

# THURSDAY, FEBRUARY 28, 2019

8:00 AM Rockland & Rockport Rooms

## Shellfish Focus Day

### Welcome and introductions (8:45-9:00 am)

- **Fiona de Koning**, chair of the Department of Marine Resources (DMR) Shellfish Advisory Council (ShAC) will introduce ShAC members, explain the Council's role, and share the agenda for the day

### Applied Shellfish Science Block (9:00-10:30 am)

- Downeast Institute (DEI) & DMR clam seed projects (9:00-10:00 am) **Sara Randall, Dr. Brian Beal, Kyle Pepperman - Downeast Institute; Sarah O'Malley - Maine Maritime Academy; Denis Nault - Department of Marine Resources**
- DEI mussel seed presentation (10:00-10:30 am) **Sara Randall, Dr. Brian Beal, Dr. Phil Yund, Dr. Skylar Bayer - Downeast Institute**

### BREAK 10:30-10:45am

### Outreach & Education Block (10:45 am-12:00 pm)

- Massachusetts Shellfish Initiative (10:45-11:30) **Scott Soares - Massachusetts Shellfish Initiative**
- Launch of the Maine Shellfish Handbook (11:30-11:45) **Dr. Gayle Zydlewski – Maine Sea Grant**
- Announcement of the Maine Shellfish Restoration and Resilience Project Grant awards (11:45-12:00) **Dr. Bridie McGreavy – University of Maine**

### LUNCH BREAK 12:00-1:00 pm

### Shellfish Management Block (1:00-3:00 pm)

- Evaluating the Effectiveness of Shellfish Legal Notices (1:00-1:45 pm) **Dr. Tora Johnson – University of Maine**
- Municipal Shellfish Program Overview (1:45-2:15 pm) **Kohl Kanwit – Department of Marine Resources**
- Legislative Update (2:15-3:00 pm) **Rep. Michael Devin and Rep. Joyce (Jay) McCreight – Committee on Marine Resources**

### Networking Event and Poster Session (3:00-4:00)

**Host:** Meredith Mendelson, Maine Dept. of Marine Resources

**Moderator:** Kohl Kanwit, Maine Dept. of Marine Resources

**Panel:** Fiona DeKoning, Hollander & DeKoning  
Denis Nault, Maine Dept. of Marine Resources  
Sara Randall, Downeast Institute  
Steve Kirk, Nature Conservancy  
Bridie McGreavy, University of Maine  
Scott Soares, Massachusetts Shellfish Initiative  
Gayle Zydlewski, Maine Sea Grant  
Michael Devin, Maine Legislator  
Joyce McCreight, Maine Legislator  
Dr. Brian Beal, Downeast Institute  
Kyle Pepperman, Downeast Institute  
Dr. Phil Yund, Downeast Institute  
Dr. Skylar Bayer, Downeast Institute  
Sarah O'Malley, Corning School of Ocean Studies  
Tora Johnson, University of Maine Machias

1:00 pm Fitness Center

### Coast Guard Approved ASHI CPR / First Aid Training

Preregistration is required for this American Health and Safety Institute (ASHI) certified training course. The course will run from 1:00 pm to 4:30 pm.

**Training Provided by:** Bill Weir, Bar Harbor Savings and Loan

*Bar Harbor Savings and Loan is sponsoring the training, donating all materials (books, First aid kits, cards, etc.,) and is also paying the ASHI fee for each student.*

1:00 pm Monhegan Room

**Environmental Monitors on Lobster Traps and Large Trawlers (eMOLT): Real Time Bottom Temperatures**

The Gulf of Maine itself is experiencing significant environmental change and as temperature is an essential parameter in the movement of commercially important species, it is a critical piece of knowledge for fishermen. The Environmental Monitors on Lobster Trap (and Large Trawlers) Program (eMOLT, see [www.gomlf.org/emolt/](http://www.gomlf.org/emolt/)) has been collecting bottom temperature data for nearly two decades, and now observations are reporting in real-time. Staff from the Gulf of Maine Lobster Foundation will show how to access the data both on and off the water, and offer opportunities to get involved. We will also share other ways of accessing real-time ocean information and forecasts through NERACOOS, and discuss with participants plans for future information products.

**Host:** Sheila Dassatt, Downeast Lobstermen's Assn.  
**Moderator:** Cassie Stymiest, Gulf of Maine Lobster Foundation  
**Panel:** Erin Pelletier, Gulf of Maine Lobster Foundation  
Tom Shyka, NERACOOS

1:00 pm Camden Room

**Public Scoping Hearing: Amendment 21 to the Atlantic Sea Scallop Fishery Management Plan**

The New England Fishery Management Council invites you to comment on Amendment 21 to the Atlantic Sea Scallop Fishery Management Plan. The Council expects to address measures related to the Northern Gulf of Maine (NGOM) Management Area, and Limited Access General Category (LAGC) individual fishing quota (IFQ) possession limits in this action. This scoping hearing offers an important opportunity for fishermen and other stakeholders to provide input on a range of alternatives that should be considered in Amendment 21. The scoping process also provides an opportunity to identify concerns, potential impacts, and relevant effects of the changes being considered by the Council in this action.

The Council is planning to develop measures that will support a growing directed scallop fishery in federal waters in the NGOM. To do so, this amendment will consider measures that would prevent unrestrained removals from the NGOM management area and allow for orderly access to the scallop resource in this area by the LAGC and LA components of the fishery. This includes establishing mechanisms to set allowable catches and accurately monitor catch and bycatch.

The Council also is planning to develop measures that will increase the LAGC IFQ possession limit as a way to improve overall economic performance of the LAGC IFQ component. The Council will consider alternatives to ensure that the LAGC IFQ component remains profitable and that there is continued participation in the General Category fishery at varying levels. To do so, the action will consider approaches that aim to reduce the impacts of decreases in ex-vessel price, as well as increases to fixed costs (e.g. maintenance and repairs) and variable costs (e.g. trip expenses including fuel, food, oil, ice, and water), on vessels and crews.

The Council will post a scoping document and other materials related to Amendment 21 at this link: <https://www.nefmc.org/library/amendment-21>

This is one of several scoping hearings being held by the Council on Amendment 21 in accordance with the National Environmental Policy Act.

**Host:** Togue Brawn, Downeast Dayboat  
**Moderator:** Vincent Balzano, NEFMC Scallop Chair  
**Panel:** Jonathon Peros, NEFMC Scallop Plan Coordinator  
Sam Ascii, New England Fishery Management Council

# FRIDAY, MARCH 1, 2019

## 9:00 am Rockland Room

### **Fishery-Dependent Data: What's in it for You?**

Fishery-dependent data is a critical piece of information for sustainable fisheries. With several emerging challenges in the Northeast region, more emphasis is being placed on the need for fishery-dependent data. Although a lot of data are collected from fishing vessels and seafood dealers, it isn't always clear how these data are used in the management process. This seminar will increase understanding of how fishery-dependent data are used, why fishery-dependent data are important, and how it can help fishermen, scientists, and managers to make informed management decisions.

Each panelist will share recent work and perspectives on using fishermen's knowledge and fishery-dependent data to improve management and science. Panelists will discuss how fishery-dependent data are currently used, current limitations of using these data, and future uses of these data considering ongoing management issues for several fisheries in the region.

Terry Alexander will share his perspectives as a fisherman, including his participation in several cooperative research projects, and as a member of the New England Fishery Management Council and the Northeast Trawl Advisory Panel.

Dr. Steve Cadrin will present the results of the New England Fishery Management Council's Fishery Data for Stock Assessments Working Group. This working group explored how fishery-dependent data are used in stock assessments, including current limitations of using these data, and made recommendations for improving the use of fishery-dependent data.

Jim Ford will share his perspectives as a fisherman, including his participation in the NMFS Study Fleet, several cooperative research projects, and electronic monitoring.

Dr. John Manderson will present an ongoing project using fishermen's knowledge to evaluate flatfish distribution in the Gulf of Maine. This study will also be used to estimate catchability of flatfish to NMFS surveys, which may be changing as a result of changing environmental conditions.

Dr. Rich Bell will present an ongoing project to use electronic monitoring data to assess the population structure of windowpane flounder, including distribution, abundance, and size/age. These data will be used to evaluate existing seasonal area and gear restrictions for windowpane flounder.

Alex Hansell will provide a summary of an ongoing project to develop a standardized index of abundance for halibut using ME DMR logbook data.

**Host:** Maggie Raymond, Associated Fisheries of Maine

**Moderator:** Sarah Heil, NOAA Fisheries

**Panel:** Dr. John Manderson, NMFS Northeast Fisheries Science Center

Terry Alexander, *F/V Rachel T*

Dr. Steve Cadrin, UMASS Dartmouth School for Marine Science & Technology

Jim Ford, *F/V Lisa Ann III*

Alex Hansell, UMASS Dartmouth School for Marine Science & Technology

Dr. Rich Bell, The Nature Conservancy

## 9:00 am Rockport Room

### **Maine Lobstermen's Association 65<sup>th</sup> Annual Meeting**

The Maine Lobstermen's Association (MLA) announces its 65th Annual Meeting. MLA's President, Kristan Porter, will offer his reflections on how the MLA continues to lead Maine's lobster industry after his first year in office.

This year's meeting will review the many policy issues that MLA addressed over the past year. The MLA will update the membership on the two most pressing issues facing the industry in 2019 -- reduced bait supply due to the 70% cut in herring quota and the potential for new regulations to protect right whales. MLA's legal counsel, Mary Anne Mason, will brief the membership on our role in the ongoing court case on right whales.

As always, the MLA membership will conduct its annual election and there will be door prizes for MLA members in attendance. MLA members, family and the public are encouraged to attend to and share their questions and ideas. See you there!

**Host:** Craig Stewart, Maine Lobstermen's Assn.

**Moderator:** Patrice McCarron, Maine Lobstermen's Assn.

**Panel:** Kristan Porter, Maine Lobstermen's Assn.

Mary Anne Mason, Crowell and Moring

10:30 am Rockland Room

**How Do We Use Technology in Any Form to Contribute to Sustainable, Safe and Thriving Local Fisheries' Futures?**

This year the EMSP students are answering the question "How do we use technology in any form to contribute to a sustainable, safe and thriving local fisheries future?" The students will present their ideas and prototypes for using technology to address or provide solutions to fishing industry issues.

**Host:** Jenni Steele, Island Fishermen's Wives Assn.  
**Moderator:** Paul Anderson, Maine Center for Coastal Fisheries  
**Panel:** EMSP Students

10:30 am Rockport Room

**Update on Right Whale Status, Research and Potential Regulations**

An update will be given on the status of the endangered North Atlantic right whale population and what that means for potential regulations to reduce entanglement risk. Presentations will include population and entanglement updates, an overview of where we are at with potential management actions and pending court cases, an update on the results from the ongoing DMR vertical line research project, and a demonstration of a new prototype for the Time Tension Line Cutter. Additionally, a discussion period will be made available for industry members to provide feedback on the Maine proposal for new regulations in the Atlantic Large Whale Take Reduction Plan.

**Host:** Meredith Mendelson, Maine Dept. of Marine Resources  
**Moderator:** Patrice McCarron, Maine Lobstermen's Assn.  
Erin Summers, Maine Dept. of Marine Resources  
Michael Asaro, NMFS GARFO  
Megan Ware, Atlantic States Marine Fisheries Commission  
Caitlin Cleaver, FB Environmental  
Ben Brickett, Blue Water Concepts

1:00 pm Rockland Room

**Quota Leasing Costs in New England's Groundfishery**

This seminar will present information on the cost of leasing annual catch entitlements in the Northeast groundfish fishery. In 2010, the majority of the fleet switched from the Days At Sea management system, which controlled fishing catch by limiting days fished, to the Sector system, which limits catch using annual allocations of hard quotas.

The price of quota varies by stock of fish, and is driven by the degree that each stock constrains total catch--the most constraining stocks should be expected to see the highest quota values.

This seminar will provide an overview of the lease market. Economist(s) will provide estimates of the cost of quota both as a percentage of the price received for the fish, and as a percentage of total expenses for fishing vessels, and estimated impact on net profit. They will discuss pros and cons of various quota price control strategies, such as: regulated price caps and permit banks. They will discuss price control strategies used elsewhere. Costs will be compared to the costs of leasing fishing days under the prior Days At Sea system.

Lastly, many fishermen have found the cost of leasing allocation prohibitive. A panel of three fishermen will discuss the impact of quota leasing on their bottom lines, and strategies they have employed in order to stay in business.

**Host:** Hank Soule, Sustainable Harvest Sector  
**Moderator:** Hank Soule, Sustainable Harvest Sector  
**Panel:** Chad Demarest, NOAA NE Science Center  
Terry Alexander, *F/V Rachel T & F/V Jocka*  
Jim Ford, *F/V Lisa Ann III*  
Tim Rider, *F/V Finlander*

1:00 pm Rockport Room

**DMR Lobster Science and Management Update**

In this double session, the results of DMR's lobster monitoring programs and new research projects will be presented and discussed. In 2018, the DMR expanded its capacity and research projects to study lobster maturity (how big does a lobster need to be to reproduce?), to start a seasonal monitoring program for larval lobsters (when is the larval peak?), and to collaborate with the Atlantic Offshore Lobstermen's Association to complete a lobster tagging study in Lobster Management Areas 1 and 3 in the Gulf of Maine and George's Bank regions (how much can or do they move?). Then, the discussion will turn to key issues facing the industry, including bait availability and alternatives, management actions at ASMFC, and the ongoing work of the Atlantic Right Whale Take Reduction Team.

**Host:** Meredith Mendelson, Maine Dept. of Marine Resources  
**Moderator:** Deirdre Gilbert, Maine Dept. of Marine Resources

**Panel:** Patrick Keliher, Commissioner, Maine Dept. of Marine Resources  
Kathleen Reardon, Maine Dept. of Marine Resources  
Heidi Henninger, Atlantic Offshore Lobstermen's Assn.  
Rick Wahle, School of Marine Sciences, Univ. of Maine  
Jes Waller, Maine Dept. of Marine Resources  
Katherine Thompson, Maine Dept. of Marine Resources  
Robert Russell, Maine Dept. of Marine Resources

2:45 pm Rockland Room

**Open Forum with NOAA Fisheries Leadership**

Please join us for an open forum with NOAA Fisheries Leadership

**Host:** Maggie Raymond, Associated Fisheries of Maine

**Moderator:** Maggie Raymond, Associated Fisheries of Maine

**Panel:** Chris Oliver, NOAA Fisheries  
Samuel D. Rauch III, NOAA Fisheries  
Michael Pentony, Greater Atlantic Regional Office, NMFS  
Dr. Jon Hare, Northeast Fisheries Science Center

# SATURDAY, MARCH 2, 2019

## 8:00 am Samoset Pool

### **Water Survival Training: Water Safety and Emergency Egress Training**

The Coast Guard's Commercial Fishing Vessel Safety Program will once again provide water safety training at this year's Fishermen's Forum. In addition to life raft and immersion suit training we will also provide free inspections of your immersion suits. Bring your suit or try one of ours in the heated pool Friday and Saturday morning.

**Host:** Kevin Plowman, USCG SNNE

**Panel:** Paul Bassick

## 9:00 am Golf Club

### **Maine Elver Fishermen's Association - Annual Meeting**

There will be a MEFA annual business meeting followed by DMR updates (proposed rules and regulations), results of the 2018 Fishermen's Survey and Aquaculture Updates. At the end there will be a question and answer session.

**Host:** Mary Beth Tooley, O'Hara Corporation

**Moderator:** Jeffrey Pierce, Alewife Harvesters of Maine

**Panel:** Darrell Young, Alewife Harvesters of Maine  
Abden Simmons, Alewife Harvesters of Maine  
Kristen Steele, Alewife Harvesters of Maine  
Sara Rademaker, Alewife Harvesters of Maine

## 9:00 am Rockland Room

### **Maine Lobster Boat Races 2019 Pre-Season Meeting**

The Maine Lobster Boat Racing Association (MLBRA) will hold its annual meeting at the Forum to discuss the upcoming 2019 race season. At the MLBRA season wrap-up and awards banquet this past October, only one rule change was discussed for 2019: in Gasoline Class B, the maximum displacement allowed will be 383 CID. Other than that, it will be business as usual with 11 stops planned on the summer race circuit.

All are invited to this meeting; non-MLBRA members are encouraged to join.

**Host:** Brian Robbins, Commercial Fisheries News

**Moderator:** Jon Johansen, MLBRA President

**Panel:** Ashlee Lowery, Boothbay Harbor event contact  
Nick O'Hara, Rockland event contact  
Mike Mayo, Rockland event contact  
Wayne Rich, Bass Harbor event contact  
Jay Mills, Jonesport-Beals event contact  
Cory McDonald, Stonington event contact  
Genevieve Kurelic McDonald, Stonington event contact  
Robin Reed, Friendship event contact  
Larry Ward, Harpswell event contact  
Chris Byers, Winter Harbor event contact  
Brent Fogg, Pemaquid event contact  
Sheila McLain, Pemaquid event contact  
Lisa Kimball, Long Island event contact  
Amy Tierney, Long Island event contact  
Jon Johansen, Portland event contact

## 9:00 am Rockport Room

### **Maine Ocean School Leadership Forum: Youth and Maine's Fisheries and Aquaculture Workforce**

Maine Ocean School is a public magnet school in Searsport. The School's mission is to provide an ocean-themed high school education and graduate students with knowledge, experience, leadership capabilities, and transferable skills associated with ocean-related careers. The School is charged with being a leader in innovative strategies for teaching in the School and broader maritime community. To achieve this, the School is actively developing workforce and community partnerships related marine science, technology, transportation, and engineering, and stewardship.

Maine Ocean School proposes to host a session entitled: "Leadership Forum: Youth and Maine's Fisheries and Aquaculture Workforce." The objective of this session is two-fold:

1) Inform participants of strategies and activities presently being employed that integrate curriculum, ocean themes, and workforce & community engagement at the School. A team comprised of the School's

Student President, a School Trustee Member, and three members of the Trustee's Workforce and Community Development Committee will lead this.

2) Lead a discussion with Maine's fisheries and aquaculture community related to desired real-world skills, knowledge, and training that students should have upon entering the workforce and development of educational/outreach partnerships with the community. The discussion will emphasize creating knowledge specifically around fisheries/ aquaculture priorities. This discussion will be led in small groups of seminar attendees by the School Trustee's Workforce and Community Development Committee Members.

The Forum's outcome will be a report the School will use to implement strategies that address these priorities within student education. This session will complement the information being provided at the Maine Ocean School Foundation's exhibitor's table that will be active for the duration of the Fishermen's Forum.

**Host:** Gayle Zydlewski, Maine Sea Grant  
**Moderator:** Melissa Landon, University of Maine at Orono  
**Panel:** Abigail Stemp, Maine Ocean School  
Phoebe Jekielek, Hurricane Island Center for Science & Leadership  
Stacey Keefer, Maine Marine Trades Assn.

#### 9:00 am Camden Room

##### **Preserving Maine's Working Waterfronts: How are We Doing, What's It Going to Take?**

Maine's coastal communities are changing. Maine is the second most popular state in the country to retire to. Summer residents are becoming year round residents and aside from the postcard image of a lobster boat on a mooring in the harbor, new residents often don't understand working waterfronts. Unlike many other coastal states Maine still has a working waterfront, but these waterfronts are under increasing development pressure. As property values and taxes rise and as interest in residential or tourism based uses increase how will Maine hold on to its working waterfronts? What tools are currently available and do we need new tools in the face of increasing non-working waterfront development? The panel will consider these questions, review how other states have tackled this problem and engage the audience to solicit ideas for how to reinvigorate efforts to preserve Maines Working Waterfronts.

**Host:** Sebastian Belle, Maine Aquaculture Assn.  
**Moderator:** Sebastian Belle, Maine Aquaculture Assn.  
**Panel:** Deirdre Gilbert, Maine Dept. of Marine Resources  
Natalie Springuel, College of the Atlantic

#### 10:30 am Golf Club

##### **Alewife Harvesters of Maine - Annual Meeting**

AHOM annual meeting, Treasurer's Report and appointment of new Board members. Then DMR will provide updates, a scientist will discuss water quality bonds and updates, and this will be followed by "The Road to a Million Alewives!" There will also be a question and answer session at the end.

**Host:** Mary Beth Tooley, O'Hara Corporation  
**Moderator:** Jeffrey Pierce, Alewife Harvesters of Maine  
**Panel:** Mike Brown, Dept. of Marine Resources  
Nick Bennett, Alewife Harvesters of Maine  
Sarah Madronal, Alewife Harvesters of Maine  
Mike Thalhauser, Maine Center for Coastal Fisheries

#### 10:30 am Rockland Room

##### **The Food Guys: "It is, But it Isn't – Chowder by any Other Name"**

Thought you knew chowder? Think again. The actual definition of chowder puts a lot of unusual dishes besides a 'bowl of white' that we're used to seeing in the category of chowder. Come see Chef Jim and Mike Young 'do their thing' once again. Come to "The Food Guys" session to be entertained, educated and generally have a few laughs and try some interesting new dishes that COULD be called chowder.

**Host:** Gerry Cushman, *F/V Bug Catcha*  
Steve Train, *F/V Wild Irish Rose*  
Craig Stewart, Maine Lobstermen's Assn.  
**Panel:** Jim LeVerso, Chef and Teacher  
Mike Young, Assistant Chef and Entertainer  
Dee LeVerso, Administrative Support

### 10:30 am Rockport Room

#### **Maine Lobster Marketing Annual Presentation**

MLMC Executive Director, Matt Jacobson, will present the revised marketing strategy for Maine Lobster and the 2019 tactical marketing plan. He will also review the results of the marketing program to date. Jacobson and representatives from Maine Lobster's marketing firm, Weber Shandwick, will be on hand to answer questions about the marketing program after the presentation.

**Host:** Togue Brawn, Downeast Dayboat

**Moderator:** Frank Gotwals, *F/V Season* and Maine Lobster Marketing Collaborative

**Panel:** Matt Jacobson, MLMC  
Allyson Hoar, Weber Shandwick  
Sara Brody, Weber Shandwick

### 10:30 am Camden Room

#### **Technical Strategies for Anchoring Floating Aquaculture Systems**

The focus of the proposed session is on technical strategies for installing efficient anchoring methods for a variety of aquaculture systems (e.g. rafts, long lines). These strategies will be specifically related to anchor selection, design, and installation to ensure adequate performance appropriate for the farm's size, environment, and bottom sediment type. This topic is critical to both small and large farmers seeking to secure their business investment in the challenging marine environment.

The session will include a technical presentation and up to four panelist presentations for a total of 60 minutes and one or more audience engagement Q&A sessions lasting a total of 30 minutes. To ensure a productive Q&A session, the technical presenter will be prepared with questions for panelists and audience members.

The technical presentation by geotechnical researcher Landon will discuss strategies important for anchor selection based on infrastructure, loading, and bottom sediments, and the technical advantages and disadvantages of presently used and novel anchor types.

Panelists from Maine's aquaculture industry, including Carter Newell, Seth Barker, Toby Dewhurst, and Bill Mook, will discuss their experiences and challenges related to anchor selection, installation, and performance for specific sites. The sites operated or designed by the panelists represent the variable nature of Maine industry's infrastructure (e.g. raft or long line) and anchor type, farm scale, and species farmed. We believe an emphasis on the range of different and real scenarios and strategies and on right sizing for available resources will add value to a broad audience and Q&A participants.

**Host:** Sebastian Belle, Maine Aquaculture Assn.

**Moderator:** Melissa Landon, University of Maine

**Panel:** Carter Newell, Pemaquid Mussel Farms  
Seth Barker, Maine Sea Farms  
Toby Dewhurst, Maine Marine Composites  
Bill Mook, Mook Sea Farms

### 1:00 pm Rockland Room

#### **You & Your Money - Planning for the Retirement You Want**

This seminar will present an overview of creating a personal retirement savings plan.

Key topics will include:

- The Changing Face of Retirement
- Determining Your Personal Retirement "Number"
- The Accumulation Stage
- Investment Options
- Managing Income in Retirement

**Host:** Hank Soule, Sustainable Harvest Sector

**Moderator:** Rick Forsley, Cetera Advisors

### 1:00 pm Rockport Room

#### **Warming Waters, Emerging Species and Market Changes: Lessons Learned from Southern New England's Black Sea Bass and Jonah Crab fisheries**

Since 2004, the Commercial Fisheries Research Foundation (CFRF) has focused on working collaboratively to build relationships among scientists, managers, and members of the fishing industry to solve problems facing fisheries resources and fishing communities across southern New England. Among the CFRF's greatest accomplishments are the fishermen-led Research Fleets developed in particular for lobster, Jonah crab, and black sea bass, which involve over 40 fishermen collecting biological and environmental data while fishing for these valuable resource species.

Over the past decade, southern New England waters have experienced dramatic and widespread warming, having profound impacts on key fisheries resources. More southern species are appearing off the coast of southern New England, new species and markets are emerging, and the fishing community has had to

adapt. This seminar will review the changes to the southern New England marine ecosystems and fishing community, and will explore future implications for the Gulf of Maine.

CFRF staff will explore what fishermen-collected data from the Lobster and Jonah Crab, and Black Sea Bass Research Fleets reveal about predator-prey dynamics (do black sea bass like the taste of lobster?) catch characteristics (what areas and time of year yield the greatest lobster and Jonah crab catch?), and impacts of bottom water temperature on resource species (is the lobster reproductive cycle changing?). A panel of fishermen and scientists will discuss how they have seen the region's ecosystems change, how fishing businesses have had to adapt, and what role fishermen-scientist partnerships play in understanding and managing a rapidly changing environment. The seminar will conclude with ample time for discussion and input from the audience.

**Host:** Togue Brawn, Downeast Dayboat Scallops

**Moderator:** Aubrey Ellertson, Commercial Fisheries Research Foundation  
Thomas Heimann, Commercial Fisheries Research Foundation

**Panel:** Anna Mercer, PhD, Commercial Fisheries Research Foundation  
Norbert Stamps, AOLA  
John Peabody, *F/V Lady Clare*  
Ken Murgo, *F/V Johnny B*  
Aaron Gewirtz, *F/V Nancy Beth*  
Dr. Marissa McMahan, Manomet Organization

#### 1:00 pm Camden Room

##### **Scallop Farming in Maine**

Increasingly, Maine fishermen are including aquaculture as part of their livelihoods. Production of sea scallops is still a young industry in the state, but interest is high and exciting work in use of ear-hanging, lantern nets and product development is at the forefront of scallop farming in the region and the US. In this session, we will review the processes of spat collection, nursery culture and grow out, gear types and equipment. We will also hear from industry members, fishermen, farmers and a buyer about the challenges and opportunities of scallop farming in the context of Maine's working waterfronts and fishing families.

**Host:** Hugh Cowperthwaite, Coastal Enterprises, Inc.

**Moderator:** Hugh Cowperthwaite, Coastal Enterprises, Inc.

**Panel:** Dana Morse, Maine Sea Grant & Darling Marine Center  
Marsden Brewer, *F/V Lindsay Marie*  
Bob Brewer, East Penobscot Bay Scallop Company  
Caitlin Cleaver, FB Environmental Associates  
Ryan McPherson, Glidden Point Oyster Farms

#### 2:45 pm Rockland Room

##### **Show Me the Money: Options for Funding My Business's Growth, Expansion, & Operation**

This panel discussion will involve traditional and non-traditional lenders as well as state and federal government entities who can assist you with your financing and business counseling needs. Learn what resources are available, what lenders are looking for, and how to figure out if you can really afford that new boat or gear to take your business to the next level. This is an interactive session where you can ask questions, but if you'd like to have your question answer without having to ask it of the group during the open session you can email it in advance to [diane.sturgeon@sba.gov](mailto:diane.sturgeon@sba.gov). Panelists will also be available to answer your questions after this session.

**Host:** Meredith Mendelson, Maine Dept. of Marine Resources

**Moderator:** Diane Sturgeon, U.S. Small Business Administration

**Panel:** Sally Garand, Finance Authority of Maine  
Rob Horne, Farm Credit East  
Brian Whitney, Maine Technology Institute  
Steve Gurin, Bar Harbor Bank & Trust  
Nick Branchina, Coastal Enterprises Inc.

#### 2:45 pm Rockport Room

##### **Developing Viable Fisheries and Markets for Green Crabs: Current and Future Opportunities and Challenges**

The invasive European green crab has had a devastating impact on Maine's soft-shell clam industry, as well as on crucial eel grass and salt marsh habitat. Despite the presence of green crabs in the U.S. for over 200 years, we are still struggling to mitigate and adapt to their harmful impacts. However, many researchers, organizations, fishermen, seafood and culinary experts have been diligently working to find ways to benefit from these invasive pests through fisheries and markets. This seminar will highlight some successes and challenges in green crab fishery and market development, as well as future opportunities. Although the seminar will include some brief presentations and a panel discussion, the majority of time

will be devoted to smaller breakout groups designed to maximize outreach and education, showcase green crab products, provide hands on demonstrations, and connect current green crab fishers with those interested in learning more. Overall, we hope this format will stimulate a lively discussion and encourage new interest in the ongoing development of a green crab industry.

**Host:** Gayle Zydlewski, Maine Sea Grant

**Moderator:** Dr. Gabriela Bradt, NH Sea Grant/UNHCE

**Panel:** Dr. Marissa McMahan, Manomet  
Everett Leach, Fisherman  
Ali Walks, Enoteca Athena  
Mary Parks, Green Crab R&D  
Steve Jury, St. Joseph's College  
Jonathan Taggart, Soft-shell Green Crab Specialist  
Chris Jamison, *F/V Breakaway*

2:45 pm Camden Room

### **Space-age Data and Shellfish Farming: How Data from Buoys to Satellites can Improve Site Selection**

Data from oceanographic instruments and from satellites have been of great use in developing models and software to help shellfish producers decide where to place their farms, and to help guide husbandry decisions such as gear choices and stocking densities. Maine has a broad range of conditions along its extended coastline, and proper siting is a critical early decision for each farmer; as aquaculture grows in Maine, siting decisions will continue to be important.

This session will review several of the biological and physical conditions important to producing shellfish (and to some extent, seaweed); temperature, salinity, chlorophyll, turbidity, etc. We will describe why such conditions are important, and how technology can inform growers about Maine's coastal waters. We will demonstrate how to use SHELLSIM software, and review its value to shellfish producers, as well as asking producers how best to improve the software.

**Host:** Sebastian Belle, Maine Aquaculture Assn.

**Moderator:** Dana Morse, Maine Sea Grant, Darling Marine Center

**Panel:** Dr. Damian Brady, Univ. of Maine Darling Center  
Dr. Carter Newell, Pemaquid Mussel Farms