Northeast Sea Grant Consortium Update
December 16, 2019

Connecticut, WHOI, MIT, Rhode Island, Maine, New Hampshire, New York, Vermont

- Funding and Other Updates
- Regional research and extension update
- Aquaculture Regional Network
- Offshore Wind Workshop in Rhode Island in Spring

FY20 NSGO Funding (FY19: $80M)

- Proposed FY20 Budgets for NSGO
  - House: $85M
  - Senate: $88M
    - Aquaculture: $13M
    - Lobster: $2M
    - Gulf of Mexico Highly Migratory Species (YF tuna): $5M

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Regional Model

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2016-2017 – Ocean Acidification

- **PI: Bassem Allam, Stony Brook Univ.**
  Probing molecular determinants of bivalve resilience to ocean acidification
- **PI: Hannes. Baumann, Univ. of Connecticut**
  Sensitivity of larval and juvenile sand lance *Ammodytes dubius* on Stellwagen Bank to predicted ocean warming, acidification, and deoxygenation
- **PI: Dianna Padilla, Stony Brook Univ.**
  Flexing mussels: Does *Mytilus edulis* have the capacity to overcome effects of ocean acidification?
- **PI: Rick Whale, Univ. of Maine**
  Genetic and phenotypic response of larval American lobster to ocean warming and acidification across New England's steep thermal gradient

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2016-2017 – Ocean Acidification

NORTHEAST COASTAL ACIDIFICATION NETWORK

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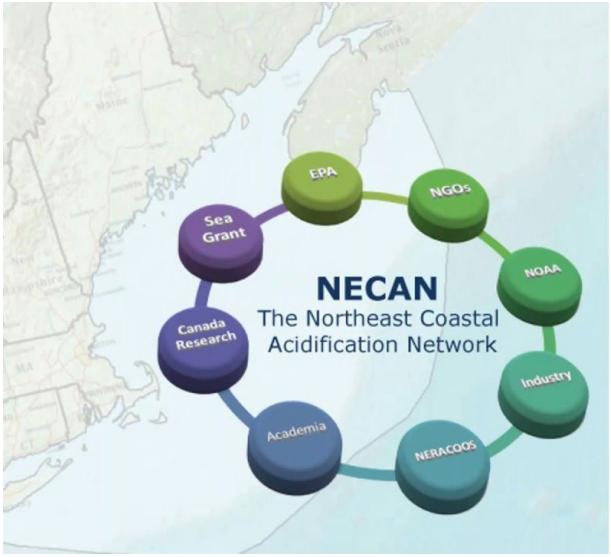
NECAN Sea Grant Webinar Series

The purpose of this webinar series is to highlight four projects funded through NOAA Sea Grant following the release of the NECAN paper published in Oceanography Magazine in 2015, "Ocean and Coastal Acidification off New England and Nova Scotia." The ocean and coastal acidification research and monitoring priorities which were defined in this paper were used by Sea Grant in a 2016 request for proposals and submissions from the University of Connecticut, University of Maine, and two from Stony Brook University were chosen and funded. These webinars will highlight each of these projects, their successes, challenges, and results.

Population Differences in Resilience to Climate Change: Responses of Blue Mussels to Ocean Acidification

Thursday December 12, 2019 at 1:00 PM ET
Dianna Padilla, PhD., Stony Brook University
Register here for this webinar.

Most research to date suggests that bivalve molluscs are particularly sensitive to the impacts of ocean acidification (OA). But, at present we do not know whether differences among local environmental conditions has selected for animals with different sensitivities to stressors. Similarly we do not know whether responses to environmental stressors are phenotypically plastic, allowing animals with broad physiological tolerances to be robust to environmental stress. Blue mussels, *Mytilus edulis*, were collected from sites around Long Island Sound (LIS) to test whether



2019 NECAN Webinar Series

Final webinar
Thurs. Dec. 12 at 1 p.m.

View previous webinar recordings @ necan.org/seagrantwebinars

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Regional Model

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2019-2021 – American Lobster Initiative

Parallel and Connected Research, Extension, and Communications

*Sub-components are implemented by all programs at the local scale

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2019-2021 – American Lobster Initiative

7 Funded Research Projects:

- **PI: Jason Goldstein, Wells National Estuarine Research Reserve**
  The potential influence of increased water temperatures in the Gulf of Maine on the distribution of female American lobsters and the impacts of these distribution shifts on larval recruitment
- **PI: Kathy Mills, Gulf of Maine Research Institute**
  Resilience, adaptation, and transformation in lobster fishing communities
- **PI: EmilyRivest, Virginia Institute of Marine Science**
  Reproduction in an era of rapid environmental change: the effect of multiple stressors on reproductive success, embryogenesis, and emerging larvae of the American lobster

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2019-2021 – American Lobster Initiative

- **PI: Tracy Pugh, Massachusetts Division of Marine Fisheries**
  Growth in large offshore lobsters: addressing a critical data gap in the US Lobster Stock Assessment
- **PI: Alexa Dayton, Gulf of Maine Research Institute**
  Fish Less, Earn More: Assessing Maximum Economic Yield Effort levels in Gulf of Maine's Lobster Fishery, Incorporating Lessons Learned from Southern New England, Canada and Australia
- **PI: RickWahle, Univ. of Maine**
  Bridging the 'Great Disconnect': Linking the Gulf of Maine pelagic food web to lobster recruitment dynamics
- **PI: Damian Brady, Univ. of Maine**
  Projecting Climate-related Shifts in American Lobster Habitat and Connectivity: Integrated Modeling to Inform Sustainable Management

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2019-2021 – American Lobster Initiative

Regional Lobster Extension Program:

- Coordinated by:
  ME, NH, WHOI, MIT, RI, CT, NY
  Sea Grant Programs
- Stakeholder Engagement
  - Engage and Extend regional research
  - Inform new research priorities
  - Address additional industry needs
- Collaborative communications efforts

Sea Grant Biennial Research Funding
40+, two-year projects

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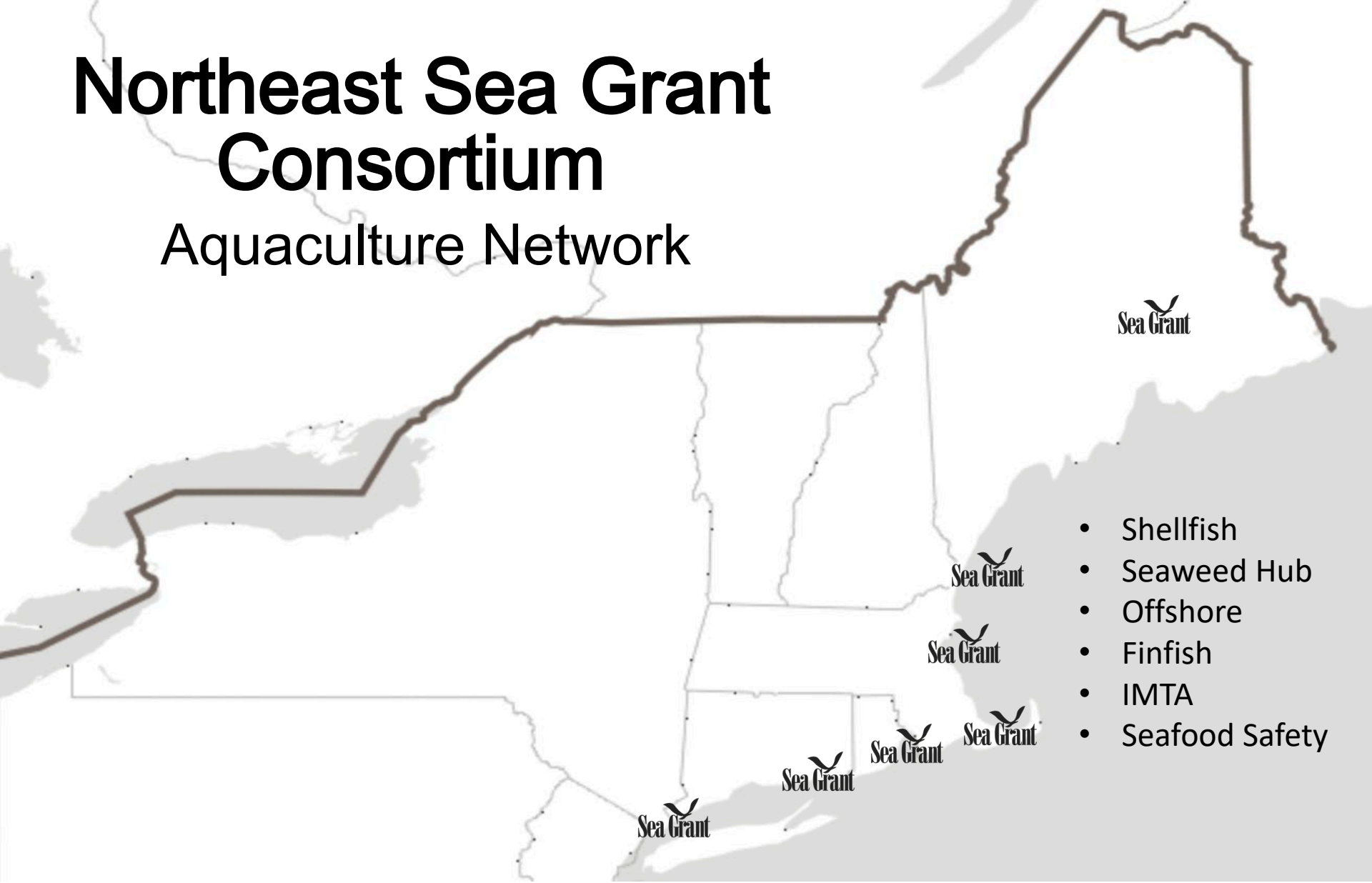
Aquaculture Network



- Shellfish
- Seaweed Hub
- Offshore
- Finfish
- IMTA
- Seafood Safety

Offshore Renewable Energy Interactions with the Environment: Lessons Learned from Europe

April 24, 2020

Rhode Island Sea Grant

Baird Sea Grant Science Symposium

More info: contact Jennifer McCann (jmccann@uri.edu)

Working Agenda & Participants 11/20/19

Joint Northeast Regional Meeting
NOAA Sea Grant College Programs & USGS Water Resources Research Institutes

December 5-6, 2019
University of Connecticut, Avery Point Campus
1084 Shennecossett Road, Groton, CT, 06340
Room 312

Thursday, Dec. 5: 8:00 AM – 5:15 PM (Working dinner reception 5:30 – 8:00 PM)
Friday, Dec. 6: 8:00 AM – 12:30 PM

Overall meeting goal: To explore connectivity, synergy, and leveraging among Northeast region programs of the NOAA Sea Grant College Program and institutes and centers of the USGS Water Resources Research Act Program.

Meeting objectives:

- Enhance understanding of missions and mandates of Sea Grant and Water Institutes/Centers.
- Enrich knowledge of current and planned work of Sea Grant and Water Institutes/Centers.
- Increase awareness of existing collaborations among Sea Grant and Water Institutes/Centers.
- Foster collaboration among Sea Grant Programs and Water Institutes/Centers to enhance and amplify outcomes.

H.R. 729, the Coastal and Great Lakes Communities Enhancement Act

- H.R. 2405 **The National Sea Grant College Program Amendments Act of 2019.** This reauthorizes the Sea Grant program for an additional five years including an authorization of appropriations that grows from a total authorized level of $93.5 million in FY 2020 to $117.7 million by FY 2025.

- H.R. 1023 **Great Lakes Fishery Research Authorization Act of 2019** This bill authorizes the U.S. Geological Survey to conduct monitoring, scientific assessmer and research in support of fisheries within the Great Lakes.

H.R. 729, the Coastal and Great Lakes Communities Enhancement Act

- H.R. 3115 – **Living Shorelines Act of 2019** – This bill directs NOAA to award grants to state/local governments, tribes, and nonprofits to implement climate-resilient living shoreline projects. Importantly, these grants will be used to help restore shorelines, with an emphasis given to communities with a history of coastal erosio Additionally, Amendment No. 6, introduced by Rep. Bill Huizenga and passed by voice vote in the House, requires no less than 10 percent of the funds awarded un the Living Shoreline Grant Program to be available to projects located within the Great Lakes.

- H.R. 2189 – **Digital Coast Act codifies NOAA's Digital Coast Program**, which provides data, tools, and training for communities to use and manage their coasta resources. Revises the program to place greater focus on critical coastal management issues.

H.R. 729, the Coastal and Great Lakes Communities Enhancement Act

- H.R. 1314- **Integrated Coastal and Ocean Observation System Act Amendments of 2019.** This bill reauthorizes the ICOOS Act through FY2024. This act mandated establishment of a national integrated system of ocean, coastal, and Great Lakes observing systems coordinated at the federal level to track and predict events related to weather.

- H.R. 729- **Tribal Coastal Resiliency Act.** This bill authorizes the Department of Commerce to award grants to Indian tribes for multiple coastal zone objectives, including preserving areas that hold ecological or cultural significance and implementing shoreline stabilization measures for public safety.

H.R. 729, the Coastal and Great Lakes Communities Enhancement Act

- H.R. 3596 – **Keep America's Waterfronts Working Act.** This bill establishes the Working Waterfront Grant Program & Working Waterfronts Preservation Loan Fun to help fund plans to preserve and expand access to waters to persons engaged i commercial/recreational fishing, boating businesses, aquaculture, boatbuilding, or other water-dependent commercial activity.

- H.R. 1747 – **National Fish Habitat Conservation Through Partnerships Act**. This bill codifies the National Fish Habitat Partnership, which seeks strategic partnersh to improve fish habitat and increase fishing opportunities. This program is voluntar and non-regulatory, and are comprised of representatives of federal, state, and loc agencies, conservation and sportsmen's organizations, private landowners, and th business sector.