

EAST COAST SHELLFISH GROWERS ASSOCIATION



The East Coast Shellfish Growers Association represents nearly 2,000 shellfish farmers from Maine to Florida and the Gulf states. These proud stewards of the marine environment produce sustainable, farmed shellfish while providing thousands of jobs in rural coastal towns.

The ECSGA informs policy makers and regulators to protect a way of life.

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From the President Walking the Hill in D.C.



President
Jeff Auger

Spring has sprung (though winter is still hanging on up here in the North) so we assembled a team of 14 industry members for our annual Walk the Hill event in D.C. As usual, we were joined by our friends from the Pacific Coast Shellfish Growers Association, with Margaret Pilaro back at the helm as executive director. We split into teams to visit 39 legislative offices and two agencies over two days. Our priority list included Farm Bill tweaks; access to the working waterfront; funding support for NOAA, Sea Grant and critical aquaculture research; correcting misleading language on the CDC website; an aquaculture exemption to the Coastal Barrier Protection Act; and asking for funds for clam genetics. There seemed to be significant momentum around working waterfront access, as

this issue applies to numerous industries feeling the effects of encroachment on fishing communities all up and down the East Coast.

Ultimately, the visit gives us the opportunity to remind our representatives of who we are and the work we do. By now many offices know about aquaculture and the economic and environmental benefits it creates, and most staffers and elected representatives are consumers themselves. This becomes even more apparent when we co-host the annual Shellfish and Wine Caucus reception. This event always has a line wrapping around the hall and provides an opportunity for us to speak one-on-one with Congressional representatives and staffers.

It's never easy to convince farmers to swap Grunds for suits, but it's essential to have ECSGA members with us from each state to highlight local examples of our issues. Please join me in thanking all the participants who took time out of their year to bring these issues to D.C. (listed on page 11). If there are issues affecting you in your state that we missed, or that you feel we should be advocating for, please let us know! We strive to ensure that your concerns are brought to the attention of our elected officials, so we want to hear from you.

Succession Planning: Selling the Farm

by Charmaine Gahan and Seth Garfield, Cuttyhunk Shellfish Farms, Cuttyhunk Island, Mass.

In January at the Northeast Aquaculture Conference and Expo (NACE) held in Providence, Rhode Island, we chaired a session titled, "Selling the Farm: Succession Planning." Using our experience at Cuttyhunk Shellfish Farms as a case study, we shared what we learned about the process, and welcomed several panelists to add their perspectives on the issues involved in selling the farm. Following is a brief summary of that session.

Seth Garfield, founder of Cuttyhunk Shellfish Farms:

I spoke about my experience starting an oyster farm in 1981, and recounted some of the steps I took transitioning the business, lessons learned and relationships forged along the way. After running the business for more than 40 years with my wife, Dorothy, I started thinking about its future. Our farm is an important

driver of commercial activity for the small, remote community of Cuttyhunk, the outermost of the Elizabeth Islands, lying between Cape Cod and Martha's Vineyard, Massachusetts.

Once I ascertained that our adult children were satisfied with their chosen career paths and unable to take over the family business, I started to approach former employees about the prospect of taking on ownership of the farm. Because I wasn't certain about the valuation of the business, I reached out to several colleagues and acquaintances for their professional help in understanding the process of transitioning ownership of an oyster farm.

Charmaine Gahan, new owner of Cuttyhunk Shellfish Farms:

I talked about my experience working at Cuttyhunk Shellfish Farms in the 1990s and my growing interest over the past few years in becoming the new owner. Cuttyhunk Shellfish is much more than just a farm. Besides growing oysters (200,000-



CUTTYHUNK SHELLFISH FARMS

The 30-acre farm sits on the north side of Great Salt Pond at the western end of Cuttyhunk Island. This tidal pond is fed by a fresh-water spring and has a man-made cut on the west side opening to Buzzards Bay. A monument commemorating the arrival of Gosnold in 1602 stands on the small island in the middle of the pond.

300,000 planted annually) and delivering them year-round to restaurants, we operate a "harbor raw-bar" boat to deliver oysters between Memorial Day and Columbus Day to boaters moored in the inner and outer harbors. Boaters hail us on "the international raw-bar-boat hailing channel," (VHF channel 72) and we pull up alongside to shuck fresh Cuttyhunk oysters and offer other local seafood.

—Continued on page 4

Seafood Expo/Seafood Processing North America aka The Boston Seafood Show



KATHY RHODES/AQUATECNICS

Cherrystone Aqua Farms made the trip from Cape Charles, Virginia, to Boston. Pictured (L to R) with a clam display on March 11 are President Chad Ballard, C.F.O. Ashley Fox and V.P. of Business Development Jessica Gray.



KATHY RHODES/AQUATECNICS

The shuckers from Island Creek Shellfish in Duxbury, Massachusetts, were kept busy during the show.



KATHY RHODES/AQUATECNICS

Zach Mallette of Full Measure Oyster Co. in Melfa, Virginia, with a display of Ultraviolets. These oysters are grown from seed to table in Nandua Bay using the only solar-powered, carbon-neutral oyster production plan in the world.



KATHY RHODES/AQUATECNICS

ECSGA Treasurer and Pangea Shellfish owner Ben Lloyd (R) with account manager Charlie Canty preside over an impressive display of shellfish at the show.

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Genomic Tools Propel Hard Clam Breeding Into 21st Century

By Bassem Allam, Marinetics Endowed Professor, Stony Brook University, New York

A team of researchers, extension agents and industry members has been hard at work on a NOAA-funded project to coordinate and improve hard clam breeding all up and down the East Coast. This Sea Grant Hard Clam Selective Breeding Collaborative, made up of collaborators from five states and led by scientists at New York's Stony Brook University, aims to develop advanced genomic technologies to optimize selective breeding in the hard clam (Northern quahog, *Merccernaria mercenaria*) for the benefit of local and regional growers.

This effort comes after decades of growth in the oyster aquaculture industry, even as hard clam production in the U.S. (both wild and cultured) has remained stagnant at best. Although *M. mercenaria* is extensively cultured from Massachusetts to Florida, growth in the industry has been stymied by many factors, ranging from lack of availability of suitable bottom leases to large-scale mortality events.

Factors known to affect hard clam survival, especially in near-market-size crops, include acute salinity fluctuations (mid-Atlantic), heat stress (primarily in Florida), QPX disease (caused by the parasite *Mucochytrium quahogii* and historically present throughout the Northeast down to Virginia) and neoplasia (primarily in Massachusetts). Preliminary evidence in clams and other marine species suggests that survival under these stressors is often linked to an animal's genetic background, with some lines (or individuals within a line) better suited to tolerate these stressors.

With this genetic evidence in mind, the collaborative project aimed to develop high-throughput genomic tools to optimize breeding using genomic selection approaches based on the genetic fingerprint of broodstocks. These modern approaches have major advantages over traditional methods of selective breeding, and are now routinely used for breeding many terrestrial crops, fish and crustaceans, and have recently shown promising results in the Eastern oyster. For example, traditional selective breeding is slow, may take many generations, and is highly prone to inbreeding, which can hinder further stock improvement.

In contrast, genomic selection provides improved predictions for target traits, and also saves time



ABIGAIL ARCHER/WHOI SEAGRANT

Digging experimental clams after 18 months of deployment at a QPX-rich field site.

and money as compared to traditional selective breeding approaches. Working within this framework, the team focused on:

1. sequencing the hard clam genome.
2. using the genome information and species genetic diversity to develop high-throughput genotyping tools.
3. evaluating the new genotyping tools to identify resistant clam stocks.

The initial effort focused on two phenotypes (the physical expression of traits) identified by industry partners and the extension team as initial targets for this work: resistance to QPX disease and heat tolerance.

So far, the clam genome has been sequenced and made publicly available, and high-resolution genomic data was generated from clam populations from Maine to Florida. This data was then used to produce a genotyping DNA chip (SNP array, or single nucleotide polymorphism) that can concurrently identify over 66,000 genetic markers

—Continued on page 12



Coastal Development Projects
Combining coastal protection & restoration with oyster industry development

J. D. "Zach" Lea, PhD, Agricultural Economist
Shellelevator Dealer for Louisiana

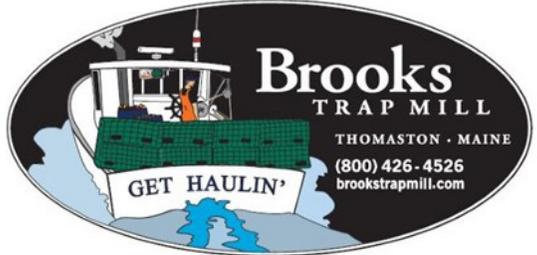
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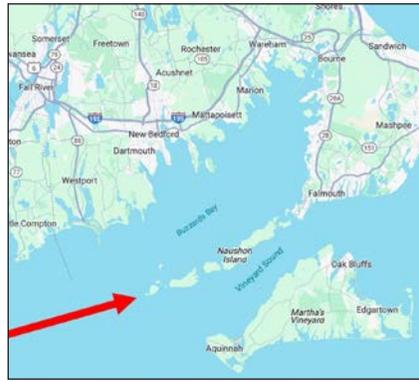


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Succession Planning

We also put on full-service, reservation-only, sit-down lobster bakes on our lawn at the marina between May and October. The menu includes chowder, fresh clams and oysters, lobster, corn, potatoes, sweet potatoes, linguica and watermelon. Since Cuttyhunk is a dry island, we can't sell alcohol, but we do have a BYOB license.

But that's not all. In the warmer months, we also operate The



Cuttyhunk Island lies at the end of the Elizabeth Island chain between Cape Cod and Martha's Vineyard, Massachusetts. A ferry runs year-round from New Bedford.

Raw Bar shack, a small, walk-up retail location where customers can enjoy Cuttyhunk oysters and a small menu of other complementary local seafood items, such as smoked bluefish spread, chowder, stuffed quahogs and clams.

This is also the World Headquarters of our retail location, selling our famous Cuttyhunk Shellfish merch, including logo shirts and hats (also available at www.cuttyhunkshellfish.com).

Especially when considering such a diverse business, Iulti-

mately had to consider a variety of factors to determine its value:

- ❑ expected costs, revenues and profits in light of my intended business plan.
- ❑ historic performance of the business, in terms of costs, revenues and profits.
- ❑ value of inventory at the time of purchase.
- ❑ value of equipment and assets available for purchase, as well as replacement costs for any depreciated assets.
- ❑ risks and liabilities of acquiring the business.
- ❑ SWOT review (strengths, weaknesses, opportunities and threats) of the existing business and market environment.
- ❑ potential barriers to entry in terms of town politics.
- ❑ consideration for the existing trademark and goodwill associated with the transfer of Seth's knowledge, experience and continuous operation of the brand and the business for the past 41 years—arguably the least quantifiable factor.

Ultimately, "the number" took into account all of these factors, balanced with a "feels right" number. I recommend pressure testing the final valuation simply by asking a bank or friends and family for a loan, which ultimately is a good method for making sure you have asked and answered all the right questions.

Seth and Charmaine:

We both acknowledge that our agreement was based on many years of mutual trust and respect. We were able to navigate the process successfully by exercising full transparency, flexibility and mutual consideration at every step. We feel that our solution to the complex question of how to transition Cuttyhunk Shellfish Farms to a new generation of ownership is one that respects the integrity and continuity of the institution, while providing "wins" for both sides. Charmaine was able to retain Seth's time and talent as a key employee for an additional transition period, and Seth benefits from additional financial incentives when pre-determined goals and milestones are met. Both of us are proud to stand at the center of efforts that continue

—Continued on page 7

HOT AQUACULTURE NEWS!!



Fish Farming News is the aquaculture industry's national newspaper, devoted exclusively to coverage and the betterment of domestic aquaculture.

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NACE Celebrates 25 Years

by Kristen Jabanoski, Science Communications Specialist, Research Communications Branch, NOAA NEFSC, Milford, Conn.

The joint 25th [Northeast Aquaculture Conference and Expo](#) and 43rd [Milford Aquaculture Seminar](#) was held in Providence, Rhode Island, January 10-12, 2024. This year's conference had its largest ever showing, with 634 attendees, 236 presenters, 42 sessions, four field trips and 34 trade show exhibitors. In addition, 59 students received support to attend and present their work.

NOAA Engaging the Aquaculture Community

Keynote speaker Danielle Blacklock, Director of the NOAA Office of Aquaculture, shared her personal experiences with seafood and stories of aquaculture businesses. She also talked about the importance of domestic aquaculture to the American economy and national food security. This was followed by industry updates from states from Maine to Virginia, as well as the Canadian Maritime provinces.

The Office of Aquaculture also held an interactive public listening session. Aquaculture growers, seafood industry workers, researchers, coastal community members and the public shared their views on the future of aquaculture at NOAA Fisheries. This included which aspects of NOAA's science and services are of most value to the public.

"Engaging with the public, fostering open and collaborative conversation, is critical as we chart the course for the future of aquaculture at NOAA Fisheries," said Blacklock. "The energy and ideas brought to this conference will help inspire and shape our vision moving forward."

Aquaculturists Unite

While the aquaculture community is growing, many have attended this meeting for years. "Information about what we do can be hard to come by, and this is the place to find it. Everyone is here—shellfish growers, NOAA Fisheries, Woods Hole



CHRIS DAVIS/MAINE AQUACULTURE INNOVATION CENTER

View of the audience from behind the speakers during the rapid-fire industry updates about challenges facing northeastern U.S. states and Canadian provinces.

Oceanographic Institution, and many more," shared Thomas Henninger, owner of Madeleine Point Oyster Farms in Yarmouth, Maine, and former commercial fisherman. "It's a chance to see people you don't see very often—like my version of a school reunion, and it's a blast. Everyone who I asked questions to when I was first starting to grow shellfish is here. How can you miss that?"

The conference is jointly organized by NOAA Fisheries Milford Laboratory and the Maine Aquaculture Innovation Center, an organization dedicated to developing socially, economically, and environmentally sustainable aquaculture opportunities in Maine, and was sponsored by 17 additional organizations.

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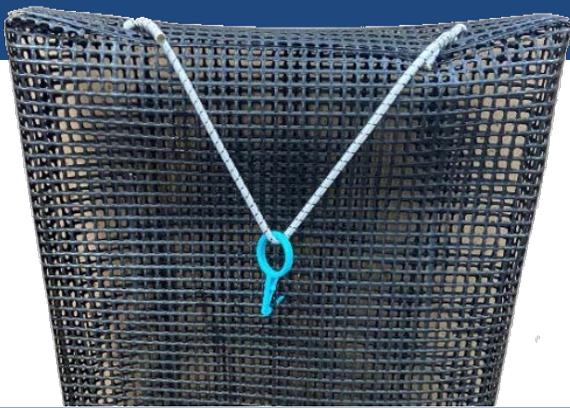
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—Continued from page 4
Succession Planning

to shape the future of the Cuttyhunk Island economy and the next generation of Cuttyhunk oyster farmers.

Other panelists:

Chrissy Petitpas, Senior Aquaculture Biologist with the Massachusetts Division of Marine Fisheries, spoke about the procedures and options available for transferring aquaculture permits, which vary by community.



[CUTTYHUNK SHELLFISH FARMS](#)

The business includes a raw bar shack that is open during the tourist season and offers raw oysters and clams, smoked bluefish spread, chowder, stuffed quahogs and merch (branded shirts and hats).

Chris Davidson of BMK Legal comes from a family that owns an oyster farm in Duxbury, Massachusetts. He spoke about the legal ramifications that the buyer and seller must consider during the three main stages of transitioning an oyster farm business: negotiation, due diligence, and purchase-and-sale. He highlighted valuation, company structure, and assets and liabilities as the main things to consider during the due diligence process.

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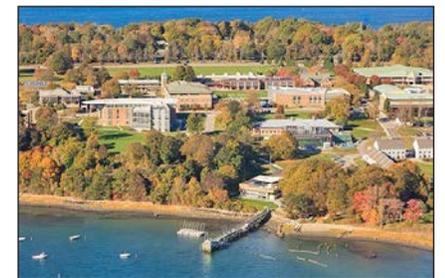
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2024 International Aquaculture Conference to Meet in Rhode Island June 3-4, 2024

Roger Williams University (RWU) and the Rhode Island-Israel Collaborative (RIIC) will hold the 2024 International Aquaculture Conference on June 3-4, 2024 at the university's Bristol, Rhode Island campus. The meeting will focus on the application of biotechnology in aquaculture and the role of novel, innovative research to produce sustainable products and food safety solutions for the global aquaculture industry.



The conference will showcase experts from Israel, Greece and Rhode Island presenting the latest aquaculture innovations and trends in three areas: bottleneck solutions for aquaculture production; innovation approaches for management, diagnostics and health of aquatic organisms; and biotechnology and marine natural products. The event will also offer opportunities for networking and collaboration among participating countries, academic institutions and industry, as well as student research presentations.

Aquaculture experts are invited to apply to present at the conference by contacting Galit Sharon, Associate Professor of Biology and Director of the Aquatic Diagnostic Laboratory at RWU, at gsharon@rwu.edu.

For sponsorship opportunities, email Avi Nevel at anevel@theriic.org or visit avinevel.wixsite.com/aquaculture-rhode-is/sponsorship.

For more information about the conference, and to register, visit avinevel.wixsite.com/aquaculture-rhode-is.



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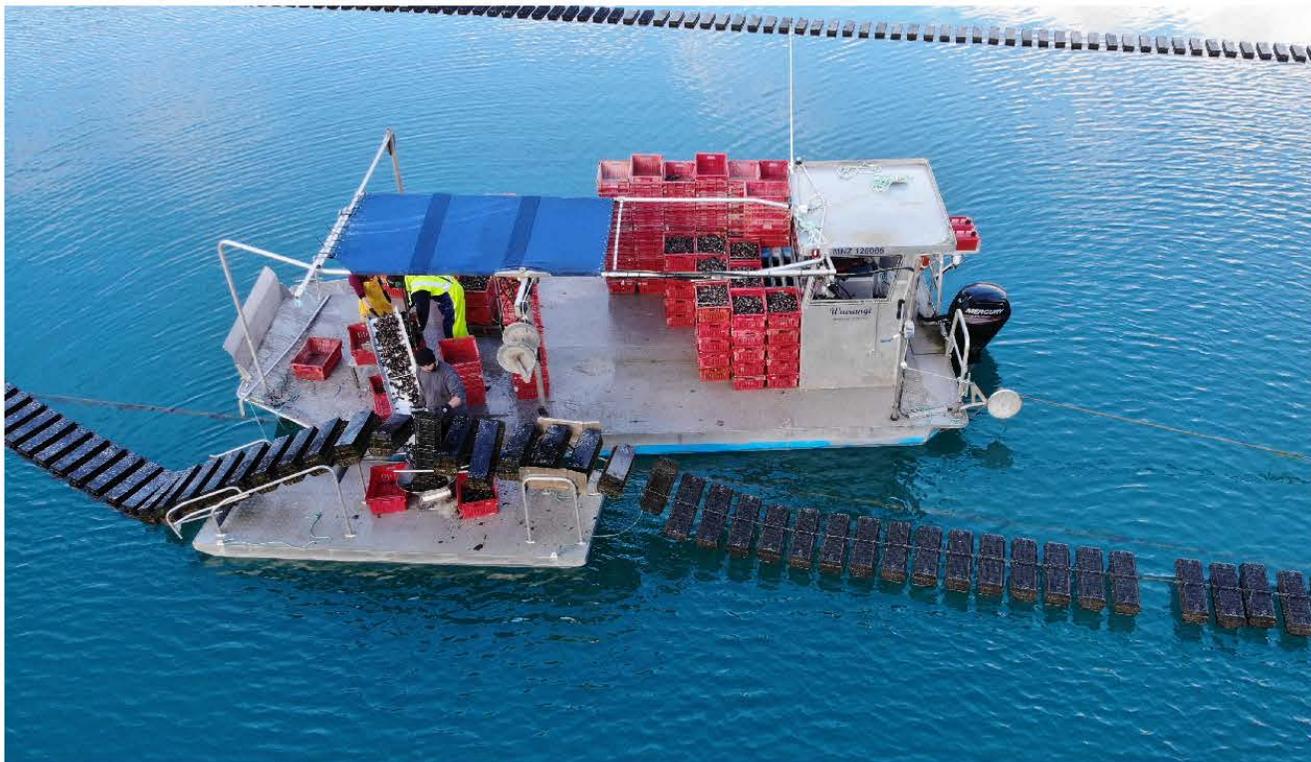
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Since the first ICSR in 1996, this conference has been held around the world, from Canada to Scotland, Australia and beyond. With its coastal beauty and natural resources, Jekyll Island, Georgia, will be an ideal setting for ICSR24.

The Jekyll Island Convention Center features convenient spaces and ocean-view terraces. On-site events will include a welcome reception, portable lunches, a traditional Low Country Boil and an Inaugural Golf Tournament. Numerous hotels cater to every budget, with Brunswick, Jacksonville, and Savannah airports nearby.

Unique in its approach, ICSR24 is sure to foster lasting collaborations and friendships.

We welcome presentations on any topic related to the restoration or conservation of shellfish. We expect attendees from all aspects of restoration, including practitioners, researchers, indigenous and other community leaders, and natural resources managers. We're eager to learn about your objectives and outcomes, from restoring populations to supporting responsible aquaculture.

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ECSGA Walks the Hill Once Again

Just before the cherry blossoms popped in March, the ECSGA sent a seasoned team of 14 members to Washington for some face time with Congressional office staff. We split up into two teams (North and South) representing 10 states, and met with staffers in 39 offices over two days. Once again, we joined forces with our compatriots from the Pacific Coast Shellfish Growers Association and our friends at the Wine Institute and Wine America to throw a very well attended reception. Several hundred extremely happy (and loud) staffers plus more than a dozen Congressional representatives flocked to the party, where we served eight varieties of oysters from both coasts, washed down with case after case of exceptional wine.

The team came armed with a long list of issues to discuss, including: garnering support for a number of tweaks to the Farm Bill to improve disaster assistance, the need for increased funding for clam genetics research, and asking for Congressional help in applying pressure to the Centers for Disease Control (CDC) to make changes to their website that would better educate media and the public on flesh-eating bacteria in ways that don't destroy our markets. We also were working to get co-signers on two bills aiming to preserve working waterfront access.

Visit ecsga.org/legislative-priorities to read the entire 2024 Legislative Priority List and our letter to the CDC.

Please thank the good folks who took precious time out from their real jobs to travel to D.C. and help us in this important lobbying work:

ECSGA Pres. Jeff Auger,
Atlantic Aqua Farms

Heather Ketcham,
Ketcham Supply

Nadia Simmons,
Behan Family Farm

Matt Ketcham,
Peconic Gold Oysters

Matty Gregg,
Forty North Oysters

ECSGA V.P. Chris Matteo,
Chadwick Creek Oysters

Mark and Lori Casey,
Delaware Cultured Oysters

Stephan Abel,
Ferry Cove Shellfish

Kim Huskey,
Ballard Fish & Oyster

Ben Stagg,
Virginia Shellfish Growers

Tom Cannon,
Soundside Oyster Co.

Charlie Culpepper,
National Aquaculture Assn.

And many thanks to our members who donated oysters for the reception: Cherrystone Aquafarm, Behan Family Farm, Atlantic Aquafarm and Forty North Oysters. And a big shout out to Pacific Seafood for their generous donation of shrimp.

—RBR



The South Team included (L to R) Tom Cannon, Ben Stagg, Charlie Culpepper, Lori Casey, Mark Casey and Chris Matteo. (Not pictured: Kim Huskey and Stephan Abel)





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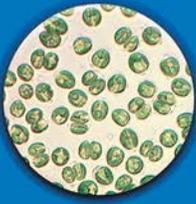
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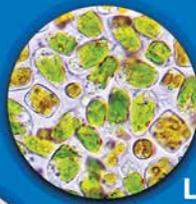
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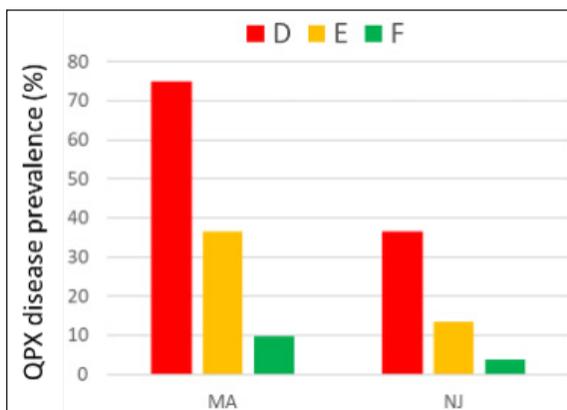
—Continued from page 3

Hard Clam Breeding Advances

in individual clams. The chip was then used to contrast the genetic fingerprint of clams from different wild and cultured stocks, including stocks that have survived QPX disease outbreaks and heat stress.

Results showed significant differences in the genetic makeup of the tested stocks. More importantly, the chip was able to segregate survivors from clams that succumbed to QPX disease and heat, showing the power of this tool to identify resilient stocks based on their genetic makeup. The chip was also able to identify stocks that appear to have undergone genetic bottlenecks (inbreeding).

Activities planned for this year include using this genotyping tool to evaluate genomic selection. Specifically, information linking target phenotypes to genetic fingerprints



QPX disease prevalence in three clam lines (D, E and F) produced from the same original stock using distinct genetic markers and deployed in Massachusetts and New Jersey for two years.

generated from the markers available on the chip will be used to breed clams predicted to have higher resilience (and their controls). Offspring will be field-deployed to evalu-

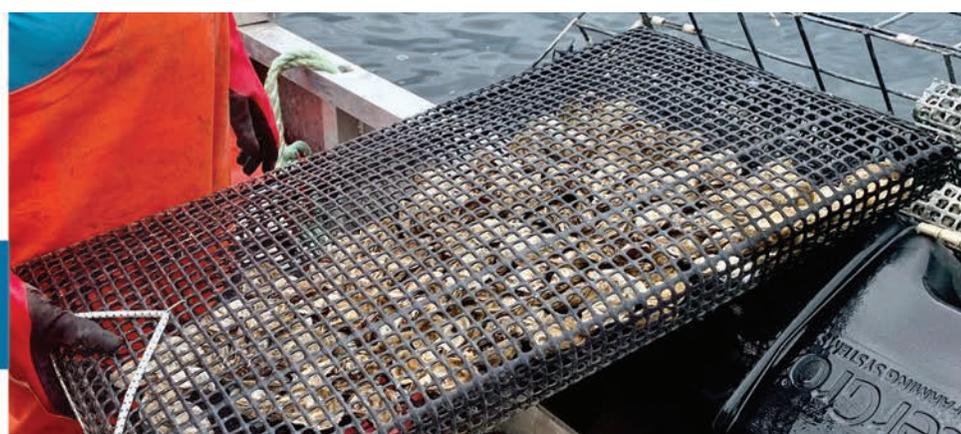
ate performance and confirm the ability of the tool to forecast resilience under real-life conditions.

The ability of the chip to characterize stocks' genetic diversity can be very valuable to identify and avoid inbreeding. The team is currently working to secure funding to provide a free service to hatcheries all up and down the East Coast to genetically test their stocks (shipping costs would also be covered by the project). The promise of these robust and high-throughput genotyping technologies is limitless, since in theory they can be used to optimize breeding for any trait that is genetically dictated, including: growth, shell characteristics such as color and thickness, and resilience to a whole suite of biological and environmental stressors. We have high hopes that these advances will be a major step forward in bringing hard clam breeding in the U.S. well into the 21st century!



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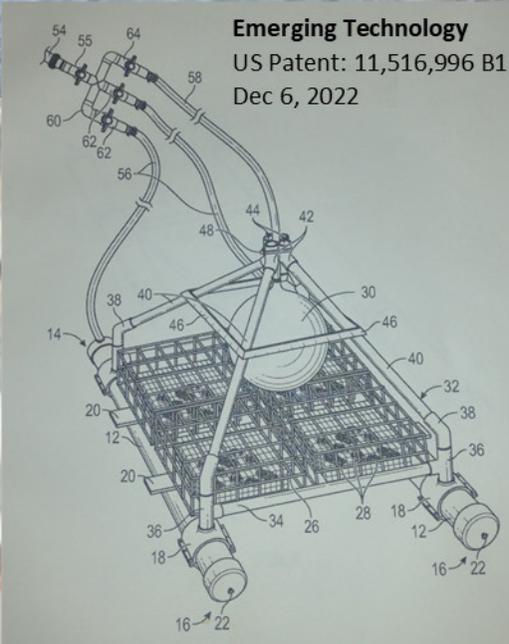
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Research Shows Triploids May Be Frail, But Only in Early Life Stages

by Christopher Brianik,
School of Marine and Atmospheric Sciences,
Stony Brook University, Stony Brook, N.Y.

With their faster growth, better meat quality and similar survival rates compared to diploids, most growers think that triploid oysters are the greatest invention since sliced bread. But many farmers in the Northeast report that triploid seed are “frail” with poor survival rates, and so they continue to rely on diploids. It’s not clear what factors are contributing to these anecdotal reports, but they seem to be distinct from cases of “triploid mortality” (now called “unusual oyster mortality”) since those animals start dying shortly after they’re deployed rather than when they’re near market size.

Unlike adult oysters, larvae and spat are highly susceptible to bacterial infections, which in the past have resulted in mass mortality events in hatcheries. But while hatchery mortalities are primarily caused by *Vibrio* species, mortalities in field-deployed spat are mostly caused by pathogens such as Juvenile Oyster Disease (*Roseovarius*). Interestingly, a previous report in the Pacific oyster (*Crassostrea gigas*) suggested that triploids may be more vulnerable to *Vibrio* pathogens, though it’s not clear how oyster pedigree would influence these dynamics. Given the widespread production of triploid oysters, frailty in the early life stages, if confirmed, could pose a significant risk to oyster aquaculture production.

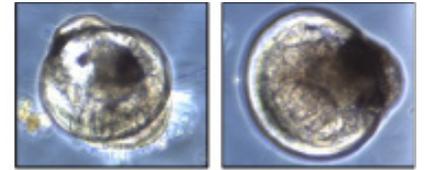
The Marine Animal Disease Laboratory (MADL) at Stony Brook University sought to address these concerns and assess triploid resilience at the hatchery, nursery and field-growout life stages. To accomplish this, two cohorts, each comprised of three half-sibling diploid and three half-sibling triploid Eastern oyster lines (*Crassostrea virginica*) were produced in 2020 and 2021 (total of 12 unique lines).

At one week and six weeks post fertilization, a subset of oysters from each line were collected and challenged with four different *Vibrio* pathogens at concentrations estimated to cause 50% mortality for their respective age classes. Another subset of oysters not used in challenge experiments were grown in upwellers for two months before being deployed in the field at two locations to assess performance in older age classes.

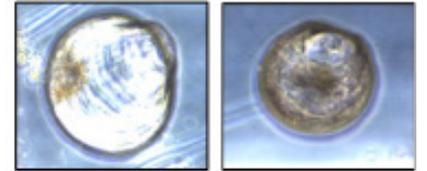
For the bacterial challenge experiments, diploids showed significantly better survival for both of the spawning events, and for both larvae and juvenile age classes. The larvae experiments lasted two days until high mortalities occurred. Diploid survival at this time point was around three times greater than average triploid survival. Mortality for juvenile oysters took longer to become apparent, with the exposure experiment lasting around 10 days. Again, survival was significantly different, with diploids showing around 1.5 times greater survival rates than triploids.

—Continued on page 17

Live



Dead



Oyster larvae before (top) and after (bottom) being exposed to pathogenic *Vibrio* bacteria used in the study.

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John Supan of Sea Farms Consulting shows off his bottle silo design for small oyster seed production at Oyster South on March 1.



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FlipFarm Systems, Ltd. makes a patented, semi-automated oyster growing system. Keith Butterfield is the U.S. distributor, located in Yarmouth, Maine.



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'Tis the season of many conferences—NACE, Oyster South, NSA and NC Aquaquaculture, to name a few. All have showcased some of the critical research needed to help us understand what's going on in our world. Many scientists are working on improving disease resistance and production traits in shellfish, perfecting management strategies, reducing Vibrio illnesses, and developing tools to make our jobs easier. In the next few newsletters we'll share some of these studies. In this edition check out pages 3 and 15 to learn about some of this research.

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—Continued from page 15
Triploid Frailty Study

Field assessments took place at two locations known to have histories of high mortalities. Although both spots had high mortalities within the first few months post deployment, no ploidy-based differences were observed at either location at any time point during the study. For the first spawn in 2020 (deployed in New York), gross observation of both live and dead oysters showed classic signs of Juvenile Oyster Disease, which was the likely cause of the mortality there. The 2021 spawn was deployed at a site in Maryland that had low saline conditions, which was likely the main factor leading to mortality at that site.

These results suggest that *triploids do display enhanced frailty, but that it's primarily during the early developmental stages and shouldn't be an issue for farmers.* Previous conflicting anecdotes of mortalities from farmers may have resulted from improper genetic pairings, as triploids are often imported from remote locations, possibly making them less adapted to the local environment and reducing productivity. Alternatively, if farmers are predominantly purchasing seed at significantly smaller sizes (around 2 mm) as compared to the size we deployed here (8-10 mm), those younger oysters may still be displaying some frailty.

With these data in mind, we recommend that hatchery managers maintain heightened awareness during triploid culturing, and implement maximum feasible biosecurity measures to prevent potential outbreaks and hatchery crashes. Furthermore, after a microbial contamination event occurs, hatcheries might benefit from producing diploids for a period of time to avoid possible bacterial resurgence, since it may be hard to completely remove contaminants. From the farmer's perspective, it may be worthwhile to avoid buying triploid seed smaller than 8 mm, since this age class may be more likely to be frail. Fortunately, the observed *triploid frailty in this study was short-lived, suggesting that triploids do not pose a greater risk for adult oyster aquaculture as long as genetics are properly controlled.*

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—Continued from page 5
NACE Wrap-Up

Trade Show

Aquaculture vendors demonstrated their innovative new products and services and connected with shellfish growers and researchers at the trade show. This year 34 exhibitors participated, including OysterGro, BlueTrace and the USDA Farm Service Agency.

“Connecting with people is what it’s all about as a vendor. I’m also a shellfish farmer, which is helpful because farmers want to talk to someone with firsthand experience using the gear,” explained Keith Butterfield, Northeast Distributor for FlipFarm USA. “Cool crossover conversations happen when I talk with a farmer who uses our system, and other farmers start listening to that farmer’s experiences. There’s immense value in getting together as a business sector. It can be solitary when you’re out

that someone feels seen, heard and valued,” said Anne Langston Noll of Maine Aquaculture Innovation Center.

“It was wonderful to see the conference creating space to discuss diversity, equity and inclusion, and to see so many people participate in the conversation,” said Jon Hare, Director of the Northeast Fisheries Science Center, who co-led the session with Isaiah Mayo of NOAA Fisheries and Langston Noll.

Interactive Sessions and Sustainability

Many sessions featured interactive components, including those focused on aquaculture education and building social license to farm. In an education workshop hosted by the University of Maine Cooperative Extension and Center for Cooperative Aquaculture Research, participants constructed their own mini-aquaponics systems. They also took a virtual tour of an aquaculture research lab using

virtual reality goggles. They left with hands-on curricula to teach youth about aquaculture.

Several sessions also focused on innovative ways to promote sustainability in aquaculture. Those included sessions devoted to using solar power, reducing plastic use in aquaculture gear, and the growing partnership between the shellfish aquaculture and restoration communities.

“This conference was born in 1998 out of a need to connect aquaculturists in the Northeast with researchers, government officials, nonprofits, and industry vendors in an informal, fun and experiential environment,” said Chris Davis, executive director of Maine Aquaculture Innovation Center and co-founder of the meeting. “It’s rewarding to see growing interest in this biennial gathering.”

The Northeast Aquaculture Conference and Expo first joined up with the Milford Aquaculture Seminar in 2012. The next Milford Aquaculture Seminar will be held in Shelton, Connecticut, in January 2025, and the next joint conference is slated for January 2026.



MARC GOGUEN

OysterGro was one of the 34 exhibitors showing their wares at the trade show.

on the farm. You learn so many pearls of wisdom from other farmers.” He also runs Butterfield Shellfish in Yarmouth, Maine.

“We always look forward to catching up with people across different disciplines at this meeting. It’s the perfect blend of industry, academic and government folks,” explained Heather Ketcham of Ketcham Supply.

Diversity, Equity and Inclusion Listening Session

The conference hosted its first women and minorities in aquaculture networking event in 2022. This year the organizers built on that commitment with a listening session during which participants shared their personal stories and lived experiences. “We can be the reason

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