture

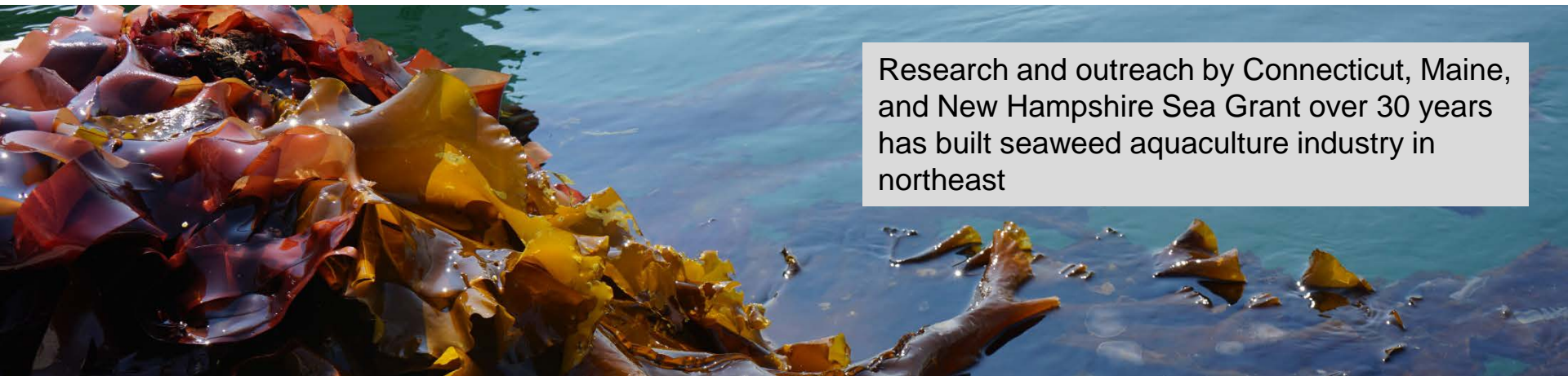


Enhancing Commercial Sustainability in the Hatchery Production of Eastern Oysters and Clams

[Virginia Sea Grant](#), Virginia Institute of Marine Science

\$998,942

Partners: Cherrystone Aquafarms; Oyster Seed Holdings, Ward Oyster Company, JC Walker Brothers, KCB Oyster Holdings, Auburn University, University of Maryland Center for Environmental Science, Horn Point Laboratory



Research and outreach by Connecticut, Maine, and New Hampshire Sea Grant over 30 years has built seaweed aquaculture industry in northeast



Sea Grant and Aquaculture

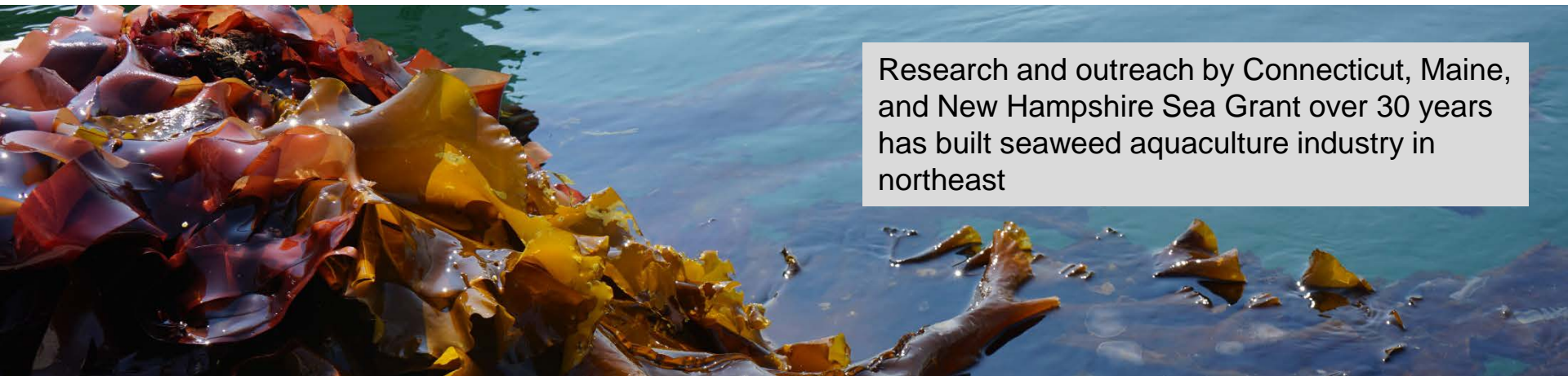


Pilot-scale grow out of sablefish ("black cod") by the Jamestown S'Klallam Tribe

[Washington Sea Grant](#), University of Washington

\$824,144

Partners: Jamestown S'Klallam Tribe, Jamestown Point Whitney Venture LLC, NOAA Manchester Research Facility, Rensel Associates Aquatic Sciences



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Sea Grant and Aquaculture



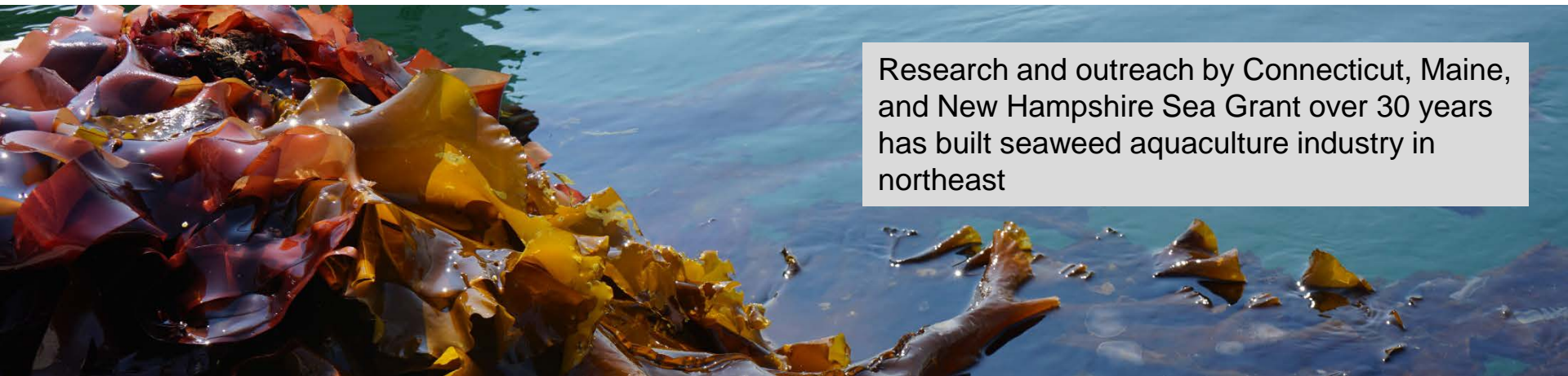
Enhancing Peer to Peer Learning Opportunities for Southern Oyster Farmers

[Mississippi-Alabama Sea Grant](#), Auburn University

\$100,218

Partners: Alabama Cooperative Extension System, Auburn University, Oyster South Co., LLC, North Carolina Sea Grant, South Carolina Sea Grant Consortium, University of Georgia Marine Extension and Georgia Sea Grant, University of Florida, Mississippi Department of Marine Resources, Louisiana Sea Grant, Texas A&M University – Corpus Christi

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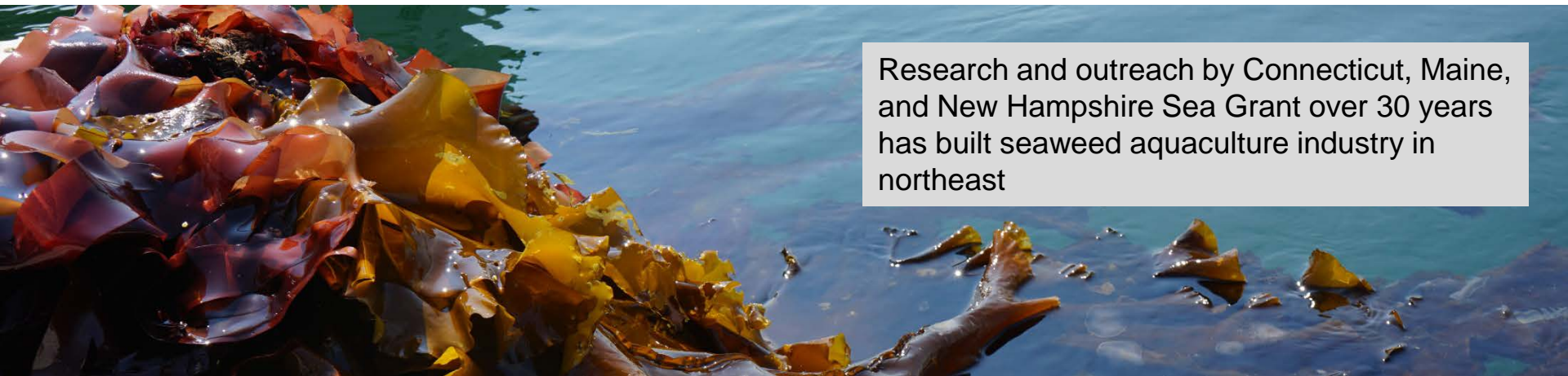
Sea Grant and Aquaculture



Large-scale culture methods for Blue Mussel, *Mytilus edulis*, seed production in Maine and the Northeast: Experimental Laboratory & Field Trials

[Maine Sea Grant](#), Downeast Institute for Applied Marine Research
\$249,238

Partners: Aquaculture Development Services, Inc., Aqualine LLC, Blue Hill Bay Mussels, Calendar Island Mussel Company, Moosabec Mussel Inc.



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Sea Grant and Aquaculture



- Sea Grant Aquaculture Experts Train and Provide Assistance to Growers
 - Workshops for growers
 - Online business resources
 - Legal research on local permitting processes



South Carolina Sea Grant extension agent provides on-site support and training to local growers



NOAA Aquaculture Program Example: Seaweed Aquaculture Success



- Sea Grant pioneering research and Extension
- SBIR to 3 companies to demonstrate
- SK funded industry research
- NOAA labs providing long term facility for 3 nurseries, science for permitting, and Marine Spatial Planning
- Now of interest to DOE for an order of magnitude increase in funding (\$25M)











Desired Outcome



Combined at end of NOAA presentations.