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AQUACULTURE CONFERENCE

Virginia's Premier Gathering of Aquaculture Professionals

JANUARY 7-8, 2022 • NEWPORT NEWS, VIRGINIA

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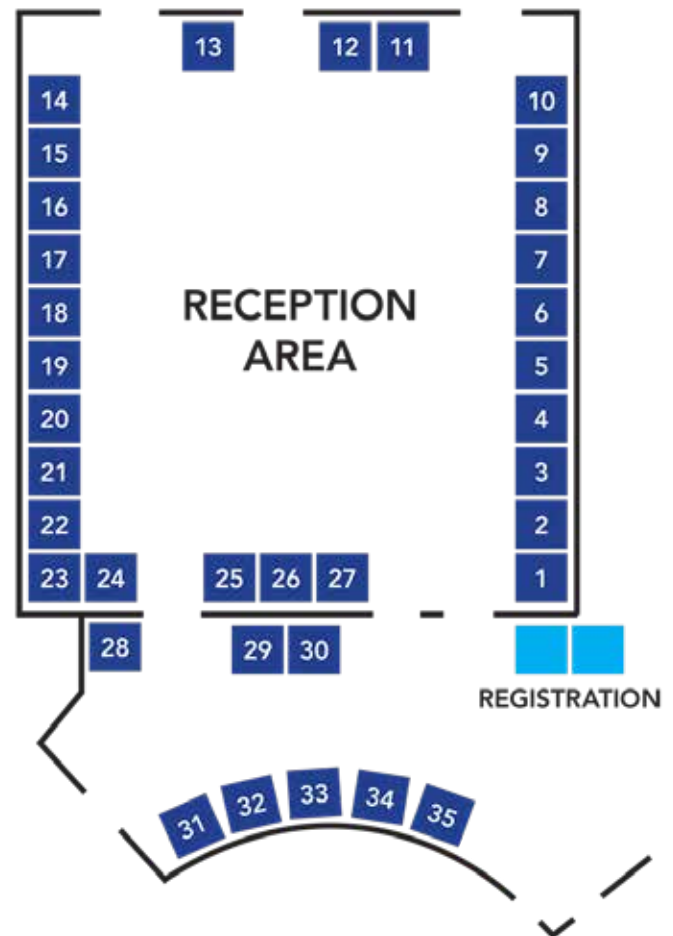


2022 VIRGINIA AQUACULTURE CONFERENCE

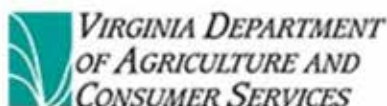
TRADE SHOW EXHIBITORS

AquaCal* (15)
Aquacultured.org (32)
Bay Watch Oyster Seeds (1)
Blue-Trace (7)
BST Oyster Supplies (2)
Cherrystone Aqua-Farms* (20-21)
JD Associates (3)
Ketcham Supply Corp. (22-24)
Oyster Seed Holdings* (25-26)
S.T.A.R. Project (28)
SEAPA (16)
Shellfish Growers of Virginia* (30)
SmartOysters* (18)
U.S. Aquaculture Society* (17)
USDA Farm Service Agency (8)
USDA Natural Resources Conservation Service (19)
VIA Design* (27)
Virginia Aquarium Sensible Seafood Program (4)
VIMS Aquaculture Genetics and Breeding Technology Center (12)
VIMS Marine Advisory Program* (33)
Virginia Department of Agriculture and Consumer Services* (9-10)
Virginia Farm Bureau* (29)
Virginia Marine Products Board (11)
Virginia Oyster Trail (5)
Virginia Sea Grant* (35)
Virginia Tech Seafood AREC* (34)
Ward Oyster Co. (13)
Zapco Aquaculture - Vogt Oyster Co.* (6)

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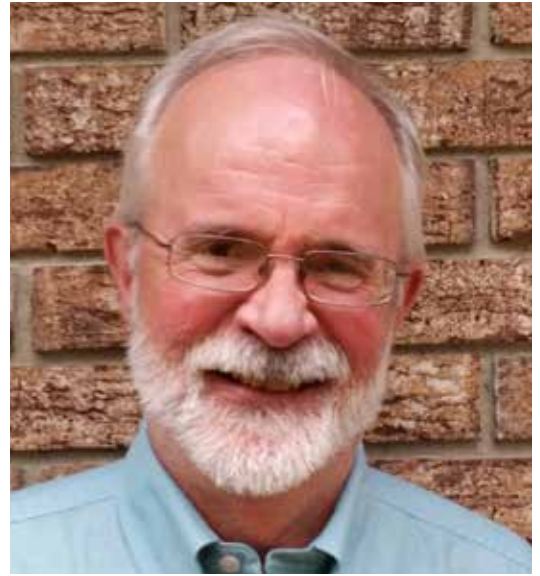
FEATURED GUEST SPEAKER

FRIDAY AT 5:00 PM

The Steering Committee is pleased to welcome **Paul Zajicek**, Executive Director of the National Aquaculture Association (NAA).

Grassroots Advocacy to Move the Needle for US Aquaculture

During 2021 the National Aquaculture Association celebrated its 30th year by focusing on farmer advocacy and not on celebration. How the NAA advocates, how you can advocate, the importance and value of aquaculture associations, and the key issues we are focusing on to move the needle for US aquaculture, to include but are not limited to: crop insurance, aquatic animal health, pandemic and catastrophic disaster assistance, economic development, applied research, public education, offshore farming and federal regulation will be presented.



NATIONAL
Aquaculture
ASSOCIATION

AQUACULTURE RECEPTION

Friday 6:00 pm - 9:00 pm

"Merroir to Terroir" oyster pairing experience

Our partners at the Virginia Oyster Trail present a "water to land" palate experience showcasing member pairings of fresh farmed oysters with Virginia Beer and wine companions.

Chesapeake Bay Oyster Company's signature Parrot Island Oysters™ grown in the shadow of Parrot Island near the mouth of Virginia's Rappahannock River paired with the Williamsburg Winery's signature Governor's White.

Signature **Ward Oyster Company's Golidlocks Oysters™**, farmed in the heart of the Mobjack Bay paired with **Pleasure House Brewing's Urbanna Oyster Stout**.

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2022 VIRGINIA AQUACULTURE CONFERENCE

FRIDAY JANUARY 7, 2022

| | | |
|---|---|----------------|
| 11:00 am - 12:00 pm | Workshop | Pearl Ballroom |
| Shellfish Thresholds, Aquaculture Resilience (S.T.A.R.) Project Coastal acidification and associated co-stressors are a serious threat to shellfish aquaculture and oyster restoration in the Bay. The S.T.A.R. project aims to (1) assess the vulnerability of the shellfish culture and oyster restoration to OA, and (2) produce the information required by communities to aid in adaptation. Shellfish growers are invited to provide observational data from their experience. A map tool will be used to identify unexpected changes witnessed in shellfish production. These changes could be good or bad and include things like production failures/success, die-offs/survival, growth, etc. Information will be collected interactively by dropping pins directly onto a GIS-map and providing the information when prompted. All of the observational info coupled with the modeled water quality data will provide a tool useful for assessing the vulnerability of shellfish in the Bay. | | |
| 12:00 pm - 1:00 pm | Trade Show | Grand Ballroom |
| 1:00 pm - 3:00 pm | General Session | Pearl Ballroom |
| The State of Virginia Aquaculture – <i>Brendan Delbos, Virginia DWR and Mike Oesterling, SGV</i> Grant Opportunities for Producers – <i>Tony Banks, Virginia Farm Bureau & Stephen Versen, VDACS</i> <ul style="list-style-type: none">• Virginia Value-Added Producer Grants• Local Food Protection Program• Virginia Foundation for Agriculture, Innovation and Rural Sustainability (VAFAIRS)• Agriculture and Forestry Industries Development Fund (AFID) FEDERAL RISK PROTECTION TOOLS: Clam & Oyster Crop Insurance Changes – <i>Alexander Sereno, USDA/RMA</i> Noninsured Crop Disaster Assistance Program (NAP) and Emergency Assistance for Livestock, Honeybees, and Farm-Raised Fish Program (ELAP) – <i>James Dunn, USDA/FSA Virginia</i> Assessing consumer behaviors – are pandemic trends temporary? – <i>Jonathan van Senten, VSAREC</i> Managing Your Farm During Uncertain Times – <i>Carole Engle, Engle-Stone Aquatic\$ LLC</i> | | |
| 3:00 pm - 4:00 pm | Break/Trade Show Networking | Grand Ballroom |
| 4:00 pm - 5:00 pm | Trade Association Meeting: Shellfish Growers of Virginia (<i>all welcome</i>) | GB III/IV |
| 5:00 pm - 6:00 pm | Keynote Presentation: | Pearl Ballroom |
| Grassroots Advocacy to Move the Needle for US Aquaculture – Paul Zajicek, Executive Director of the National Aquaculture Association | | |
| 6:00 pm - 9:00 pm | Reception | Grand Ballroom |

2022 VIRGINIA AQUACULTURE CONFERENCE

SATURDAY JANUARY 8, 2020

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|-------------------|--------------------------|----------------|
| 7:30 am - 8:30 am | Hot Breakfast (provided) | Grand Ballroom |
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| 8:00 am - 8:30 am | Virginia Oyster Trail State of the Union | GB III/IV |
|-------------------|--|-----------|

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| 8:30 am - 10:00 am | Breakout Sessions |
|--------------------|-------------------|

BIVALVE SHELLFISH

PEARL BALLROOM

VIMS Shellfish Aquaculture Science Initiative

- Gloucester Point Overview and Update, *Bill Walton, VIMS*
- Eastern Shore Lab Overview and Update, *Richard Snyder, VIMS*

Recirculating Aquaculture System Application in a Virginia Oyster Hatchery

- *Mike Congrove, Oyster Seed Holdings*

How Shellfish Farmers Can Make a Difference in the Global Struggle to Curb a Runaway Climate

- *Bill Mook, Mook Sea Farm*

VA AQUACULTURE

GB III/IV

Program Updates

- **Va Dept. Wildlife Resources**
Brendan Delbos
- **Virginia State University**
Chris Mullins
- **Virginia Tech - Virginia Seafood Agricultural Research and Extension Center (VSAREC)**
Michael Schwarz
- **VSAREC - Seafood Economic Analysis and Marketing Research (SEAMaR)**
Jonathan van Senten
- **Virginia Tech**
David Kuhn
- **Institute for Advanced Learning and Research (IALR)**
Scott Lowmann

| | | |
|---------------------|---------------------------------|----------------|
| 10:00 am - 11:00 am | Networking and Trade Show Break | Grand Ballroom |
|---------------------|---------------------------------|----------------|

CONTINUED...

2022 VIRGINIA AQUACULTURE CONFERENCE

SATURDAY JANUARY 8, 2020

11:00 am- 12:00 pm

Breakout Sessions

BIVALVE SHELLFISH

PEARL BALLROOM

Rapid Fire Research: Snapshots of Relevant VIMS and VASG Graduate Student Research

Moderated by Madeleine Jepsen, VASG

- **Investigating the Genetic Basis of Low Salinity Tolerance in the Hard Clam**
Leslie Speight Youtsey, Master's Student
- **Does Cross Breeding Hard Clam Populations Alter Larval Environmental Stress Tolerance?**
Anthony R. Himes, Ph.D Student
- **Improving Virginia's Ability to Monitor for HAB Toxins**
Sarah Pease, Ph.D Student
- **Uncovering the Genetic Diversity of Dermo Disease to Strengthen Regional Shellfish Health Management**
Elizabeth F. Weatherup, Master's Student
- **Are oyster larvae from broodstock compared to wild oysters more resilient to climate change?**
Annie Schatz, Ph.D Student
- **Assessing Bay Shellfish Vulnerability to Environmental Stressors -How Growers can Contribute to the Science**
Fei Da, Ph.D Student

VA AQUACULTURE

GB III/IV

Hydroponics/Aquaponics/Food Safety

- **Food Safety Programming at the Seafood AREC: Updates and Services Provided to Industry**
Katheryn Parraga-Estrada, VSAREC
- **Emerging Technologies for Enhancing Aquaponics Food Safety**
Reza Ovissipour, VSAREC
- **Aquaponics in the Classroom**
Chris Mullins, VSU

12:00 pm - 1:00 pm

Lunch

Grand Ballroom

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2022 VIRGINIA AQUACULTURE CONFERENCE

SATURDAY JANUARY 8, 2020

1:00 pm - 2:30 pm

Breakout Sessions

BIVALVE SHELLFISH

PEARL BALLROOM

Ask a Regulator (open forum)

VDH/Shellfish Safety and VMRC

Submerged Aquatic Vegetation (SAV) and Shellfish Aquaculture

- **Regulatory Overview and Perspective**

Ben Stagg, VMRC

- **VIMS Research Update - Quantifying the impacts of oyster aquaculture on submerged aquatic vegetation**

Lisa Kellogg, VIMS

VA AQUACULTURE

GB III/IV

Recent Advances

- **United Sorghum Checkoff Program - SmartFeeds Programming**

Michael Schwarz, VSAREC

- **Black Soldier Fly Initiative at the Seafood AREC: Opportunities for Aquafeed Development**

Reza Ovissipour, VSAREC

- **Assessing the Economic Impact of the Virginia Seafood Industry**

Fernando Goncalves, VSAREC

- **Industry Update from Schuyler Greens Company**

John McMahon, Schuyler Greens Company

3:00 pm - 4:00 pm

ECSGA Workshop

GB III/IV

BMPs to address concerns associated with shellfish aquaculture in floating gear

Organized by Bob Rheault, ECSGA and Mark Amaral, Lighthouse Consulting Group

The ECSGA developed a Best Management Practices module for shellfish farming about a decade ago. The free, web-based module has been adopted by hundreds of farmers helping them describe their operations and the various steps growers can take to minimize conflict and show how their operations are compatible with other users of the commons. Subsequently shellfish farmers have developed a variety of novel gear types that restrict navigation and are more visible to boaters and waterfront homeowners such as: Oyster Gro, SEAPA, Hecyl baskets, Flip Farm and flip bags. These gear types bring unique permitting challenges and deserve their own set of Best Practices to minimize conflicts and facilitate permitting.

This panel will bring together resource managers, growers, equipment manufacturers and extension agents to offer methods to minimize conflict and hopefully propose best practices that growers can consider in order to increase their chances of positive permit application outcomes. The workshop will close with an open discussion giving attendees an opportunity to share their experiences and ideas.

2022 VIRGINIA AQUACULTURE CONFERENCE

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(BSP) = Bivalve Shellfish Program Committee

(VAP) = Virginia Aquaculture Program Committee

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Architecture Supporting Aquaculture



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VIMS Eastern Shore Seawater Lab



VIMS Aquaculture Facility Hatchery Rendering



VIMS Seawater Lab Interior

VIA design architects is known for their work in coastal flood plains and waterfront settings providing flood proof, resilient building and site design solutions for marine scientists, aquaculture researchers, and aquaculture farmers. These facilities are highly specialized and uniquely focused on the work of the people that occupy them, the marine life housed within them, and the water systems that run through them. These sites are handpicked for access to non-augmented water salinities or purities, and each come with their set of environmental challenges.

The Virginia Institute of Marine Science (VIMS) is a leading marine research and education Institution with global impact. Their research extends from inland watersheds to the open ocean, with an emphasis on the coastal zone. They have a three-part mission to

conduct research, educate students and citizens, and provide advisory service to policy makers, industry, and the public. VIA is proud to be VIMS' architect for the planning, design, and implementation of their entire Campus located in the seaside village of Wachapreague on Virginia's Eastern Shore.

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