

# irginia Aquaculture Conference

November 17-18, 2017  
Newport News Marriott, City Center  
740 Town Center Drive  
Newport News, Virginia

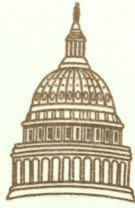
[www.vaaquacultureconference.com](http://www.vaaquacultureconference.com)

**VIMS** | WILLIAM  
& MARY  
VIRGINIA INSTITUTE OF MARINE SCIENCE  
MARINE ADVISORY SERVICES



## Virginia Aquaculture Conference 2017

MARK R. WARNER  
VIRGINIA



UNITED STATES SENATOR  
WASHINGTON, D.C.

November 17, 2017

Dear Friends,

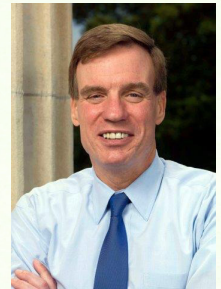
I am pleased to extend warm greetings to all who are gathered for the Virginia Aquaculture Conference.

This biennial event provides a wonderful opportunity to network with fellow professionals in the aquaculture industry while learning about current issues and the latest technological developments. These dialogues are critical in ensuring that the industry continues to prosper in Virginia. Your work helps to strengthen the economies of your communities and the Commonwealth. I commend you for your contributions to the aquaculture industry and your dedication to furthering your professional development.

Enjoy the conference!

Sincerely,

MARK R. WARNER  
United States Senator



## Thanks to Our Gold Sponsors



## Friday, November 17, 2017

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1:00 pm – 3:00 pm



Bivalve Shellfish Breakout



Pearl Ballroom

Practical advice geared towards oyster farmers in the first several years of production and those looking to make the jump from part-time to full-time.

Moderator: Karen Hudson, VIMS

1:00 pm **Permitting Panel – Permitting & Dealer Requirements**  
Andrew Button, VMRC; Danielle Schools, VDH/DSS

1:45 pm **Grower Panel – Small-scale Oyster Farm Operation Discussions with Representatives from the Northern Neck, Middle Peninsula and the Eastern Shore.**  
Jennifer Palazzo, Morattico Creek Oyster Co.; Tommy Leggett, Chessie Seafood and Aquafarms; Chris Buck, Ruby Salts Oyster Co.

1:00 pm – 3:00 pm

Aquaculture Meeting

Blue Point Room

Joint meeting of the Virginia Farm Bureau Federation's Aquaculture Advisory Committee and the Virginia Department of Agriculture and Consumer Services' Virginia Aquaculture Advisory Board

3:00 pm - 3:30 pm

Networking Break & Trade Show

Grand Ballroom

3:30 pm – 5:00 pm

General Session

Pearl Ballroom

3:30 pm **Partnering With Passive Private Investors to Increase Your Production**  
Justin Ritter, McCallum & Kudravetz, P.C.

4:15 pm **Engage Virginia's Economic Engine: Tourism, Trails, and Marketing**  
Sherri Smith, Artisans Center of Virginia and Virginia Oyster Trail; Staci Martin, Virginia Tourism Corporation

5:00 pm – 6:00 pm

**Shellfish Growers of Virginia  
Membership Meeting**

Pearl Ballroom

*Open to members and non-members*

**Virginia Aqua-Farmers  
Network (VAN)**

Blue Point Room

*Open to VAN member-owners and affiliate producers*

7:00 pm – 9:00 pm

Gala Aquaculture Reception

Grand Ballroom

Saturday, November 18, 2017

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7:30 am - 8:30 am

Breakfast (provided)

Grand Ballroom

8:45 am - 10:00 am

General Session

Pearl Ballroom

Welcome

Keynote Address - The Story of Fisheries and Aquaculture as the Next Chapter  
Barton Seaver, chef and internationally recognized leader in sustainable seafood initiatives

10:00 am – 10:30 am

Networking Break and Trade Show Grand Ballroom

10:30 am – 12:15 pm



Bivalve Shellfish Breakout



Pearl Ballroom

Moderator: Richard Snyder, VIMS

10:30 am Alternative Shellfish

Rick Karney, Director Emeritus of Martha's Vineyard Shellfish Group

11:20 am Shedding Light on the Legal Side of Aquaculture

Justin Guthrie, Willcox & Savage, P.C.

10:30 am – 12:15 pm



Finfish/Prawn Breakout



Blue Point Ballroom

10:30 am Aquaculture Round Table (Producers and Associations)

Moderator: Brian Nerrie

11:15 am Research and Extension Updates:

- VT-Blacksburg – David Kuhn
- VT-VSAREC – Michael Schwarz
- VSU – Brian Nerrie, David Crosby, Chris Mullins

11:45 am Open Forum: Questions/discussion

12:15 pm - 1:30 pm

Lunch (provided) & Trade Show

Grand Ballroom

Saturday, November 18, 2017

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1:30 pm - 4:00 pm



Bivalve Shellfish Breakout



Pearl Ballroom

1:30 pm **Harmful Algal Blooms (HABs) – A Regional Perspective and What it Means for Virginia**

*Moderator: Juliette Smith, VIMS*

Lisa Campbell, Texas A&M (Gulf); Raphael Kudela, UCSC (Pacific Northwest);

Todd Egerton, VDH/Shellfish Sanitation (Chesapeake Bay)

2:30 pm **Continuing the Discussion on Triploid Oyster Mortality**

*Moderator: Ryan Carnegie, VIMS*

- Controlled field tests to identify the UN-usual suspects of triploid mortality. Joey Matt, VIMS
- Triploid fecundity: Is it Dad's fault? Kate Ritter, VIMS
- Why are you growing triploids? Stan Allen, VIMS

3:30 pm **News You Can Use - Interstate Shellfish Sanitation Conference (ISSC) Update**

Mike Oesterling, Shellfish Growers of Virginia

1:30 pm - 4:00 pm



Finfish/Prawn Breakout



Blue Point Room

1:30 pm **Regulations From Producer Prospective**

Jonathan van Senten, VT-VSAREC

1:45 pm **Small Scale Farming: Economics and Marketing**

Carole Engle, VT-VSAREC

2:15 pm **Emerging Sectors: Ornamentals/High-Value Species**

Steve Urick, VT-VSAREC

2:30 pm **Emerging Sectors: Value-Added Feeds**

David Kuhn, VT

2:45 pm **Aquaponics and FSMA**

Laura Strawn, VT-ESAREC

3:15 pm **Aquaponics Economics**

Jonathan van Senten, VT-VSAREC

3:30 pm **Aquaponics Hands-On Program**

Chris Mullins; Brian Nerrie; and David Crosby, VSU

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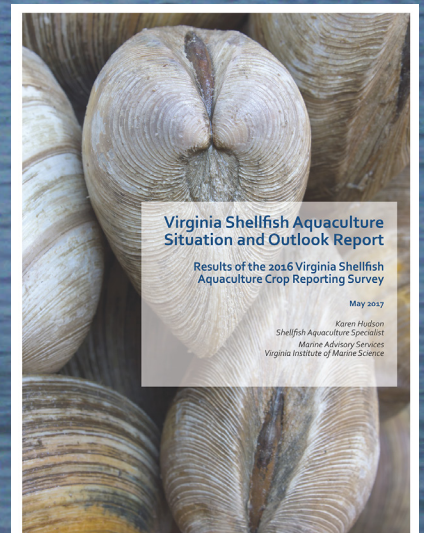
WILLIAM  
& MARY

## VIRGINIA INSTITUTE OF MARINE SCIENCE MARINE ADVISORY SERVICES

*The role of VIMS/MAS is to respond to the needs of marine industries, resource managers and the general public, and to provide science-based information that will increase the public's awareness of the marine environment.*

*MAS also implements marine extension services on behalf of Virginia Sea Grant.*

- Aquaculture
- Coastal Economies
- Commercial Fisheries
- Education
- Recreational Fisheries





## Join the US Aquaculture Society!

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- Meet and interact with your colleagues
- Educational opportunities, including professional workshops
- Student opportunities for recognition and support

*The United States Aquaculture Society (USAS) is a chapter of the World Aquaculture Society (WAS). WAS is a worldwide professional organization dedicated to the exchange of information and networking among the diverse constituencies interested in advancing the aquaculture industry. As WAS becomes more globally involved in providing services and professional development opportunities, the role of USAS is increasingly important for the U.S. aquaculture community.*

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[AFID@VDACS.VIRGINIA.GOV](mailto:AFID@VDACS.VIRGINIA.GOV)  
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## ~ Friday Evening Gala Aquaculture Reception ~

*Featuring seafood farmed right here in Virginia and farmed oysters  
paired with local wine and beer*

### Local, fresh, and all natural:

Farm-raised hard clams from the Eastern Shore; Farm-raised oysters; Pond-raised rainbow trout; Tilapia raised in recirculating aquaculture systems; Pond-raised channel catfish, hybrid striped bass, and freshwater prawns from local farmers in Southside, Virginia.



### Oyster Pairing Experience

Coordinated by our Virginia Oyster Trail partners  
with champion oyster shuckers – Deborah Pratt &  
Clementine Macon

Oysters from Ballard Fish & Oyster Company paired with O'Connor  
Brewing Company's Bold Man Oyster Stout

Big Island Aquaculture's "Big Island Pearls" paired with 2016 A Midsummer  
Night's White from The Williamsburg Winery

### The Virginia Oyster Trail



*Thanks to our seafood and beverage sponsors!*



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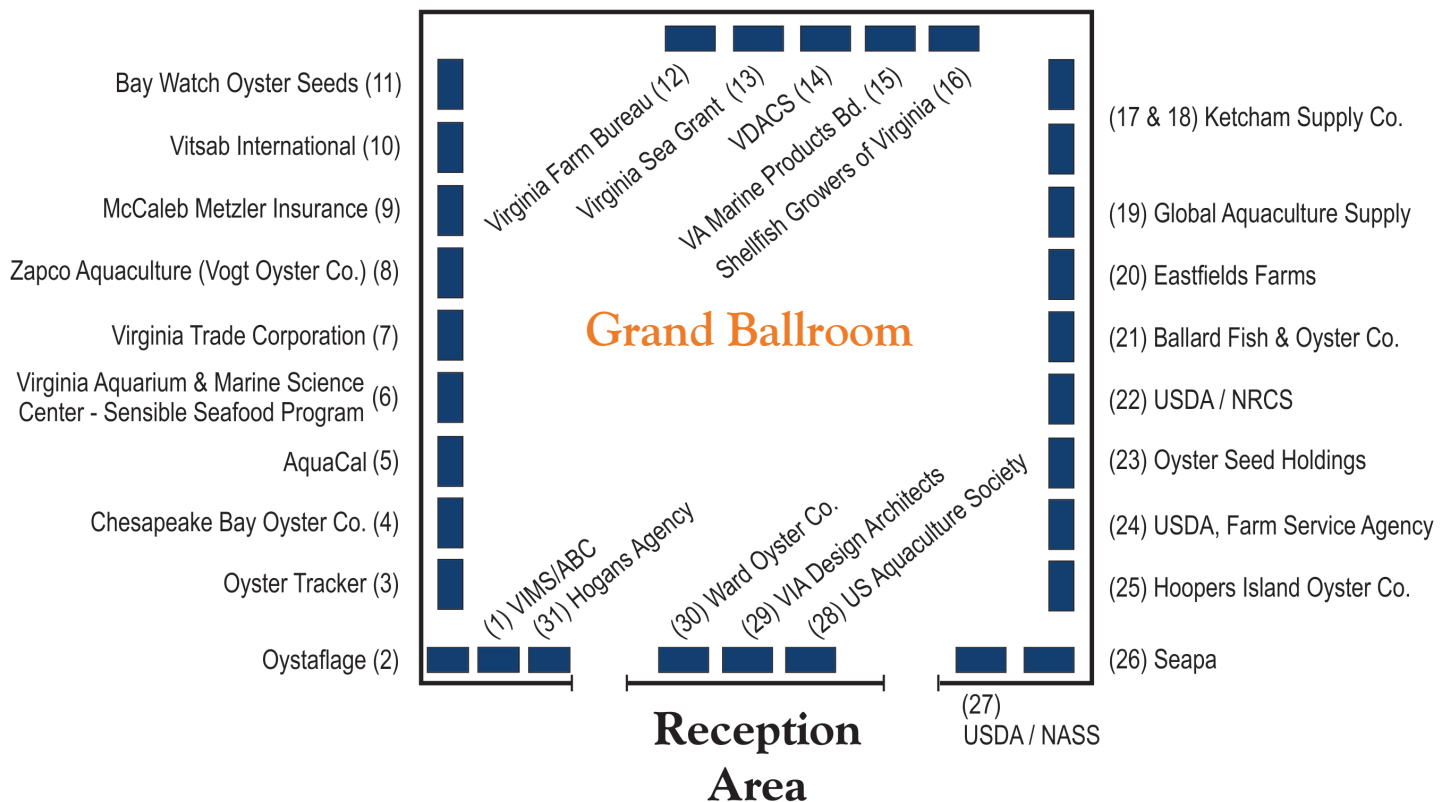
**VIRGINIA  
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Find out why at [Virginia.org/Oysters](http://Virginia.org/Oysters)

## Virginia Aquaculture Conference 2017

### Trade Show Exhibitors

AquaCal (5)	USDA, Natural Resources Conservation Service (USDA / NRCS) (22)
Ballard Fish & Oyster Co. (21)	USDA, Farm Service Agency (24)
Bay Watch Oyster Seeds (11)	VIA Design Architects (29)
Chesapeake Bay Oyster Company (4)	Virginia Aquarium & Marine Science Center - Sensible Seafood Program (6)
Eastfields Farms (20)	Virginia Department of Agriculture and Consumer Services (VDACS) (14)
Global Aquaculture Supply (19)	Virginia Institute of Marine Science, Aquaculture Genetics and Breeding Technology Center (VIMS / ABC) (1)
Hogans Agency (31)	Virginia Farm Bureau (12)
Hoopers Island Oyster Co. (25)	Virginia Marine Products Board (15)
Ketcham Supply Co. (17 & 18)	Virginia Sea Grant (13)
McCaleb Metzler Insurance (9)	Virginia Trade Corporation (7)
Oystaflage(2)	Vitsab International (10)
Oyster Seed Holdings (23)	Ward Oyster Co. (30)
Oyster Tracker (3)	Zapco Aquaculture (Vogt Oyster Co.) (8)
Shellfish Growers of Virginia (16)	
Seapa (26)	
US Aquaculture Society (28)	
USDA, National Agricultural Statistics Service (USDA / NASS) (27)	



## Conference Steering Committee

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(BP) = Bivalve Program Committee

(FP) = Finfish/Prawn Program Committee

## Additional Members of the Program Subcommittee

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## Thanks to Our Silver Sponsors



## Guest Speaker Bios

### Barton Seaver, Keynote Speaker

Barton Seaver is on a mission to restore our relationship with the ocean, the land, and with each other—through dinner. He has translated his illustrious career as a chef into his leadership of the Sustainable Seafood and Health Initiative at the Center for Health and the Global Environment at the Harvard T.H. Chan School of Public Health and Senior Advisor: Sustainable Seafood Innovations at University of New England. In these roles, Barton spearheads initiatives to inform consumers and institutions about how our choices for diet and menus can promote healthier people, more secure food supplies, and thriving communities and how to innovate for sustainability. The initiatives use human health metrics to better define sustainability by cooking with bycatch species, serving conscious portion sizes, and shining a spotlight on healthy aquaculture practices.

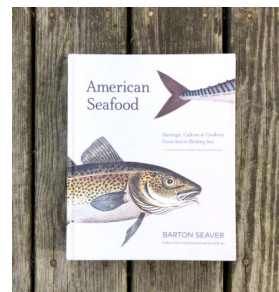
Barton is a firm believer that human health depends on the health of the ocean and that the best way to connect the two is at the dinner table. As an award-winning cookbook author, Barton pairs simple cooking techniques with a vast knowledge of seafood for a fresh take on sustainable eating.

An internationally recognized speaker, Barton has delivered lectures, seminars, and demos to a multitude of audiences including White House, the Aspen Institute, TED, the Institute of Medicine, and food-related industries and conservation groups. He is also a contributing editor at *Cooking Light* and *Coastal Living* magazines and a regular contributor to NPR, the *Guardian* and the *New York Times*.

Barton is the author of 6 highly regarded books. For *Cod and Country: Simple, Delicious, Sustainable Cooking* introduces the idea of seasonal eating to seafood. *Where There's Smoke* highlights the art of cooking over fire. He is also the author of two cookbooks in his role as a fellow with the National Geographic Society. *The National Geographic Kid's Cookbook* and *Foods*



*for Health*, a science-based guide to healthy, everyday eating. His most recent work, *Superfood Seagreens: A Guide to Cooking with Power-packed Seaweed* explores the health benefits of this emerging player in the superfood realm. His second sustainable seafood-centric cookbook entitled *Two if by Sea* published in May 2016. His latest book has just been released in November, 2017: *American Seafood: Heritage, Culture & Cookery From Sea to Shining Sea*, a compendium of history, culture, science and culinary notes. Part cookbook, part historical archive, it will document every commercially available species harvested in the US to date.



Barton currently resides in coastal Maine, a stone's throw away from a working waterfront, with his wife, son, and their 10 heritage chickens.

### Lisa Campbell, Harmful Algal Bloom Speaker

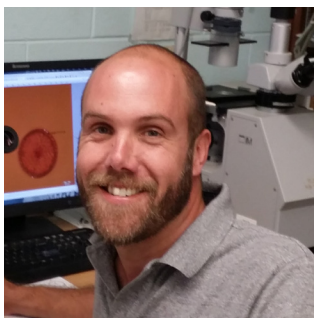
Dr. Lisa Campbell is a Professor and William R. Bryant Chair in the Department of Oceanography, with a joint appointment in the Department of Biology, at Texas A&M University. Her research focuses on phytoplankton ecology. She has conducted field work in all oceans, but her current research centers on harmful algal blooms in the Gulf of Mexico where she has deployed the Imaging FlowCytobot to obtain a high temporal resolution phytoplankton time-series. This continuous, autonomous system has successfully provided early warning of potential harmful algal blooms eight times since 2007.



## Guest Speaker Bios, continued

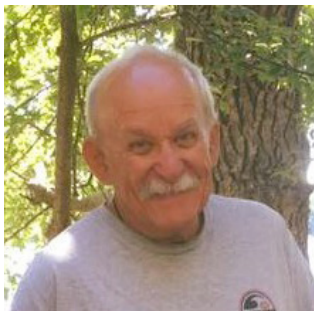
### **Todd Egerton, Harmful Algal Bloom Speaker**

Dr. Todd Egerton leads the marine science branch of Virginia Department of Health's Division of Shellfish and has over 15 years of experience working on harmful algal blooms in Chesapeake Bay and is a long standing member of the Virginia Harmful Algal Bloom Taskforce. His work with VDH includes managing Virginia's marine biotoxin control plan, which monitors the state's shellfish growing areas for HABs, as well as source tracking efforts to investigate additional pollution concerns to water quality and public health. Todd received an undergraduate degree from Susquehanna University, and a MS and PhD in Ecological Sciences from Old Dominion University. Dr. Egerton serves as an adjunct assistant professor at ODU and the director of the ODU phytoplankton analysis laboratory, which maintains the long-term Chesapeake Bay phytoplankton monitoring program, one of the longest running datasets of its kind. Much of his research has focused on dinoflagellates, including environmental and biotic interactions associated with bloom formation and transport. When he's not collecting water samples or looking in a microscope, Todd enjoys fishing, kayaking and camping with his wife and two children.



### **Richard C. Karney, Alternative Shellfish Speaker**

Mr. Karney has been the Shellfish Biologist and Director of the Martha's Vineyard Shellfish Group, Inc., a nonprofit consortium of the shellfish departments of six towns on Martha's Vineyard, since 1976. Before that, he worked for the Virginia Institute of Marine Science. For the past 41 years Mr. Karney has carried out a successful community-based resource development program for



the commercially important shellfish species (quahogs, bay scallops, oysters and mussels) on Martha's Vineyard. Management efforts have concentrated on the development of hatchery and field aquaculture methods for shellfish and the operation of the Nation's first public solar shellfish hatchery. Presently the hatchery operation produces over 40 million seed shellfish annually. In the mid 1990's with a \$500,000 National Marine Fisheries Service grant, Mr. Karney conducted a shellfish aquaculture retraining program for fishermen displaced by fishing closures on Georges Bank. Presently over 2.7 million oysters are harvested annually from 20 small farms on Martha's Vineyard. Mr. Karney was awarded the Gulf of Maine Visionary Award by the Gulf of Maine Council on the Marine Environment in part for demonstrating "that shellfish aquaculture can be an environmentally and economically sustainable activity for coastal communities." Mr. Karney is a past Vice President of the National Shellfisheries Association. He has been co-chair of the Southeast Massachusetts Aquaculture Center since 2001.

### **Raphael Kudela, Harmful Algal Bloom Speaker**

Dr. Raphael Kudela is a Lynn Professor of Ocean Health at University of California Santa Cruz. Kudela researches the factors that control phytoplankton growth and distribution in the ocean. His specific focus is on the question of how multiple interactions of light, macro and micronutrients and phytoplankton physiology determine the rates, processes, and patterns we observe in the marine environment. He is a member of the Intergovernmental Panel on Climate Change (IPCC), and is co-chair of the US National HAB Committee.



# Virginia Aquaculture Conference 2017

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