



NC Aquaculture Industry Growth Visioning Workshop
Carteret Community College Hospitality and Culinary Arts Center
3915 US-70, Morehead City, NC 28557
Thursday, March 21, 2024

Schedule –

- 8:30 David Cerino, Carteret Community College - Welcome
- 8:35 Ken Halanych, UNC Wilmington - NC EcoTech Innovation Engine
- 8:45 Brian Silliman, Duke University - Ecotech – what is it?
- 8:55 Ken Riley, NOAA Office of Aquaculture - NOAA Aquaculture Strategic Plan
- 9:00 Chuck Weirich, National Sea Grant Office - NOAA Sea Grant Aquaculture Investment Plan
- 9:05 Tim Sullivan, USDA National Institute of Food and Agriculture - USDA Aquaculture Priorities
- 9:15 Chris Matteo, NC Shellfish Growers Association - Shellfish Industry Growth- Past, Present, and Future
- 9:25 Todd Gardner, Carteret Community College - Ornamental Aquaculture: small product, huge potential
- 9:35 Catherine Frederick, University of Maryland - Recirculating Aquaculture Systems – Scaling up
- 9:45 Carol Price, NC Aquariums - Aquaculture for Conservation, Restoration, and Enhancement
- 9:55 Skip Kemp, Kemp Fisheries - Pond Based Systems: advancing productivity
- 10:05 Eric Herbst, NC Sea Grant - Sea Grant Aquaculture Hubs
- 10:15 Pete Anderson, NC Department of Agriculture – Permitting and siting Aquaculture operations in NC
- 10:20 Break, Coffee and Danish prepared by CCC Baking and Pastry Arts students**
- 10:30 Breakout sessions (please see next page for breakout group details)
- 11:45 End Breakout sessions
- 12:00 Lunch – 5 course French Cuisine by CCC Culinary Arts students**
- 1:15 CCC Aquaculture Facility Tour
- 2:10 Depart for Carolina Gold Farm Tour
- 2:30 Tyler Chadwick - Carolina Gold Oyster Company - 421 Merrimon Rd, Beaufort, NC 28516
- 3:30 Depart for NCSU MARC
- 4:00 NCSU MARC - new facilities and research studies - 810 Straits Rd, Smyrna, NC 28579
- 6:00 Shuck! Aquaculture Industry Development Mixer - 3915 US-70, Morehead City, NC 28557**
- 11:00AM - 6:00PM *Trade Show Set Up Available at the New Bern Riverfront Convention Center**



LinkedIn: <https://www.linkedin.com/company/ncet-north-carolina-ecosystem-technology/>

web: <https://uncw.edu/ncet> email NCET@UNCW.EDU to learn more or become a partner



This material is based upon work supported by the NSF Engines Development Award: “Advancing climate technologies in Eastern North Carolina” funded by the National Science Foundation. Any opinions, findings and conclusions or recommendations expressed in this material do not necessarily reflect the views of the National Science Foundation.



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Breakout sessions:

A Shellfish

All phases of oyster and clam aquaculture, including hatchery, nursery, and growout on shellfish leases. Includes shellfish restoration efforts and development of alternative species.

B Ornamental

Production of freshwater and marine display animals for the pet trade and public aquariums.

C Pond based systems

Production of freshwater and marine fish and crustaceans in ponds, including advanced pond systems and In-Pond Raceways.

D Recirculating Aquaculture Systems

Land based closed systems utilizing filtration technology for waste removal and water quality management. Includes intensive clearwater RAS, biofloc, and aquaponics.

E Conservation, Restoration, and Enhancement

Aquaculture for Conservation of threatened and endangered species, Restoration of habitats and ecosystems, and Enhancement of exploited resources.



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North Carolina Aquaculture Development Conference



Friday, March 22nd - NC Aquaculture Development Conference at the Riverfront Convention Center

8:00 Registration - Trade Show Open

8:30 Welcome from the NC Aquaculture Development Conference Committee

8:35 NC Farm Bureau - Legislative and Policy Updates – Stacy Sereno

9:00 NC Aquaculture Association Industry Updates – Pete Anderson

9:15 NC Aquaculture State Update and Economic Impact
NCSU-NCCE - Steve Hall, NC Sea Grant - Eric Herbst, NCDA&CS – Tim Ivey

10:00 BREAK 1 – Trade Show Open... (Sponsor video segments)

10:30-12:00 Concurrent Sessions - Research Updates: Shellfish and Finfish

Shellfish Research Session Presentations/Topics – Upstairs in the Tryon Room

10:30 UNCW Shellfish - Ami Wilbur

10:50 Carteret Community College Workforce Development – Dave Cerino and Bryan Snyder

11:10 NC Shellfish Industry Status and Updates from NCDMF – Zach Harrison

11:30 NCDMF Shellfish Sanitation: Water Quality and Regulatory Updates - Valerie Wunderly

Finfish Research Session Presentations/Topics – Upstairs in the Berne Room

10:30 NCSU Warm Water - Alex Chouljenko

10:50 NCSU Cold Water - George Selden

11:10 NCSU Marine Aquaculture Research Center (MARC) - Steven Hall

11:30 UNCW Finfish - Patrick Carroll

12:00 BREAK 2 – Trade Show Open (Sponsor video segments) – NCAA Silent Auction Begins

North Carolina Aquaculture Development Conference



Friday, March 22nd - NC Aquaculture Development Conference at the Riverfront Convention Center Friday Agenda Continued – Lunch and Afternoon Schedule of Events

12:30-2:00 Lunch and Keynote Presentations – Showcasing NC Striped Bass by StriperHub

1:00 **Keynote 1** - NC Farm Bureau President Shawn Harding

1:30 **Keynote 2** - NCDA Veterinary Division State Veterinarian Dr. Michael Martin
Who we are, what we do, and our current and future collaboration with NC aquaculture.

2:00 **BREAK 3 – Trade Show Open... (Sponsor video segments)**

2:30-4:30 Concurrent Sessions – Industry Updates: Shellfish and Finfish

Shellfish Industry Update Presentations/Topics - Upstairs in the Tryon Room

2:30 SUMS (Sudden Spring/Summer Unusual Mortality Syndrome) in Oysters -
Bill Walton, Virginia Institute of Marine Science (Session Keynote Speaker)

3:00 NC Mass Mortalities of Oysters Research -Tal Ben-Horin, NCSU College of Veterinary Medicine

3:15 NAP, ELAP and Mass Mortalities of Oysters in NC - James Davis and Tommy McLamb, USDA FSA

3:30 Water Quality and Environmental Monitoring for Shellfish Farms -In-Situ

3:45 Lighting Talks: Grower Hacks to Address Mass Mortalities of Oysters –
Tyler Chadwick, Benjy Davey, & Conor MacNair

4:00 Digital Tools for The Shellfish Growing Industry -Troy Alphin, UNC Wilmington

4:15 North Carolina Shellfish Growers Association Update - Chris Matteo, NCSGA

4:30 **Break / Session Overflow**

Finfish Industry Update Presentations/Topics – Upstairs in the Berne Room (continued next page)

North Carolina Aquaculture Development Conference



Friday, March 22nd - NC Aquaculture Development Conference at the Riverfront Convention Center Friday Agenda Continued –Afternoon and Evening Schedule of Events

Finfish Industry Update Presentations/Topics – Upstairs in the Berne Room

- 2:30 North Carolina's Secret Flounder Ponds. Creating a Safe Avenue for a Local Wild Harvest to Aquaculture Legend - Zach Harrison, NCDMF
- 2:45 NPDES Strategy Session for DWR-EPA - Pete Anderson, NCDA and Keith Larick, NCFB
- 3:00 Novel Ingredients and RAS Feeds – Tim Harder and Sabine Mader, Skretting
- 3:15 Products and Research Updates – Chris Stock, Zeigler Feeds
- 3:30 StriperHub Update - Ben Reading, NCSU
- 3:50 SNARC White Bass National Breeding Program: Highlights – Adam Fuller, USDA-ARS
- 4:10 Organic Carbon Addition to Reduce Ammonia – Bart Green, USDA-ARS
- 4:30 Break / Session Overflow**

NC Aquaculture Tradeshow Mixer Event, Chef Demonstrations, and NC Cultured Seafood Festival

- 5:00 Tradeshow Mixer and Prefunction – FREE NC Craft Beers and Wines
- 5:30 Product Demo with Chef Smoke of the Flame Catering Company
Product Demo with Chef Chad Blackwelder, NCDA Food Service Marketing Specialist
- 6:00 NC Cultured Seafood Festival
- 7:00 NCAA Silent Auction Ends and Final Announcements

Saturday Agenda Continued on next page...

North Carolina Aquaculture Development Conference

Saturday, March 23rd - NC Aquaculture Development Conference at Riverfront Convention Center
Aquaculture Introductory Seminars and Aquaponics Session

- 8:30 Trade Show Opens – Coffee and Refreshments available – Ball Room**
- 9:00 Beginning Business Resources, Licensing and Permitting - Pete Anderson, NCDA&CS
- 9:20 Land and System Requirements - Steve Gabel, NCCE
- 9:40 Species Choices and Marketing - Mike Frinsko, NCCE
- 10:00 Intro Session Overflow/Questions and Break**
- 10:30 Aquaponic Systems - Huy Tran, Aquatic Equipment and Design
- 12:00 Adjourn**

2024 Conference Committee Members and Support



NC Aquaculture Association
www.ncagr.gov/markets/aquaculture/NCAA.html
Reps: Randy Gray, Aubrey Onley, Natalie Woolard,
Dale Pridgen, Craig Perry, Brian Stroud, Howard Brown



NC State University
Bio & Ag Engineering
www.bae.ncsu.edu
Rep: Steve Hall



NC Department of Agriculture & Consumer Services
www.ncagr.gov/markets/aquaculture
www.ncagr.gov/markets/seafood
Reps: John Aydtlett, Pete Anderson, Anna Barcafer



NC Cooperative Extension
<https://aquaculture.ces.ncsu.edu/>
Reps: Mike Frinsko, Steve Gabel, George Selden



North Carolina Farm Bureau
www.ncfb.org
Rep: Debbie Hamrick



NC Sea Grant
<https://ncseagrant.ncsu.edu/>
Rep: Eric Herbst



SBTDC
<https://sbtcd.org/>
Retired Rep & NCADC Chairman: Michael Twiddy
Thank you for continuing to serve!
Registration Support: Tony Buxton



UNCW
Center for Marine Science
<https://uncw.edu/cms>
Rep: Jay Styron

Thank you for attending the 36th Annual North Carolina Aquaculture Development Conference!

We value your input and review of the conference. We would also appreciate your ideas on how we can better our conference and serve the NC aquaculture Industry. Please send comments to 'Contact Us' at www.ncaquaculture.com