

EAST COAST SHELLFISH GROWERS ASSOCIATION



The East Coast Shellfish Growers Association represents over 1,300 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.

1623 Whitesville Rd.
Toms River, NJ 08755
ecsga.org

Executive Director
Bob Rheault
(401) 783-3360
bob@ecsga.org

President
Karen Rivara

Vice-President
Alex Hay

Secretary
Matt Behan

Treasurer
Gef Flimlin

Connecticut Brian Yarmosh
Delaware Mark Casey
Gulf Coast John Supan
Maine Jeff Auger
Maryland Tal Petty
Massachusetts Mark Begley
New Hampshire Jamie Heaney
New Jersey Bill Avery
New York Karen Rivara
North Carolina Chris Matteo
Rhode Island ... Jeff Gardner
South Carolina Trey McMillian
Virginia Chad Ballard

Equipment Dealer
Heather Ketcham

Shellfish Dealer
Chris Sherman

Ex Officio
Ed Rhodes, Leslie Sturmer

The Mouth of the Bay Hope Springs Eternal



Executive Director
Bob Rheault

As the days get longer and the threat of snow fades, things are starting to look up in many ways. After the past year we could all use some good news! My wife and I got our shots in March, and it was liberating. We can't wait to go out to eat and have friends over for shared indoor meals, handshakes and hugs, and eventually to get rid of our @#\$\$* masks!

I expect that as increasing numbers of people all over the country become vaccinated and start to feel a similar sense of liberation, a substantial amount of pent-up restaurant demand will be released. I believe that restaurants will rebound nicely over the next two months—in fact, sales are already picking up as many states relax restrictions on indoor dining. It is even possible that you will have trouble getting a reservation at your favorite spot this summer!

Nevertheless, I hesitate to spike the ball right now since we're not quite out of the woods yet. There's always the threat of one or more variants putting us

back in a bad spot, and I have concerns about the pace and breadth of the recovery.

It's been widely reported that the pandemic was an extinction event for independent restaurants. The National Restaurant Association counted 100,000 closed in September, and many of my favorite raw bars have thrown in the towel. Statistics from NYC and Chicago have been bleak, and questions remain about how many high-paid workers will ever return to work in their city offices and order expensive meals. Open Table reports that restaurants that have re-opened (nationwide) were back to 70-80 percent capacity for sit-down meals in March compared to last year.

I wonder how many growers cut back on seed orders last year, and whether inventories will be able to keep pace with demand this summer. I worry that many growers, still reeling from the economic damage of the past year, might be putting expansion plans on hold for yet another year. I know lots of growers are sitting on some very large product, so fire up the barbecue and grill those jumbos. They are amazing eaten plain or paired with delicious sauces—if you need ideas check out the [Recipes](#) page of our website.

Since I have not heard of many farms for sale I remain hopeful that all the relief efforts we worked so hard for last year may have prevented what I was

— Continued on page 7

Member Profile: Atlantic Capes Fisheries

by Robert Rheault,
ECSGA Executive Director

I recently I paid a virtual visit to Brian Harman, the manager of oyster aquaculture operations at Atlantic Capes Fisheries (ACF) in Cape May, N.J., which also runs several scallop boats and surf clam operations. They started farming oysters in Delaware Bay back in 1996 and use different grow-out methods at several sites, selling product under the brand names Cape May Salts, Stormy Bay Oysters, Elder Point Oysters and Jersey Gem Oysters. Their oyster farming operations currently employ around 20 people, but staffing varies seasonally.

When asked what made him want to get into the business, Brian explained that when he was in college he landed his first “oyster gig” at the Cape Shore hatchery location of Rutgers University's Haskin Shellfish Research Laboratory (exit 6 for the Jersey-born).

“I needed money and didn't want to pump gas, so I ended up growing oysters for Rutgers. At the time I had no vision of a career in aquaculture, but as I learned each step of the shellfish-farming process, from hatchery to grow-out, I realized this was something I could see myself doing for the long haul. Working outside, in nature, and always encountering something new are what keeps this work interesting,” Brian explained.

Grow-out

New Jersey has two very different ecosystems for growing shellfish: the coastal bays, which are rich lagoons protected behind barrier islands; and the vast, 780-square-mile expanse of Delaware Bay, which experiences 5-foot tides, a wide range of salinity and some wild seas. Although the Bay has a storied history of highly productive oyster fishing, it often delivers punishing farming conditions, complete with 4-foot seas and 6-foot-tall ice bergs.

Although every ACF oyster starts out in the nursery—a combination of FLUPSYs and land-based



JAY RUTKOWSKI/ACF

Nursery Manager Pete Siner shows some *Polydora* mudworms who's boss on the Cape Shore Farm. In this location, *Polydora* thrives on oyster gear and can quickly smother a crop if not kept in check by daily inspections.

tank upwellers—grow-out methods differ. The Cape May Salt brand is grown out on Cape May's intertidal flats in rack-and-bag gear, allowing workers to visually inspect all the shellstock daily, just by patrolling the rows. This is crucial to staying on top of developing problems before they cascade into disaster, which translates to

— Continued on page 2

— Continued from page 1
Atlantic Capes Fisheries

being overrun by *Polydora* worms. Brian noted that, “we have a species of *Polydora* that is super prolific in lower Delaware Bay, and if left unchecked for even a couple days too long, can snowball into a crop-smothering mess. So we



JAY RUTKOWSKI/ACF

Shaughn Juckett and Melissa Harabedian navigate the flats to bring in a harvest of Cape May Salt Oysters. “Salts” are harvested via ATV and transported to a refrigerated truck waiting on shore.

keep a close eye all summer as the mud intensity comes and goes.”

On the opposite end of the spectrum, Stormy Bay, Elder Point and Jersey Gem oysters are grown out on a subtidal farm located in the middle of Delaware Bay, which makes for rough conditions in the non-summer months. Large steel cages containing plastic trays sit on the bottom in roughly 20 feet of water, and crews periodically haul the cages onto the decks of the work boats for tumbling. Brian explained that this system had to be specially designed for the rough open waters of Delaware Bay, but that these growing conditions “produce a very fat oyster with a medium brine and pleasantly sweet notes.”

Like many industry members, over the past two decades ACF has been constantly making changes to their methods. “We’ve never really done things the exact same way two seasons in a row. There’s *always* something to be learned, and tweaked or changed each season,” Brian said. He’s excited about the recent addition of a rotating bottom cage that uses the passive energy of the tides in Delaware Bay to turn the oysters each day. ACF is currently working on an intertidal version of this technology in



JAY RUTKOWSKI/ACF

The crew of the *Morning Star* brings a cage on deck for husbandry out on the Stormy Bay Oyster Farm in Delaware Bay, N.J.

hopes of keeping the Cape Shore *Polydora* under control without the need for near-constant manual washing.

COVID

Brian talked about how COVID impacted his farm this year. “I won’t sugar coat it. The pandemic has been painful. We had a hefty crop of beautiful oysters ready for sale in the spring of 2020, just as the half-shell market essentially vaporized as restaurants were forced to close last March. With the clock ticking towards warmer waters and the start of our growing season, I had to scramble to find alternative outlets to offload product to avoid overburdening our resources on the farm. We had to send a pile of product to be shucked so we had room in our gear for the upcoming season.”

Brian related that one of his biggest challenges this year has been trying to get the general public to feel comfortable eating oysters at home.

“We’ve always known that oysters are primarily consumed in restaurants, shucked and served to patrons on a plate of ice.” But with so many restaurants closed or at reduced capacity, ACF has been trying to open the minds of consumers to the simplicity and ease of enjoying oysters anywhere.

“If you take a few minutes to learn the process of safe handling and shucking, you can now enjoy your favorite oysters in your kitchen, backyard BBQ, at the beach, kids’ soccer practice—wherever. Focusing much of our energy on retail business has certainly been beneficial for us,” Brian said, “and it’s safe to say we’ve progressed in this sector much faster than we would have in a non-pandemic landscape.”

Brian is optimistic about improving oyster markets in the coming season. “I’m fairly certain we’ll see excellent business along the Jersey coast and beyond this summer, as folks are eager to get outside and *do things* after such a difficult and draining winter, and

— Continued on page 4

4Cs Breeding Technologies, Inc.

Triploid Technology for the Oyster Industry

OYSTER COMMON

Sell online and let us handle the logistics

OYSTERCOMMON.COM

Introducing Improved Bottle Silos

- **Seamless construction using PEGT modified acrylic resin**
 - ~ near clarity of pure acrylic
 - ~ more resistant to cracking

- **4" diameter; 21 1/2" tall**
- **3/4" FNPT water connection**
- **Neoprene O-ring marble seat reduces leakage during handling**

- **Deep discharge spout eliminates gasket/pipe/tubing**
 - ~ allows higher flow rates and easier cleaning
- **Includes a 1 3/8" marble**
 - ~ eliminates spinning that can crush spat
- **Custom built nursery systems available**

Price: \$180 (US) each + shipping
Includes marble
VISA/MasterCard accepted

For additional information or to place an order, contact:
John Supan Ph.D.
Sea Farms Consulting LLC
jsupan2575@gmail.com

Regulatory Thunder Clouds Loom

by Robert Rheault,
ECSCGA Executive Director

As if the pandemic weren't bad enough, our industry had a few other curve balls thrown our way this year. In September the Food and Drug Administration (FDA) announced it was rolling out new traceability rules that could pose significant challenges to growers and dealers. We still don't know whether the shellfish community will get an exemption, but if we don't, at least we will have four years to figure out how to come into compliance. Stay tuned!

Then in November the former administration announced it was rolling out revisions to the Nationwide Permits (NWP), and gave us a month to comment on over 100 pages of Federal Register fine print. After weeks of conference calls and research, we submitted eight pages of comments with 80 references, trying to guide the revision of the Army Corp of Engineers' NWP 48 Aquaculture rule. A few weeks later the Corps responded with a 110-page decision document that effectively ignored our comments. We worked hard on those comments in order to make sure the Corps incorporated scientific publications showing how shellfish farming is compatible with eelgrass.

You may recall that around two years ago, after environmental non-governmental organizations (NGOs) sued the Seattle District Army Corps, the Ninth Circuit Court invalidated around 1500 shellfish aquaculture permits in Washington State. The NGOs alleged that the Corps had failed to properly consider individual and cumulative impacts of aquaculture on protected resources such as threatened species and essential habitat (e.g., eelgrass). The Corps lost the lawsuit and the appeal was denied, so now all the shellfish farms in Washington State are rushing to get re-permitted in time for planting season. At last tally only a few dozen had been re-permitted—only 500 more to go!

Having heard about the pain that the industry in Washington was enduring with the double whammy of the pandemic and permit revocations, I was concerned we might see a similar lawsuit on the East Coast. I figured it might happen in New York, where one NGO was threatening to sue the

Corps over mechanical-harvest issues. A few weeks ago I learned that the Center for Biological Diversity, the Center for Food Safety and the Sierra Club had filed a Notice of Intent to sue the Corps nationally! Just what we need.

The Notice alleges that the Corps failed to properly consider the impacts to protected resources (threatened/endangered species and critical habitat) in issuing 12 of the 50 NWPs they use. NWPs simplify the permitting of dozens of activities that meet certain minimum criteria designed to ensure no significant impacts to protected resources. They save thousands of hours for both permitting agencies and permittees, with the categories of permits covering activities as diverse as installing power lines and pipelines, to dredging, to putting a driveway over a vernal stream; and of course NWP 48 for shellfish aquaculture.

This suit won't have any impact on the five New England states, because instead of NWPs they use state-based Regional General Permits. Talking to NOAA's policy people and NOAA's Protected Resources Division I learned that they don't think our situation is as dire as I had initially feared. All of the East Coast Corps districts

have adopted Regional Conditions that further guide the issuance of NWP 48 permits.

These Regional Conditions mandate that applicants consider potential impacts to protected resources, and if a proposed lease could impact sea turtles or sturgeon or eelgrass, then the Corps has to seek what is called a "Section 7 Consultation" under the Endangered Species Act from NOAA's Protected Resources Division. That Consultation will determine whether the proposed

activity is likely to have a significant adverse impact, whether a project can go forward or if special conditions or mitigation measures are required.

Since the East Coast Corps districts typically don't allow shellfish farming in eelgrass anyway, and our farms don't have substantial impacts on threatened and endangered species, NOAA's policy folks seem confident that the Corps will win the suit (at least when it comes to NWP 48 and aquaculture). Let's just hope they're right.



Freshtag™ Time/Temperature Labels Calibrated to mirror bacteria growth - or customize for your temperature profile

 <p>For Perishable Catering Products</p>	 <p>Validates Caviar Freshness and Quality</p>
 <p>Engineered to C Bot Toxin for ROP/MAP</p>	 <p>Cold Chain Monitoring for Shellstock</p>

Using Stoptlight technology, Vitsab **Freshtag™** labels stay green for most of their life. They turn yellow and then red, like a stoptlight, if temperature abuse per formulation is detected



Mark Winowich Director, Business Development
 Phone: +1(206)962-0437 mark.winowich@vitsab.com

www.vitsab.com



the best
PLASTIC CONTAINERS
for SHELLFISH GROWING SYSTEMS

Our top quality products are ideal for harvest, processing, storage and transport.

- Reusable
- Recyclable
- Durable
- Delivered

1.888.778.2473
www.ThunderbirdPlastics.com

— Continued from page 2
Atlantic Capes Fisheries

with vaccine availability giving many more people the confidence to partake,” he said.

The Best Part

Like many other shellfish farmers, Brian believes that the best part of his job is working outdoors. “I get to work outside on a beautiful tidal flat with killer views.” His credo: Enjoy



JAY RUTKOWSKI/ACF
 Brian Harman straps down the last bags from an early December morning picking session on the Cape Shore Flats site in N.J.

shellfish, raised and harvested from our waters. It seems more folks are waking up to the fact that some of the best shellfish available on the market are harvested a stone’s throw from their beach house.”

Atlantic Capes Fisheries was one of the first companies to sign up as an ECSGA member, and Brian voiced his appreciation for the benefits of membership. “Farm operations, sales, and raising a family can pull you in all directions, and it’s nice to know that the association is looking out for us and keeping us updated on threats and opportunities that affect our business.”

Visit capemaysaltoysterfarms.com for more info or to order shellfish, merch, etc; and don’t forget to check out some of the fantastic photos taken by Jay Rutkowski, the media producer responsible for ACF’s social media and website content, at the farm’s Instagram account, [@CapeMaySaltOysterFarms](https://www.instagram.com/CapeMaySaltOysterFarms).

Live Algae On Site

Industrial™ Plankton

1-844-818-0304
industrialplankton.com

Global Leader in Live Feed Bioreactors

life, be kind to others and get out of your comfort zone. Brian is encouraged by the continuous growth of oyster operations over the past decade. “I can see consumers in New Jersey really gaining an increased appreciation for local

K&L GATES

NAVIGATING THE WATERS OF REGULATORY REQUIREMENTS

Effectively managing your businesses requires careful regulatory compliance.

We represent a wide range of shellfish aquaculture enterprises. Our work ranges from project permitting and regulatory compliance, to litigation, tax, employment, real estate, and legislation and policy matters.

We have prepared testimony and presented the views of industry coalitions and aquaculture clients to the U.S. Congress, state legislatures, and local, state, and federal regulatory agencies. A national firm with offices in major cities including Washington D.C., Boston, New York, Charlotte, and Seattle, we bring both local and national perspectives to meet the needs of industry clients.

Before embarking on your next legal challenge, consider the resources we have to offer.

K&L Gates LLP. Global counsel across five continents. Learn more at klgates.com

SmartOysters

The complete farm operations solution for your aquaculture enterprise.

SmartOysters Stock Finder

Total Doz Oysters	No of Oysters	\$ Oyster Value
13,609	5,788,824	794,464

Crop by Lease

www.smartoysters.com

info@smartoysters.com
 +1 850.512.0024

East Coast's #1 Supplier of Grow Out Gear



***Floats • Cages • Trays • Bags
Everything You Need for Aquafarming***

111 Myrtle Street
New Bedford, MA 02740
508.997.4787

www.ketchamsupply.com
info@ketchamsupply.com
[@ketchamtraps](https://twitter.com/ketchamtraps)

Netting Protection



Above
and
Below
Water

Predator Exclusion • Pens & Cages

- UV resistant plastic • Easy to fabricate
- Rolls, sheets and tubes custom cut-to-size in 24 hours



**INDUSTRIAL
NETTING**



1-800-328-8456 www.industrialnetting.com

NELCO

Products for Marking & Identifying Shellfish Aquaculture Lines & Gear



Flag Markers

Flag markers are available in 3 flag sizes: 1-5/8" x 1", 1-7/8" x 1-1/8", and 2" x 3" and lengths of 3", 6", 9" and 18". They are available in 5 UV resistant colors for easy identification and may be hot stamped with company names, phone numbers or serial numbers. These are rated for 120 lb. tensile strength.

Weather Resistant Zip Ties

Zip Ties are UV weather resistant and offer easy, fast and economical installation for gear, color coding or to seal bags. Sizes range from 4"-60" in length and are 18 lb. to 250 lb. tensile strength.

Stainless Steel Cable Ties

Stainless Steel cable ties endure extreme temperatures and severe environmental conditions. They are available in 200 and 350 lb. tensile strengths as well as sizes from 5" to 60".

Multi-Purpose Cable Ties

Multi-purpose cable ties are available in 18, 40, 50, 120 and 175 lb. tensile strengths, as well as a wide range of lengths. They are also available in a wide range of colors for marking and identification purposes.

Custom Services

For custom identification, we offer high quality hot stamping on all nylon cable ties, including the Flag Markers.

Call and mention this ad to receive a discount.

Contact us for questions, samples or sales inquiries:
Andy Moss, amoss@nelcoproducts.com, 800-346-3526 x136

Product Spotlight:

Industrial Plankton's Photo Bioreactors a Game Changer for Hatcheries

Industrial Plankton produces photo bioreactors (PBRs) designed to grow algae for shellfish hatcheries. Our vision is to help stabilize the foundation of shellfish aquaculture by making the process of producing plankton more reliable, compact and bio-secure using technology. We love the shellfish industry and are truly proud to be working with such an amazing and diverse group of people. Following are the stories of just a few hatcheries using our algae-growing equipment.

Steve Malinowski and his wife, Sarah, founded Fishers Island Oyster Farm in 1981 and were some of the earliest pioneers of modern aquaculture. Steve has been using his PBR 1000L to help provide algae for his hatchery since 2016. The family-run farm relies on the hatchery to produce seed that is either sold to other farms or grown out to market size and sold to restaurants.



INDUSTRIAL PLANKTON

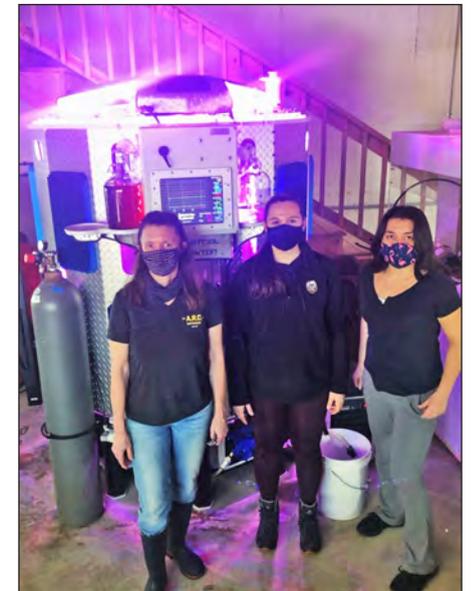
Steve Malinowski of Fishers Island Oyster Farm inspects the touchscreen controls on his PBR 1000L.

In 2017 the Malinowskis joined forces with six other shellfish growers to form a partnership with The Nature Conservancy, creating the Shellfish Growers Climate Coalition (SGCC). By sharing personal stories identifying the significant negative impacts of climate change, the Coalition's goal is to urge legislators to enact policy to secure a low-carbon future.

Industrial Plankton is proud to count Steve and Sarah as customers; we were lucky enough to get a chance to visit them and get a glimpse of what life is like on Fishers Island, at the east end of Long Island Sound in New York.

To learn more about the hatchery visit www.fishersislandoysters.com/oyster-hatchery.

For more info on the Climate Coalition visit www.nature.org/en-us/what-we-do/our-priorities/tackle-climate-change/climate-change-stories/shellfish-growers-climate-coalition.



INDUSTRIAL PLANKTON

Nancy Goward, Aimee Hebert and Lisa Bourassa of Aquaculture Research Corporation (A.R.C.) are staying safe, masked up in front of their PBR 1250L.

Lisa Bourassa, the hatchery manager at the Aquaculture Research Corporation (A.R.C.) in Dennis, Mass., has been using a PBR 1250L for the past few years to produce algae for quahogs, oysters and surf clams. A.R.C. was one of the first hatcheries to spawn shellfish and has a long and rich history in aquaculture out on Cape Cod. The hatchery has operated at the mouth of Chase Garden Creek for over 50 years, supporting more than 1500 farms with their seed! You can read more about their history at www.archatchery.com/history-2.

In 2018 **Cornell Cooperative Extension of Suffolk County (N.Y.)** received their first PBR 1250Ls. Their state-of-the-art shellfish hatchery is now equipped with four of our PBR 1250Ls, which help support their restoration efforts. It's been a pleasure to work with Hatchery Manager Josh Perry, who holds the record for some of the longest running

— Continued on page 7

— Continued from page 6
Industrial Plankton



INDUSTRIAL PLANKTON

Josh Perry, the hatchery manager at Cornell Cooperative Extension of Suffolk County (N.Y.) gives two of his PBR 1250Ls at the hatchery a double thumbs-up.

cultures in any of our algae bioreactors. Their shellfish restoration work is focused on enhancing native shellfish populations to improve local water quality; this is certainly something everyone at Industrial Plankton is excited to be helping with. To learn more about the project visit lishellfishrestorationproject.org.

When **Cherrystone Aqua-Farms** was expanding their clam hatchery in Willis Wharf, Va., in 2017, they looked to Industrial Plankton to augment algae production, purchasing the first two PBR 1250Ls (Industrial Plankton's first full-LED photobioreactors). With their space-age look, Kari Rapine and staff named the pair of PBRs after Star Wars siblings Luke and Leia. They use the PBRs in their hatchery to support larval clam production.



INDUSTRIAL PLANKTON

Cherrystone Aqua Farms Hatchery Manager Kari Rapine, with her PB1250L, named "Leia."

It has been a pleasure working with and supporting Kari and the team at Cherrystone. Starting last year they began shipping directly to customers, so you can order some excellent clams started on PBR algae at clamandoyster.com/collections/our-products.

— Continued from page 1
Mouth of the Bay

convinced would be a wave of consolidation. Talking to dealers it is clear that the relief packages for them were not as generous as they were for farmers, so we may see some consolidation there. Many dealers also took a hit when big restaurants like Legal Seafood went under, leaving them with stacks of unpaid bills.

It is hard to say how the current COVID relief package that just passed Congress will impact our industry, but all indications are that consumers will have more money to spend and that restaurants should be eligible for substantial relief. A few months ago I was predicting that the USDA would roll out a CFAP3 program for farmers this spring, but I haven't heard anything yet.

Maybe more Americans learned to shuck and cook at home this year, so maybe our market channels will be deeper and broader than they were a year ago! That would be a good thing for sure. With any luck, we will have another

century before we have to endure the next global pandemic!

I am particularly eager to put this chapter behind us and get back to the normal order of ECSGA business. Our lobbying work has begun again (virtually) and we have submitted our bill, HR 628 The Shellfish Aquaculture Improvement Act. With five co-sponsors so far and many more soon to follow, and with the support of the Farm Bureau Federation, we might have a shot at finding relief for all of you who pay twice for your workers compensation insurance.

DLBA
 NAVAL ARCHITECTS
 A GIBBS & COX DIVISION

Contact:
 Jonathan Soja
jsoja@gibbscox.com
 757-321-8516

Designing Aquaculture Support Vessels to improve **safety** and **productivity!**

Formutech Inc.
 135 Kent St.
 PO Box 893
 Charlottetown, P.E.I.
 Canada C1A 7L9

E-mail address
jfortune@formutech.ca

Internet
www.formutech.ca

Phone number
 1 855-599-0099

Jesse Fortune
 Owner/President

Cell number 1 902-629-0126

Go Deep International Inc.

Shellfish Aqua Products
 Site/Lease Marking Solutions

10 Watertower Rd., Saint John
 New Brunswick, Canada
 E2M 7K2

International: (01) 506-633-7850
 Toll Free: (North America) 1-877-446-3337

Website: www.godeepintl.com
 Email: info@godeepintl.com

AQUAMESH®
 MADE IN THE USA

riverdale.com

Update from the Gulf of Mexico

by Bill Walton, Director, Auburn University Shellfish Lab, Dauphin Island, Ala.

Though still a relatively small industry, off-bottom oyster aquaculture has grown rapidly in the Gulf of Mexico in the past decade. By 2020 Alabama had 18 farms harvesting 2.2 million oysters. Building off a successful clam aquaculture industry, expansion in Florida has grown even more quickly, with scores of farms in waterbodies from Pensacola Bay to Tampa Bay harvesting 4.9 million oysters in 2019.

Not to be outdone, Mississippi has established a large oyster aquaculture park near Biloxi, with dozens of new farmers raising oysters there. Louisiana has nearly a dozen productive farms in the state, with several around Grand Isle. Texas recently adopted legislation to allow off-bottom oyster farming, and plans to permit farmers to raise oysters in the state's coastal waters this year. Like growers in other parts of the country, these Gulf Coast farmers are producing world-class oysters destined for the



AUBURN UNIVERSITY SHELLFISH LAB

Working an adjustable long line system on a foggy morning in Grand Bay, Ala.

half-shell market, selling and promoting an ever increasing number of brands.

What has propelled the rapid growth of this industry? First, the productive waters and warmer temperatures of the Gulf result in fast-growing animals. In my experience, it's typical to have oysters reach market size within 9-12 months (or even sooner) after spawning, while still producing an oyster with a deep cup and thick shell.

Second, while there was some initial hesitation by regulatory agencies, most states have adopted (or in Florida's case, adapted) permitting systems allowing the industry to move forward. Each state from Louisiana to Florida also implemented oyster-farming parks (called by different names in different states), areas zoned and pre-permitted for off-bottom oyster culture.

Third, the industry has worked closely with academic researchers and extension specialists to answer critical questions, with a substantial investment in competitive funding from state

and national Sea Grant programs. Notably, the integration of applied research with strategic extension efforts (permitting, business planning, assessing markets, helping with marketing strategies, engaging the seafood restaurant industry, etc.) appears to have been essential to the success of the Gulf oyster aquaculture industry.

Nevertheless, oyster aquaculture in the Gulf still faces several critical and substantial hurdles. In terms of the oyster-growing environment, the benefits of warm, food-rich waters are countered somewhat by the challenges of heavy bio-fouling—oysters aren't the only organisms that grow quickly in these conditions. On top of that, many growers face difficulties posed by wide swings in salinity. Heavy rains typical in the region lead to drops in salinity that can pose a threat to crop survival (depending on the timing and duration of storms), trigger closures for conditionally approved waters, and adversely affect marketing of the product.



FERNANDO DECILLIS

Sorting through oysters at an Alabama oyster farm. Gulf Coast oyster aquaculture is growing rapidly, and farmers are producing world-class oysters for the half-shell market, introducing more and more brands.

ADVOCATES AND COUNSELORS REPRESENTING SHELLFISH GROWERS SINCE 1999

PLAUCHÉ & CARR



SAMUEL W. "BILLY" PLAUCHÉ
billy@plauchecarr.com
MEGAN K. TERRELL
megan@plauchecarr.com

Pacific Northwest Office
1218 3rd Ave., Ste. 2000
Seattle, WA 98101
206.588.4188

Gulf Coast Office
1110 River Rd. S., Ste. 200
Baton Rouge, LA 70802
225.256.4028

WWW.PLAUCHECARR.COM

Tetraselmis

Live Algae Paste

- ▶ Frozen with a food-grade cryopreservative to keep cells viable.
- ▶ Superior shellfish growth rates.
- ▶ For salinities 20-30 ppt.



MOOK SEA FARM

Our world is your oyster!

From our hatchery to yours!

Algae@mookseafarm.com | mookseafarm.com/algae



Of course, growers in the region also are vulnerable to tropical storms. Despite constructing infrastructure with these storms in mind and developing "storm strategies," severe weather events can be devastating. Ensuring that growers develop and implement storm plans can help minimize losses, but the threat of catastrophic loss is always there. The potential effects of climate change (warmer temperatures, more frequent and severe storms, lower dissolved oxygen, etc.) also can't be ignored, and growers are aware of the need to adapt to changing conditions.

Gulf growers also have suffered very high oyster mortality events on their farms. These die-offs, associated with oysters going into their second calendar year in the spring/summer, have been devastating. They have been associated with triploids, similar to what has been seen in Virginia, though the precise cause remains unknown.

— Continued on page 15

Aquaculture and Birds Webinar Summary on ECSGA.org

USDA's Wildlife Services hosted a discussion on aquaculture and bird interactions. Topics covered bird predation, protected resources concerns, and water quality impacts from guano.

Click on [Bird Interactions with Aquaculture](#) on the drop-down menu under the **Grower Resources** tab on the main menu.

algafeed

The Algal Revolution

Place Your Orders Now

www.algafeed.com
sales@algafeed.com
(833) ALGAE-4U (833) 254-2348

Algafeed has broken the barrier to produce high-density, fresh microalgae on a commercial scale.

We grow a complete range of live, natural, high-density microalgae reliably delivered and ready to use.

Algafeed empowers leading shrimp, and shellfish hatcheries to access a portfolio of high-density microalgae of unequalled nutritional value.

BENEFITS

- Reliable Supply
- Consistent Quality
- Increased Survival
- Faster Growth
- Higher Yields
- Better Seed Quality

Algafeed Algal Menu

Tisochrysis lutea



Chaetoceros muelleri



Thalassiosira weissflogii



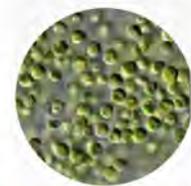
Avg. Density: (25-35) (million cell/mL) **Avg. Density:** (25-35) (million cell/mL) **Avg. Density:** (8-12) (million cell/mL)

Cell Size: (5-10) (micron) **Cell Size:** (5-20) (micron) **Cell Size:** (15-30) (micron)

Tetraselmis sp.



Nannochloropsis gaditana



Avg. Density: (5-10) (million cell/mL)

Cell Size: (10-20) (micron)

Avg. Density: (100-200) (million cell/mL)

Cell Size: (3-5) (micron)

From Seed to Shuck MAKE 2020 YOUR BEST SEASON!

For more than a decade, we've created proven systems to produce great-tasting, fast-growing oysters. Raise your seed using nursery gear designed by watermen for maximum results



Nursery Tank

Increase stocking density with proven, turn-key system.



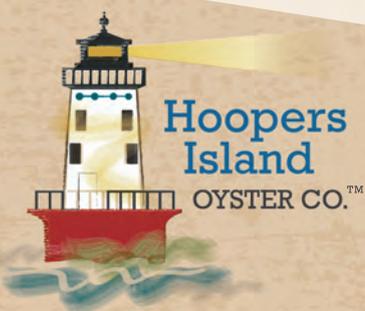
Flupsy

Grow large quantities of seed in our high-efficiency upweller.



Oyster Tumbler

Sort, wash and size oysters for market or further grow-out.



Get in touch!

(410) 397-3664
HoopersIsland.com

This Spring Turn to Hoopers Island Oyster Company for Great Grow-Out Gear & Processing Equipment

Wellfleet Shellfishermen's Farmers Market a Bright Spot in COVID Winter

by Jordan Halloran, AmeriCorps Cape Cod Member, Wellfleet Shellfish Department

Sitting near the tip of Cape Cod, the town of Wellfleet, Mass., relies heavily on shellfishing, with around 25 percent of the working-age population involved in the fishery. So when the COVID-19 pandemic struck back in March 2020, shuttering restaurants and decimating tourism, the town's shellfish industry took a serious hit. In those early days, ECSGA Executive Director Bob Rheault conducted an informal poll of dealers and growers, estimating that oyster sales throughout the country had plummeted by at least 90 percent practically overnight.

In November, with winter on the horizon and no reprieve from pandemic restrictions in sight, Wellfleet Shellfish Constable Nancy Civetta spoke with the Selectboard, the town's regulatory authority for shellfishing, about ways the

town might be able to help shellfishermen, sharing her idea of starting a farmers market for shellfish. The Wellfleet Shellfish Department (WSD) worked closely with the Mass. Division of Marine Fisheries (MADMF) and the Mass. Department of Public Health to take her idea and create a shellfishermen's "farmers market" with the goal of imparting the flavor—and financial impact—of direct sales, while still operating within the current regulatory framework mandating that shellfish must be sold to a licensed dealer.

However, persuading shellfishermen or dealers to also take on the marketing and promotion of selling product presented an obstacle. Enter Ginny Parker, president of the Wellfleet Shellfishermen's Association (WSA), and Selectboard member Ryan Curley. Both had been involved with the project from the beginning, communicating with shellfishermen and providing feedback to WSD. Parker and Curley stepped up and took on the lion's share of the work to conduct online advanced sales on behalf of the shellfishermen. They built a "one-stop-shop" website where consumers could browse and purchase various Wellfleet shellfish products. The pair created profiles with photos



WELLFLEET SHELLFISH DEPT.

Wellfleet shellfish farmer Evan Bruinooge puts a bag of his home-grown quahog clams in a customer's cooler at the first-of-its-kind shellfish farmers market.

of the shellfishermen, launched a Facebook page, and published an eNewsletter to get the word out. Their combined efforts have been key to the market's success.

To comply with state regulations, the market needed a dealer to accept the product and track information related to state reporting. Holbrook Oyster stepped in, agreeing to purchase product, keep it separated by harvester, and join the harvesters to distribute shellfish at the market.

Finally, on a grey Saturday in early December, the work of this collective was realized. Cars lined up bumper-to-bumper, eagerly waiting to pick up their Wellfleet shellfish. "One of the most satisfying parts of the market is that we started it shortly before the new year," Curley said. "It was great to end the year with something positive, as we had an overwhelming outpouring of appreciation for Wellfleet's shellfishermen."

Thanks to the joint efforts of WSA, Holbrook Oyster and the harvesters participating at the market, consumers feel as if they are purchasing directly, meeting the shellfishermen who harvested their product and building strong community bonds. The market's success has hinged on the outpouring of support from Wellfleet locals and surrounding communities. Consumers come from all over the state, with one customer making the trek from Shrewsbury, in central Massachusetts, to pick up orders for herself and her neighbors.

Running every Saturday from 12 p.m. to 2 p.m., the market features both wild-caught and farmed oysters and quahogs. Grower Evan Bruinooge was the first harvester to participate and was glad to get product off his farm. He said, "I was unsure if I would have any success, but it was worth a try!" Since the market's beginning, almost two dozen different harvesters have been able to sell shellfish in this capacity. The market has

— Continued on page 14



Preserve the Quality of Your Live Product

The Saeplast DWS352 PUR multi-purpose container is ideal for the storage and purification of live oysters, clams and mussels. An even flow of water is maintained resulting in the perfect oxygenation of each individual shellfish.

Like all Saeplast containers, the DWS352 container is ergonomically designed for maximum strength, ease of handling, stacking, and optimum hygiene. They are designed so that they stack perfectly together with or without lids.

- High water flow suitable for shellfish cleaning
- Patented water circulation system for maximum flow of water optimizes oxygenation
- Integrated water channels – no need for external piping
- Save floor space - easy to stack - provides great stability
- Drains to empty 100% in the event of a power failure



A brand of Berry

SÆPLAST | Saint John, NB Canada | Phone: +1 800 567 3966 | E-mail: sales.sj@saeplast.com | www.saeplast.com

National Shellfisheries Association Meeting Highlights

by Robert Rheault,
ECSCGA Executive Director

At the end of March the National Shellfisheries Association (NSA) held its 113th annual meeting virtually, and while my brain ached from hours on Zoom, I came away with the impression that we are incredibly fortunate to have hundreds of really smart people working hard to solve multiple problems and answer many questions posed by our shellfish friends. Conference organizer Sandy Shumway reports that 585 people from 29 countries registered, and 410 presentations streamed 5.2 terabytes of data over the course of the meeting.

Submerged aquatic vegetation

One session was devoted to presentations on the interactions of submerged aquatic vegetation (SAV) and shellfish farming, and provided more evidence that the two are mutually compatible. Lisa Kellogg of the Virginia Institute of Marine Science (VIMS) described a controlled experiment done with floating gear placed over an existing eelgrass bed that found no significant impacts, except slightly longer blade length under the cages. That work will continue next summer, when the team plans to move some of the gear over part of the control plot and examine the reaction of the eelgrass both to having the gear removed, and to having gear placed over part of the control site. This sort of experiment, where researchers can compare conditions before and after an impact with a nearby control is really the gold standard in experimental design. If no strong effects are found it should be quite compelling evidence that aquaculture does not have deleterious impacts on SAV.

A meta-analysis conducted by Jennifer Ruesink and a team from the University of Washington examined dozens of studies evaluating the interactions of shellfish and SAV, looking for shellfish impacts on eelgrass and eelgrass impacts on shellfish. They found that, with few exceptions, these studies revealed only minor impacts (either positive or negative).

Aerial photographs presented by Melissa Southworth (also from VIMS) showed eelgrass and other types of SAV invading an aquaculture site for a few months of the summer. The fact that *Ruppia* (an SAV species that, like eelgrass, is also protected) can come into a farm over the course of a summer and establish itself quite densely between the rows of cages is again strong evidence that the oyster cages are not having a deleterious impact on the SAV. Melissa will

share a more in-depth analysis of her work in a future newsletter.

Other highlights

- ❑ Bassem Allam and his team at Stony Brook University's School of Marine and Atmospheric Sciences have established the East Coast Hard Clam Breeding Collaborative, and they have sequenced the clam genome and named the organism responsible for QPX. Now you will have to learn how to pronounce *Mucochytrium quahogii*. They are looking at identifying the genes associated with QPX resistance and heat stress.
- ❑ Rona Kobell of Maryland Sea Grant led a session on how to communicate with the media. The main takeaway was that the news media love a good story—and we have great stories to tell—so invite reporters and your local legislators out on the farm in order to tell your story before the anti-aquaculture jerks tell it for you! Great advice from a talented writer who has been covering our industry skillfully for many years.
- ❑ Kevin Parker and a team from Rutgers University compared the economics of rack-and-bag, small-scale bottom cages with large cages like those deployed by Atlantic Capes Fisheries (see story on Page 1). One of the many takeaways from the talk caught my eye: a mere 4-percent increase in survival (from 50 percent to 54 percent) in the large bottom cages doubled the profitability!
- ❑ Many presentations on microplastics—mostly showing little or no effect on shellfish.
- ❑ A dozen presentations on *Vibrios* taught me many really wonky things.



MELISSA SOUTHWORTH/VIMS
Aerial view of oyster cages in May, before submerged aquatic vegetation had a chance to grow between the rows.



MELISSA SOUTHWORTH/VIMS
Oyster cages in July, showing extensive growth of submerged aquatic vegetation between the rows.





SHELLFISH GROWER INSURANCE

INSURANCE

Call for Commercial Boat Insurance!

- General Liability
- Jones Act
- Business Auto/Truck
- Workers' Compensation
- Marine/Boat
- All Others

CONNECT WITH



David Merriman, CPCU
Sales Executive
Phone: 434-327-1643
dmerriman@bankersinsurance.net
www.bankersinsurance.net/seafood



Bankers Insurance focuses on you, the client, and endeavors to become your trusted insurance agent. We are committed to No Excuse Client Service and pride ourselves on delivering the highest ethical and professional standards. Contact David, today!

SOAR Buys 2.5 Million Oysters to Rebuild Reefs; Will Fund \$1 Million in Resilient Aquaculture Projects

The Nature Conservancy
The Pew Charitable Trusts

In October 2020, The Nature Conservancy (TNC) and The Pew Charitable Trusts (Pew), in coordination with the shellfish industry and federal and state partners, launched the Supporting Oyster Aquaculture and Restoration (SOAR) program, with the dual goals of supporting oyster farmers affected by economic slowdowns associated with COVID-19 and rebuilding wild oyster reefs.

SOAR has focused on the immediate need to provide economic relief to oyster farmers by making \$2 million available for an oyster-purchase program to rebuild 27 acres of imperiled



SUSAN ALLEN / SOAR

Growers and staff from Parsons Mariculture and TNC stand on a pile of nearly 300,000 oysters purchased by SOAR and destined for replanting in Barnegat Bay, in Ocean County, N.J.

native shellfish reefs across 20 restoration sites in seven states.

As of March 2021, TNC has purchased nearly 2.5 million oysters from 100 growers to restore 15 sites in Maine, New Hampshire, Massachusetts, New York, New Jersey and Maryland. This spring, SOAR will enter into phase 3 of the purchase program and will begin buying oysters and shell in Washington state. The program will also start a second round of oyster purchases across several of the East Coast states using funds remaining from the first round of the purchase program.



SUSAN ALLEN / SOAR

Growers drop off oysters purchased by SOAR in New Jersey. More than 600,000 oysters were purchased and replanted as part of the direct purchase program in the Garden State.

The SOAR program is also beginning to focus on addressing the long-term need to build a more resilient U.S. shellfish aquaculture industry by establishing the \$1 million Shellfish Growers Resiliency Fund (Fund), in partnership with the National Oceanic and Atmospheric Administration (NOAA), the U. S. Department of Agriculture's Natural Resources Conservation Service, state management agencies and shellfish growers associations.

The Fund aims to pave the way for a more resilient and sustainable U.S. shellfish industry



SUSAN ALLEN / SOAR

Parsons Mariculture staff deploy oysters purchased by SOAR on Tuckerton Reef, a research and restoration project managed by Stockton University in Barnegat Bay in southern New Jersey.

that benefits the ocean and the communities relying on it. The priorities for the Fund were established with the support of a diverse steering committee made up of representatives from government agencies, growers, aquaculture associations, academia and non-governmental organizations (NGOs).

On March 29, 2021, the Fund issued a request for proposals (RFP) for small- and large-scale awards. Funding will be open to applicants in the United States and will be distributed equitably among the West Coast (including Hawaii and Alaska), East Coast and the Gulf of Mexico.

The small award will fund one-year projects (up to \$20,000) and will target shellfish growers, shellfish aquaculture industry associations and closely linked supply-chain companies supporting aquaculture. The application deadline for the small RFP is May 17, 2021, with a second round closing in June 2021. The exact dates for the second round will be made available on the SOAR website soon.

The large award will fund two-year projects (up to \$100,000) and will target shellfish growers, academic organizations, non-profit organizations engaged directly in the support of shellfish aquaculture, supply-chain companies supporting aquaculture and shellfish aquaculture industry associations. The application deadline for the large RFP is June 14, 2021.

The small and large awards have different eligibility requirements, application and reporting requirements, priorities and deadlines. To learn more about the Fund and the application guidelines, please visit the SOAR website. An online informational webinar and Q&A session regarding the RFP will be hosted on April 28, 2021. Details will be available online in the coming weeks.

For more info about the purchase program or the Fund, contact Christina Popolizio (c.d.popolizio@tnc.org) or visit nature.org/soar.

HOT AQUACULTURE NEWS!!



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

Content is geared toward active commercial fish and shellfish farmers, covering all major commercially cultured species, in freshwater and saltwater, warmwater and coolwater, and both open and closed production systems.

Fish Farming News is published bi-monthly. Subscriptions are just \$14.95 per year in the US.

Subscribe to
Aquaculture's National Newspaper

GO DIGITAL - sign up at:

www.fish-news.com/ffn



© Fish Farming News
Compass Publications Inc. - Fisheries Division



Oyster Bay
January 23rd 2020

BECKY WASDEN/AUBURN SHELLFISH LAB

Bill Walton from Auburn University led a team of researchers down in Florida who looked at the potential of co-culturing green sea urchins with oysters. They were investigating the potential for culturing urchins for roe, and what effects the presence of urchins had on the oysters. The results were amazing! The urchins act like little Roombas, eating most of the fouling and cleaning the shells and the bags. Better yet, both oyster and urchin seemed to benefit from the partnership. The urchins developed fat, yellow roe sacs and the oysters ended up with deeper cups, heavier shells and a higher meat weight. A win-win!



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

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

jdzlea@hotmail.com 985-272-3681



The Shellfish Growers Climate Coalition brings together 200+ shellfish businesses from across the country and supply chain. Join us in sharing stories of climate impacts, advocating for smart climate policies, and helping sustain the shellfish industry by adding your name to our growing roster of members.

"We got into oyster farming because we feel it's our duty to take care of the planet. But we need to do more to address climate change to ensure oysters can continue positively impacting the environment. The coalition strengthens our voice, our advocacy, and the viability of the shellfish industry!"

Taryn Brice-Rowland
Rogue Oysters



nature.org/shellfish4climate
IG: @shellfish4climate
Email: sgcc@tnc.org

WORLD'S LEADING OUTBOARD DIESEL ENGINES
ENDURANCE • RELIABILITY • POWER • CONTROL

125 HP - 300 HP FOR DEMANDING ENVIRONMENTS





mackboring.com • (908) 391-8378 • kthompson@mackboring.com

BMPs for Regulators on ECSCGA.org

Watch a 40-minute Zoom presentation on best management practices to help regulators design aquaculture regulations that are fair, equitable and comprehensive. It's a good overview of the permitting lessons learned from 14 East Coast states that are still working this out.

Click on **Best Management Practices for Regulators** on the drop-down menu under the **Regulations and Permitting** tab on the main menu.

6 WAYS INSTANT ALGAE® ENSURES YOUR HATCHERY'S SUCCESS



Tim Reed, President, CEO and Founder of Reed Mariculture, Inc.



- 1** Always available refrigerated and frozen algae concentrates
- 2** Superior nutrition, intact whole-cell feeds
- 3** Consistent and reliable results
- 4** Easy to use
- 5** Friendly customer service and technical support
- 6** Superior shipping and logistics

WATCH OUR SHORT VIDEO TO LEARN MORE: ReedMariculture.com/sixways

© 2021 Reed Mariculture, Inc. All rights reserved. Instant Algae, Ensuring Hatchery Success are trademarks or registered trademarks of Reed Mariculture Inc.

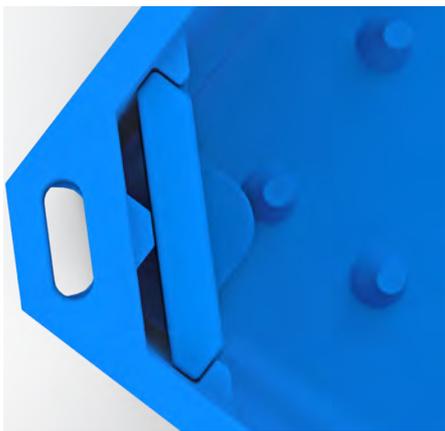
Product Spotlight: Sæplast Multipurpose Containers for a Cleaning and Purging Solution

Sæplast DWS352 PUR wet-storage containers are ideal for in-plant, short-term cleaning and purging of grit and dirt from oysters, clams and mussels prior to packaging or placing into a live well for longer-term storage. Usually 24-48 hours is enough time for the animals to completely rid themselves of sand and grit.

The containers can be stacked four or five high under a continuous flow of water raining down from above. When the top box fills up, the water spills into two patented water channels located in opposite corners, flowing into the container below. When the bottom box in the stack fills up, it overflows



Patented integrated water channels optimize flow from container to container, washing away dirt and providing oxygen to keep the animals as healthy and calm as possible.



Built-in lifting handles in the top four corners allow containers to be used for harvesting on the water, transporting to the plant and moving around within the plant for purging—all in one container system.

through the legs, running into a ditch channel leading to the water treatment area or out of the plant. It is also possible to connect the bottom box to a plumbing system using the exterior drain-holes. This system provides a continuous flow of clean water and oxygen to the shellfish in all the containers.

Manufactured at the Sæplast facility in Saint John, New Brunswick,



Water rains down onto the top box and flows down through each box in the stack, exiting at the bottom.

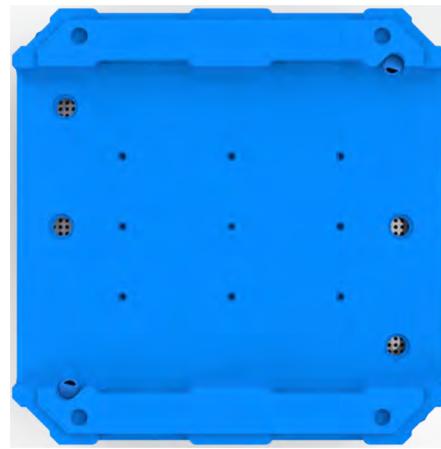
on Canada's East Coast, this new multi-functional, modular system was designed with the North American market in mind. Its standard 48" x 48" footprint allows for fork-lift access from all four sides and pallet-jack access from two of those sides.

Other features of Sæplast DWS352 PUR multi-purpose containers:

- ❑ do not require external pipe or drain connections, so they're equally at home in both closed- and open-looped systems;
- ❑ high water-flow rate is suitable for shellfish cleaning during purging;
- ❑ easy-to-replace wear pads on bottoms prevent premature wear and extend the life of the units;
- ❑ can be personalized with customer logos and with a variety of tracking options, including barcodes, QR codes and RFID tags to meet all your identification requirements.



Boxes can be stacked up to four or five high, with or without lids.



Four easy-release drain plugs allow for rapid draining, crucial in keeping shellfish alive in case of a power failure.

Working in conjunction with key partners for water treatment, storage of water, cooling and filtering, Sæplast is your passport to food safety peace of mind.

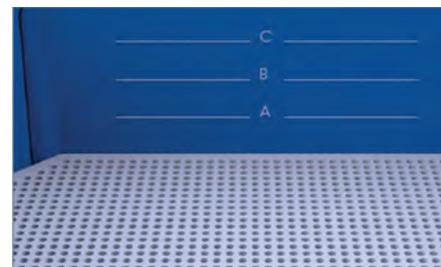
For more info, contact us at +1-800-567-3966 or sales.sj@saeplast.com.



Containers are made of double-walled, food-grade polyethylene filled with polyurethane and are ergonomically designed for maximum strength and ease of handling.



A false-bottom grid allows mud and dirt to wash away from shellfish, and securely locks into place along all four sides to ensure animals don't fall through into the mud.



Gradient lines molded into the inside walls at four even levels from the grid plate prevent over-filling, which could cause mortalities if product is kept out of the water for too long. (Note: lines enhanced for illustration purposes)

— Continued from page 10
Wellfleet Farmers Market

run nearly every Saturday since then with plans to stay open until at least May 1.

Parker serves as the communications liaison with shellfishermen and created the online sales platform that powers the market. Curley manages the sales lists, eNewsletters and pickups at the market each week. Civetta is intricately involved with market operations to ensure regulatory compliance. Volunteers from the local high school hand out recipes to help customers make shellfish a staple in their kitchens and to recycle shells from previous weeks to use as cultch, oyster shell that larval oysters (spat) like to set on. WSD overwinters the shell and then spreads it on the harbor bottom to attract spat in early summer.

The Town of Wellfleet and the Wellfleet Shellfishermen's Association are committed to helping other shellfishermen through this volatile and difficult time. If a shellfish market sounds like something that would help your town, please reach out to the Wellfleet Shellfish Department at www.wellfleet-ma.gov/shellfish-department or to WSA at wellfleetshellfishermen.org, where you can also order shellfish and learn more about the market. Additionally, MADMF has issued guidance to other coastal communities that may want to replicate Wellfleet's model, posted at www.wellfleet-ma.gov/shellfish-department/pages/dmf-shellfish-sales-at-farmers-market.

Cool Videos on ECSGA.org.

New feature on the
website!

We just added a great video showing a school of striped bass hanging out under floating cages. Click on [Cool Videos](#) on the main menu.

If you have video to share, send it on over and we will add it to the page.

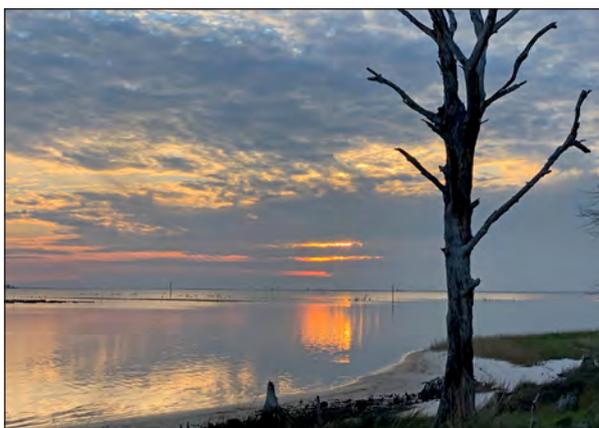
— Continued from page 8

Gulf Coast Update

Certainly, the industry cannot thrive without solving this problem, either by developing better triploids, using diploids, and/or adapting farm-management practices to reduce die-offs.

In addition to environmental challenges, the industry faces hurdles outside those found on the farms. First and foremost, growers struggle with seed supply. With all the Gulf states prohibiting importation of seed from the Atlantic Coast, growers must depend on hatcheries located in the region, with additional barriers to seed movement on a state-by-state basis compounding the difficulties of obtaining seed. Many of the area hatcheries are new, or new to raising oysters, and many are working to build reputations as consistent seed suppliers.

There's also the question of market demand. What is the ceiling on demand for Gulf farm-raised oysters, both regionally and nationally? The industry's rapid growth has led to an



AUBURN UNIVERSITY SHELLFISH LAB

The sun goes down over an aquaculture use zone in Alligator Harbor, Fla.

increase in the number of restaurants serving farm-raised oysters on the half-shell, but there is certainly interest in developing new markets.

On the bright side, the diverse group of new growers in the region, from traditional oyster harvesters to entrepreneurs with varying back-

grounds, have established a strong community that is working together to address industry issues and needs. We see good participation in regional workshops and the annual Oyster South Symposium, which has grown from just over 100 attendees in its first year to well over 300 in 2020 (just before the world shut down due to COVID). While Oyster South provides a venue for exchange of information, as a charitable foundation it is prohibited from lobbying.

Recognizing the need for an amplified voice with regulators and lawmakers, a number of growers banded together and formed the Gulf Chapter of the ECSGA, with the board of directors' approval. I have been fortunate enough to serve as the first Gulf states representative on the ECSGA board but with my term ending, I am pleased to announce that John Supan of Navy Cove Oysters in Fort Morgan, Ala., has been elected to serve as the new Gulf Chapter representative. I have every confidence that both the chapter and the Gulf industry will continue to grow.

NEW Plastic Corrugated Boxes!

MADE IN U.S.A.

- Tough & Durable Construction
- 100% Recyclable with Plastic # 5
- Waterproof
- Space Saving vs. Foam
- Weight Saving vs. Waxed Boxes

P P C **PACKAGING PRODUCTS CORPORATION**
FISH AND SHELLFISH PACKAGING SPECIALISTS

198 Herman Melville Boulevard, New Bedford, MA 02740 USA Ph 1-508-997-5150
Fax: 1-508-993-9807 • USA & Canada Toll Free 1-800-225-0484
Email: info@pkgprod.com • Website: www.pkgprod.com

Reach out today!

ECSGA Membership Categories and Dues

Growers, dealers and equipment suppliers enjoy full voting rights. (If you are both a grower and a dealer simply ask yourself where most of your revenue comes from.) If you don't fall into one of these industry categories please consider joining as a non-voting associate member.

Member Type	Gross Annual Sales	Dues
Grower	\$0 to 50,000	\$100
Grower	\$50,000 to \$100,000	\$200
Grower	\$100,000 to 300,000	\$500
Grower	\$300,000 to 1 million	\$1,000
Grower	\$1 million to \$3 million	\$2,000
Grower	over \$3 million	\$3,000
Shellfish Dealers and Equipment Suppliers		\$250
Restaurant Ally		\$100
Non-voting Associate		\$50

Because ECSGA is a 501(c)(6) non-profit trade organization, a portion of your membership dues may be tax deductible as a business expense; please contact us for details.

You can pay online using PayPal or your credit card on our website ECSGA.org or mail this form with your check to:

ECSGA, 1623 Whitesville Rd, Toms River, NJ 08755.

Name _____

Company _____

Street Address _____

City, State, Zip _____

Email _____

Phone _____

Member Type and Level* _____

* Rest assured your sales information will be closely guarded and will not be shared!

Get growing today!

OysterGro® makes aquafarming productive and rewarding.



Proven system

- Turnkey operation
- Predictable investment
- Environmentally friendly
- Dedicated support
- Profitable results

FREE CONSULTATION

1(506)743-5455

Partners in success

Our experts are ready to assist with all aspects of your business, including site selection and growth planning.

4 models to choose from:



www.OysterGro.com

OysterGro®