



LONGLINES

Volume 25 No. 1
Winter 2022



**NEW YEAR BRINGS
NEW CHAPTER FOR PCSGA...**

PCSGA



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The PCSGA strives to ensure a healthy industry and environment for shellfish farming on the Pacific Coast.

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Comments and questions about *Longlines* are invited. Please email: newsletter@pcsga.org

What the Tide Brought In

Notes from the Director

For the last 11 years I've been the voice of PCSGA. I have crafted that voice into countless comment letters, messages to members, pleas to agencies and legislators, meeting agendas, notes, volunteer thank-yous, and even words for this newsletter. It's all been incredibly rewarding and fun.

As I write this edition of "What the Tide Brought In," I can't help but notice that most of the letters on my keyboard are blank. They have literally worn off. The keyboard still operates fine, that is if you are a classically trained touch-type typist. The "hunt and peck" typists among us may struggle given that only the Q, W, Y, U, J, Z, X, V, B and half of a P are actually visible.

Along with the gray hair atop my head, the condition of my keyboard seems to be an excellent way to mark the passage of time. Those missing letters represent the spirited voice I faithfully put forth on the behalf of shellfish growers. Most times that voice was to achieve and celebrate "wins". Some of my favorites include: restoring a much-needed shellfish genetics program, understanding and addressing changing ocean conditions with improved monitoring, improving viability of seed through nursery systems, creating a scholarship fund, a new logo, the annual resource directory, and increasing our Allied Memberships – from less than 10 to 61.

Probably the one thing that makes me proudest is the transformation in PCSGA leadership. When I started, the board was a disparate group, void of a common understanding of purpose nor vision. Pushing for monthly meetings, active committees, standardized policies and processes led to consistency, improved engagement, and knowable expectations for all members AND staff. This may seem theoretical, but the existence of our collective vision and strategic planning caught the attention of a private foundation. Their recent commitment of funds allows PCSGA to do some important tasks aimed at building social capital for the industry.

Unfortunately, not all of the words I've had the honor of sharing were happy. Some of those "missing" letters were used to share heartbreaking news. I am still pained by the loss of John Lentz who was my mentor in my first few years; and the passing of Kurt Grinnell from whom we all had plenty to learn. I also shared news about lawsuit decisions, agency actions, shellfish mortality and other things too depressing to bring up.



Margaret slurping an oyster while on a farm tour in Willapa Bay, Washington.

Cover Photo: Hama Hama Oysters posted this photo of Aubri on dawn patrol to their social media on July 4, 2021 with the caption: "Celebrate that red white and blue, wherever you find it. Be safe out there today folks." Photo taken by Jeff Scott Shaw.

MONTHLY ECOSYSTEM SERVICES PHOTO CONTEST WINNERS!

Of all the things I've communicated about, the one steady "topic" - and the one that caused the most heartburn, sleepless nights, and stress - is certainly Army Corps Permitting. Goodness, I shared A LOT of words about this. Astute readers of Longlines will notice that all but one letter used in common swear words are among the "missing". I'm actually not sure why the "U" remains.

I am very sad to leave all of you wonderful hardworking, family oriented, ecosystem defenders. My parting words may be odd, but here they go... have fun!

Fun reminds us that we are all humans who want to connect with others. I have found it easier to develop lasting connections with a person who is prone to laughing over one who is not. Levity is where hope, companionship, and collaboration sprout into well-functioning communities - just like our PCSGA community. So, please strive to balance hard work with fun! Request silly games at the conference, show up to meetings with goofy glasses, find time to play miniature golf, and create opportunities to laugh.

I will spend my remaining days seeking and enjoying the shellfish you've all grown. I will forever be proud of my association with all of you. Thank you for an incredibly educational and FUN 11 years.

Be well.



Margaret A. Pilaro



October: Dan Hanson photographed three to four-year-old oyster shells that caught a hefty wild set of spat on Bald Point in Hood Canal this summer.



November: Fiona Boardman captured this photo by utilizing one of their GoPro cameras that are used to study how fish use eelgrass & oyster aquaculture habitats (funding from PSMFC).



December: Bill Dewey's photo highlights that predator exclusion nets over manila clams provide a substrate for many plants and animals to grow on. In Samish Bay the bread crumb sponge (*Halichondria panicea*) is abundant on nets in the winter time.



Save the Date!



76th Annual Shellfish Conference & Tradeshow LIVE & IN PERSON!

September 19-21, 2022

Wenatchee Convention Center
Wenatchee, WA

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Contest rules at www.pcsga.org

Pearls from the Prez

This issue has been a hard one to write. I have written and deleted more words than I have ever written in all my years as the president. I know what I want to say, the words are beating through my heart, articulating them is where I fall short. By the time you are reading this, our dear friend and director of more than 11 years, Margaret Pilaro, will have set sail for her new journey in San Diego.

How do we recover from such a loss to our organization? Margaret stood at the helm of our ship, beating the drums, leading the efforts, giving us opportunities to have a voice and for that voice to be heard. Margaret also held us accountable and gave us structure that we had zero appreciation for at the time, but has since been a godsend when hard questions or difficult situations arose. She also fought the good fights sometimes with rallied troops behind her that often seemed like herded cats, and sometimes under the radar testifying in congressional meetings and saving genetics programs with little to no contributions but her own.

What will we do now? How do we fill those shoes? Will we be okay? These may be questions only being asked in my head, but I suspect not. I do know that we will be okay. I know that because she taught me how to be. She taught me how to adjust my sail and make the most of the wind

blowing through. She also taught me how to have fun even when bogged down with work. Take that moment to find an opportunity for joy and laughter. We also have to take care of ourselves and each other. It is and will continue to bring me joy when I get the random card or note in the mail from Margaret - her doctor like handwriting telling me wise and kind words or sharing a memory from a trip we have been on.

We have our work cut out for us, the search for a new director will be hard. Not because there are not other very capable people, but because she was and is an amazing person. A deeply caring woman. Not just for some of us but all of us. Yes, even those who can be the pain or thorn or those whom are never satisfied - she cared, she loved what she did beyond the job itself. The next person, right or wrong, will be measured against what the last 11 years have been. It will be our job to support this person and ensure they too care deeply for our industry and then we pray that they look good in funny face glasses.

To my friend, I love you, I thank you and I hope this next chapter is fully of bubbles, laughter until we question our bladders and enough good memories to keep you smiling when you are missing us all.



Miranda Ries
Pacific Seafood, Pacific Shellfish

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- *Guidance navigating local and national permitting processes*
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- *Discounts and rebates through allied partners*
- *Access to health care and business security with insurance partners*
- *Scholarships and funding opportunities for enrichment development*
- *Network for collaborations and information sharing*

WHAT DOES PCSGA DO?

We are your **advocate** and work with local, state and national partners to help define policies and regulations that affect your business.

We work with a team of consultants and scientists from leading universities and marine institutes to support **cutting-edge research**.

We believe **outreach** is key. We invite you to join our beach cleanup efforts, our annual community event (SLURP), and various festivals to help build relationships with the public that are vital to our success.

We recognize **education** is essential in achieving our long-term goals. We support programs that teach the value and benefits of our industry.

We organize an annual **conference and tradeshow**. You'll learn about current and emerging issues facing our industry - all at a discounted member rate.

We urge you to **get involved**. Volunteer at local festivals, join a committee, participate in our annual lobbying trip to DC and your state, or represent your region on our Board of Directors.



ALLIED MEMBER PROGRAM

Dedicated to local, national, and international businesses that support the shellfish industry.

ALLIED MEMBERSHIP LEVELS AND BENEFITS:

SUBSCRIBER \$40

- Subscription to quarterly newsletter, *Longlines*

FRIEND \$250

- Subscription to quarterly newsletter, *Longlines*
- Access to PCSGA membership list
- Membership rates to PCSGA Annual Conference

ASSOCIATE \$500

- 2.25" x 2" (w x h) display ad in quarterly newsletter, *Longlines*
- Annual Resource Catalog, with 1/8 page business ad and listing
- Company name listed on PCSGA website
- Membership rates to PCSGA Annual Conference
- Access to PCSGA membership list
- Subscription to quarterly newsletter, *Longlines* and PCSGA Listserv

SUSTAINING \$950

- Free Tradeshow Exhibit space and ticket to Tradeshow Reception at PCSGA Annual Conference
- 2.25" x 2.75" (w x h) display ad in quarterly newsletter, *Longlines*
- Annual Resource Catalog, with 1/4 page business ad and listing
- Full directory listing on PCSGA website, and link to your website
- Membership rates to PCSGA Annual Conference
- Access to PCSGA membership list
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CORPORATE \$1700

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- Free Tradeshow Exhibit space and ticket to Tradeshow Reception at PCSGA Annual Conference
- 2.25" x 3.5" (w x h) display ad in quarterly newsletter, *Longlines*
- Annual Resource Catalog, with 1/2 page business ad and listing
- Full directory listing and company logo on PCSGA website, and link to your website
- Membership rates to PCSGA Annual Conference
- Access to PCSGA membership list
- Subscription to quarterly newsletter, *Longlines* and PCSGA Listserv

PATRON \$4,000

- Free entrance for two to PCSGA Annual Conference and Grand Awards Banquet; additional attendees pay at member rate
- Free Tradeshow Exhibit space and ticket to Tradeshow Reception at PCSGA Annual Conference
- 4.75" x 3.25" (w x h) display ad in quarterly newsletter, *Longlines*
- Annual Resource Catalog, with full page business ad and listing
- Full directory listing and company logo on PCSGA website, and link to your website
- Membership rates to PCSGA Annual Conference
- Access to PCSGA membership list
- Subscription to quarterly newsletter, *Longlines* and PCSGA Listserv
- Gourmet holiday gift basket

ATTENTION GROWER AND ALLIED MEMBERS!

Want to stay on board with PCSGA or join the Association for the first time?

YOU CAN DO IT ALL ONLINE!

Renewing Members: www.pcsga.org/renew-membership-dues

New Members: www.pcsga.org/join-pcsga



PCSGA Grower Membership Application

Company: _____

Designated representative, for voting purposes: _____

Number of years in shellfish business? _____

Mailing address: _____

Geographic location of farm (e.g. west side of Hood Canal near Brinnon): _____

Phone: (____) _____ Email: _____

Name(s) of another grower near your farm location (if known): _____

Species you farm (check all that apply): Oysters Manila Clams Geoduck Mussels

In case of a toxic spill or other marine emergency, list the counties where you farm so we can notify you quickly: _____

Calculate Your Dues:

Membership dues are based on your annual sales. Calculate your dues amount by taking 1% of the annual farm-gate value of your shellfish. Farm-gate is the value received when selling product to a buyer or to a processor for further value-added processing.

Example: You harvest and sell clams directly to a distributor for processing. The distributor pays \$100,000. Your dues are 1% of \$100,000, or \$1,000. (.01 x \$100,000 = \$1,000)

Annual farm-gate sales of \$ _____ x .01 = \$ _____ dues (Minimum \$250)

Check one: 1 payment of _____

4 payments of _____ (due Jan, Mar, Jun, Sep)

Check VISA/MC # _____ Expiration Date: _____

*Payment will be charged to the above credit card once membership has been approved by the Board

SIGNATURE REQUIRED:

- I affirm that my membership dues amount is an accurate reflection of my annual production.
- I agree to comply with best management practices outlined in PCSGA's Environmental Codes of Practice (ECOP).

Signature _____ Date _____



Farmers' Corner

Written for you, by you - share all the news from your farm.

Submit to newsletter@pcsga.org



Meet New PCSGA Grower Member Black Shield Oyster Co.

by Sara Harvey & Christian Jones

Black Shield Oyster Co. is a petite shellfish farm located in the Middle Hood Canal, focused on cultivating pacific oysters and manila clams, using bag-on-bottom methods to tumble our little stewards of the Canal. We are a two person team, both coming out of Seattle restaurants, who are interested in producing shells that are service ready, pristine, and just delightful to enjoy. Our unique location, a private cove with a single home that touches the creek is special for so many reasons - not least of which is the absolutely delicious shellfish that grow here, but also because of the rich and exciting history to be found just below the silt layer.

At one time, a "pirate ship" (the C. A. Thayer) was docked here, there was a menagerie with a monkey & a bear among other critters, and the still standing original building that can be seen in many photos from the 40s & 50s, "McNeals 101 Attractions" is currently our gear shed. The ship was purchased in 1950 when it was being used as a cod-fishing boat, and dubbed "the Black Shield" by the owner of the cove at the time, Charles St Charles, who married a McNeal daughter and left his "Salt Chuck Charlie" life behind to become a captain and an oysterman. We named our farm after this legacy of adventure, and hope that somewhere in the night skies, Captain St Charles is still watching us work the night tides, by the light of LED batteries these days.

Follow Black Shield Oyster Co. on Facebook
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Julie Decker: Seafood Champion

By: Jessica Hathaway, National Fisherman

Date: November 12, 2021

It's been almost 30 years since Julie Decker made her first summer run to Alaska from Chicago to work as a patcher for Alaska General Seafoods in Ketchikan. She went back to Chicago for the winter. But she would find herself in Ketchikan again the next year at age 22.

This time she was back as a graduate — both from Northwestern University and from cannery work. Decker walked the docks, determined to find a spot on a boat. She worked as a greenhorn deckhand on a gillnetter, and that was it. The pull of Alaska was too strong to resist.

She came back to crew on the same boat the following summer after spending the winter in her hometown of Detroit, waiting tables, teaching English and working at a domestic abuse shelter. That experience seemed almost prophetic when she found herself on deck with an abusive captain.

Realizing she was stuck on a boat in remote area with her assailant, she was determined to find a safe exit. When the boat was unloading at the tender, she called the captain of another gillnetter to pick her up and take her to Wrangell. That gillnetter was Gig Decker, and as luck would have it, he was looking for a deckhand.

“The first time I saw her on the back deck, I could see that she was hard-working and focused. Then, when I met her, she was friendly, interesting and different. She enjoyed fishing and being in Alaska, yet we could talk about any topic. There was something mysteriously attractive about all that,” says Gig Decker.



They finished the season together, harvesting salmon, then diving for cucumbers and urchins. After learning the cucumber and urchin dive fishery, the pair began working to set up the Southeast Alaska Regional Dive Fishery Association from their home port of Wrangell. In 1999, Decker became the association's executive director, which garnered the experience of guiding an organization through early growing pains.

Since then, Decker has dedicated her onshore time to promoting the interests of fisheries stakeholders and fishing communities.

“Julie has always been dedicated to her family and community, and this shines through in her advocacy for Alaska's fisheries and a bright vision for future generations and our coastal communities,” says longtime friend, commercial fisherman

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and Alaska Seafood Marketing Institute board member Tomi Marsh, of Ketchikan.

In 1999, the Deckers married on Valentine's Day and welcomed their son, Sig, that year. Their daughter, Helen, was born in 2001.

In 2006, Decker joined the staff of Wrangell Seafoods, which was formed to take over the local seafood plant in the hopes of retaining the community's vital processing capacity. The hurdles proved to be too high for an independent, fledgling company, and Trident Seafoods purchased the operation in 2009-10.

Soon thereafter, Decker served on the board of the nonprofit Alaska Fisheries Development Foundation. She was hired as the development director in 2011 and became executive director in 2014, a position she still holds.

"Julie sees the larger picture in the many hats she wears, not only in the benefits for industry and the environment, but the socioeconomic benefits for coastal Alaska communities," says Riley Smith, deputy director of the foundation. "She really cares about people, relationships and family, and it really shows."

The foundation has been integral to the evolution of the seafood industry through research and development since its founding in 1978, including the Alaska Mariculture Initiative in 2013.

Under Decker's leadership, that initiative led to the creation of the Alaska Mariculture Task Force by then-Gov. Bill Walker in 2016. Decker became the chairwoman of the task force in 2017. Their work produced the Alaska Mariculture Development Plan, which projects a \$100 million-dollar Alaska industry in the next 20 years.

"One of her greatest strengths that I've observed is her ability to bring the right people together to address common needs and

move forward shared visions," says Jeremy Woodrow, executive director of the Alaska Seafood Marketing Institute. "Whether she is at the head of the table or not, she's always a leader in the room. Our industry needs more people like Julie who are always looking to improve what we have and not settle for just 'good enough.'"

The Deckers have carried on the traditions of a fishing family in Southeast Alaska. Their kids grew up on the family boat, F/V McCrea, fishing in the summers. Sig attended the University of Southern California, and Helen went to the University of California at San Diego.

In the summer of 2020, both Sig, 21, and Helen, 19, were seining on the F/V Vigilant with family friends. On a stop-off in Petersburg, they and two other crew members died in a car accident on the island. The other passengers were Ian Martin, 29, of Petersburg, and Dennis Lord, 37, of Elmira Heights, N.Y., who were fishing on the seiner Magnus Martens.

The news rippled through the industry, causing an outpouring of support. In a summer studded with pandemic-related fears and coronavirus precautions onboard, a tragedy like this seemed almost unimaginable.

"Julie and Gig will always be the most amazing parents," says Marsh. "They would come to my boat, passing Sig and Helen over the rail. The deaths of Helen and Sig are painful, but the support of community from all over exemplifies how much good work and respect Julie has built over the years and that these values of family and community that Julie and Gig hold dear are real and long-lasting."

The accident propelled an existing plan for the Wrangell Mariners' Memorial. Naturally, the Decker family had already been leading the way on arranging funding, planning and sitting for the project, with Gig Decker serving on the board since 2017.

Continues on next page...



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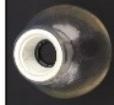
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Julie Decker: Continued

Everyone in the industry knows Julie Decker, but not because she's self-promoting. In fact, it's the opposite. She is tirelessly committed to promoting the work and ingenuity of those around her.

"Julie is also the most gracious host and friend, she is always thinking of others, not in a self-serving way but because she likes people and their quirks," says Marsh. "She can see connections and potential, and links people together because she knows they have common goals or will just enjoy each other. The table at Julie and Gig's is always open with good food, drink, conversation, and laughter."

Decker's natural penchant for bringing people together in collaboration has benefited the industry as a whole.

"Julie Decker is a constant source of support and advocacy for Alaska's seafood industry and our story of sustainability," says Julianne Curry, Public Affairs manager for OBI Seafoods.

Through the Alaska Fisheries Development Foundation, she took the reins of the Alaska Symphony of Seafood, which celebrates innovation in product development from Alaska's commercial fisheries. Under her guidance, the annual competition has focused global attention on Alaska, seafood products, and innovation, including the introduction of a new category called Beyond the Plate, promoting utilization of byproducts, which provides more value from the resource.

"We are incredibly lucky to have Julie opening new doors for seafood product development to expand beyond traditional markets for Alaska seafood," Curry says. "I'm incredibly grateful for all she has done to increase the value of Alaska seafood."

And the admiration is mutual.

"I am grateful to know and work with incredible people, in a wholesome industry that deserves to be celebrated, not only for the superior food it supplies to the world, but also the embodiment of traditional values of family, hard work, responsibility to one another, and prudence for the environment," says Decker. "The evolution of the seafood industry to integrate new opportunities in ways that benefit us all is the next challenge that I look forward to."

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Gov. Issues Emergency Order Over Green Crab Infestation

by: The Associated Press
January 19, 2022

BELLINGHAM, Wash. (AP) — Gov. Jay Inslee has issued an emergency order to address the exponential population growth of the invasive European green crab within the Lummi Nation's Sea Pond, Makah Bay, Grays Harbor, and Willapa Bay.



A female European green crab carrying an egg mass is among the crabs trapped at the Lummi Nation's Sea Pond in December. (Steve Ringman / The Seattle Times, 2021)

The emergency order was issued Wednesday in an effort toward eradicating the invasive species and preventing permanent establishment, which would particularly harm endangered species, impact resources that are part of the cultural identity of Washington Tribes and Native peoples, affect small businesses and low-income communities, The Bellingham Herald reported.

The order directs the Department of Fish and Wildlife to start implementing emergency measures with funding already available, directs the Department of Ecology, and asks the Department of Natural Resources and the State Parks and Recreation Commission to identify European green crab management as a high priority on state-owned aquatic lands and to facilitate implementing the emergency measures.

The order also urges the Legislature to provide additional emergency funding as requested by the Department of Fish and Wildlife as soon as possible.

The crab — native to Europe and northern Africa — is highly adaptable and preys on juvenile clams before they reach harvestable age, out-competes native crab species such as Dungeness crab, and wreaks havoc on marine and estuary ecosystems near shore.

Green crabs showed up on Washington's outer coast around 1998, KUOW reported. Lummi Nation officials have been trying to fend them off since several dozen were found in a saltwater pond on Lummi Bay in 2019.

In November, The Lummi Indian Business Council declared a disaster and formed a task force for eradication after over 70,000 European green crab were captured and removed from the pond.

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WA Shelf Glider Now Live on NVS

Source: Jan Newton, NANOOS
November 18, 2021

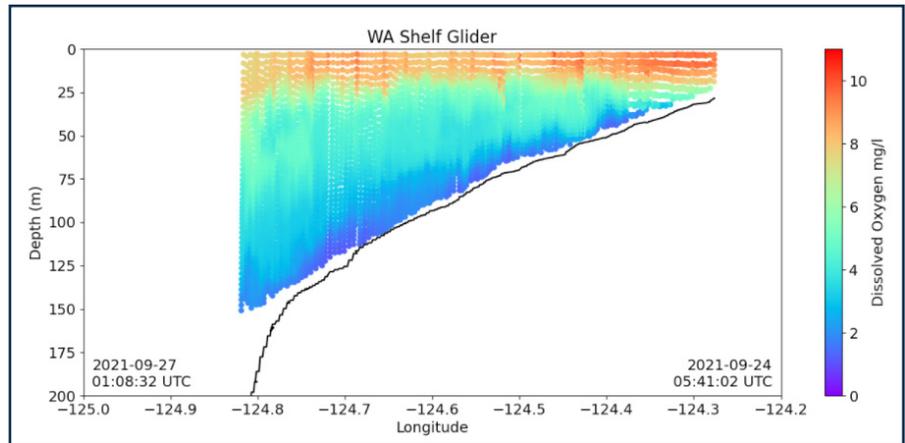
The Washington Shelf Glider has returned to service under the leadership of PI Jack Barth (OSU), with a team including Charles Seaton (CRITFC), Joe Schumacker (Quinault Indian Nation), Anatoli Erofeev (OSU), and Stephen Pierce (OSU). July and September 2021 deployments are available on NVS and show the evolution of upwelling and near-bottom low-oxygen water through the 2021 “hypoxia season”. The September map was made as early fall storms began to mix up the water column and move bottom waters offshore during downwelling.



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This glider will be deployed next in April 2022 and will travel further offshore to survey the deeper source waters anticipated to reach the coast during the following upwelling season. NANOOS Associate, Roxanne Carini, and DMAC Team, Troy Tanner and Alex Dioso, have worked together to create a new, automated pathway for the glider data to be plotted in NVS as soon as it is available during each deployment. We hope that this near-real time access to the WA Shelf Glider data visualizations will be useful to our user community for such applications as tracking low oxygen waters, future marine heatwaves, or algal blooms.



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Tracking Oysters with Blockchain

Source: foodprocessing.com.au
January 12, 2022

Blockchain is being used to keep track of organic oysters, protecting them and their buyers from fraud and theft. Developed by Security Matters (SMX), the tracking technique involves connecting the physical and digital worlds in order to allow for a form of provenance and digital genealogy to be established.

The method is fairly simple: the organic oysters are marked with an invisible, food-grade marker during the cleaning and processing stage that identifies their geographical origin. The marking is then linked to the blockchain, which allows the physical oyster to be tracked. Since the blockchain is hosted externally and has been developed to minimise fraud, the service makes it possible to have a long-term digital receipt of where an oyster was bought or sold and by whom.

The food-grade marker can be applied to a live oyster and is able to be read through plastic liner packaging. The marking system is not affected by refrigerated environments, logistics and transport conditions and procedures that are typical to the industry and sustained through the shelf life of the oysters.

The benefits of this system are twofold: firstly, the provenance of the oyster can be easily kept track of, as it moves between producers and sellers. This means that theft and fraud of the oysters can ideally be minimised, with buyers knowing where the products are coming from and if the seller is acting legally.

The second benefit of the system is that it allows buyers to understand the source of the oysters and check on their sustainability practices.

“SMX is excited to have successfully developed a food-grade marker system for oysters,” said Security Matters founder and CEO Haggai Alon.

“This is the first of several large superfood markets where our technology can be applied to provide all value chain players with the ability to meet the consumers and stakeholders’ expectations on the origination of their products and sustainability, whilst also increasing the marketability of products, which has the potential to increase sales.”

The technology was tested in a laboratory environment and Security Matters is currently negotiating with commercial suppliers to adopt the technology, with the launch of the oyster-blockchain service expected by the end of Q1 2022.



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NAA Conducting USDA Regional Aquaculture Center Programmatic Review

Source: National Aquaculture Association
January 5, 2022

The National Aquaculture Association (NAA) proposed and has been funded by the US Department of Agriculture, National Institute of Food and Agriculture (NIFA), to conduct a programmatic review of the five US Department of Agriculture supported [Regional Aquaculture Centers](#).

The Centers coordinate institutional resources with industry needs to fulfill their mission to support aquaculture research, development, demonstration and extension education to enhance viable and profitable U.S. aquaculture. The five Centers fund and oversee cooperative research, development and demonstration projects that directly address the concerns of US aquaculture community in their regions. The Centers are:

[Center for Tropical and Subtropical Aquaculture](#) located at University of Hawaii and encompasses America Samoa, Commonwealth of the North Mariana Islands, Federated States of Micronesia, Guam, Hawaii, Palau, and Republic of the Marshall Islands.

[North Central Regional Aquaculture Center](#) located at Iowa State University and encompasses Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota and Wisconsin.

[Northeastern Regional Aquaculture Center](#) located at the University of Maryland and encompasses Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont and West Virginia.

[Southern Regional Aquaculture Center](#) located at Mississippi State University's Delta Research and Extension Center and encompasses Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, Oklahoma, Puerto Rico, South Carolina, Tennessee, Texas, U.S. Virgin Islands and Virginia.

[Western Regional Aquaculture Center](#) located at the University of Washington's School of Fisheries and encompasses Alaska, Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington and Wyoming.

The NAA highly values the fundamental paradigm that undergirds the Centers. This paradigm consists of three interconnected efforts: farmer advisory committees, university or laboratory-based scientists, and aquacultural extension specialists. Functionality is achieved through farmers identifying, prioritizing and selecting research and demonstration projects conducted by scientists whose results are interpreted as actionable information for the farmer by extension specialists that bridge the gap, or extend that information, from the research community to the farming community. This structure is the envy of the world and for good reasons. This practice is an incredibly efficient way to target applied research and ensure it addresses critical bottlenecks faced by the farming community.

The NAA has engaged the services of a highly qualified review team, Dr. Carole Engle, Mr. Gary Fornshell, Dr. John Hargreaves and Dr. Gary Jensen, to complete the following activities over the next two years:



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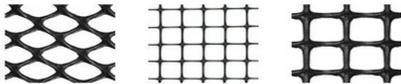
- Analyze the funded projects at each Regional Aquaculture Center from 2014-2021.
- Analyze investments against the Subcommittee on [Aquaculture's National Strategic Plan for Federal Aquaculture Research \(2014-2019\)](#).
- Assess industry involvement in each Center and in Center funded projects and determine if: 1) investments address critical industry needs and 2) if findings are well disseminated to stakeholders.
- Identify gaps and develop recommendations for future funding of regional aquaculture research that would provide the greatest benefit to US aquaculture.
- Identify gaps and recommendations to increase efficiency and impact of individual regional aquaculture centers.
- Create a technical report outlining the results of this comprehensive review.

The review team will work independently of the Centers and the NAA to complete the analysis, provide recommendations and write the technical report. The Team will conduct their work through virtual interviews and review of Center procedures and funded projects. Interviews will include Center staff and individuals that have worked with, or not worked with, the Centers to include farmers, researchers, and extension specialists. If you are contacted, please accept an interview invitation. Your participation and contribution to the review will be greatly appreciated. The NAA has contracted with Tony Vaught, Professional Aquaculture Services, to provide administrative support to the review team including scheduling virtual interviews.

For additional information, please contact Paul Zajicek, NAA Executive Director, at 850-216-2400 or naa@thenaa.net or Dr. Tim Sullivan, National Program Leader of Animal Production Systems, National Institute of Food and Agriculture, at Timothy.Sullivan@usda.gov.

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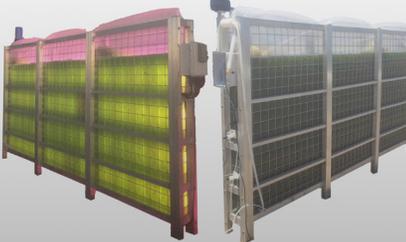
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Executive Director

The Executive Director represents the mission and the interests of the Pacific Coast Shellfish Growers Association, an organization that has existed for nearly a century. The Director will lead the development and implementation of PCSGA programs, tools, and relationships in order to assist the region's shellfish industry and related community. The Director supervises a team of committed staff and works collaboratively with the Board of Directors and stakeholders to oversee PCSGA's strategic vision and lead association decisions to drive members' agenda.

Stewardship Officer

The Stewardship Officer will represent the mission and the interests of the Pacific Coast Shellfish Growers Association to the public. Specifically, this position develops and implements PCSGA programs, tools, and relationships to assist the shellfish industry and community. The Stewardship Officer will seek to improve and strengthen environmental, regulatory and business practices for shellfish farmers including Association members and nonmembers. The Stewardship Officer will work collaboratively with PCSGA leadership and other experts, amplifying each other's work and impact to the highest degree. Focus of this position is in Oregon and Washington, but outcomes will have wider applicability to all Pacific Coast states.

Member Services Coordinator

The Member Services Coordinator will represent the mission and the interests of the Pacific Coast Shellfish Growers Association. Specifically, this individual will strengthen the membership experience, working with members to identify and reflect key issues into new and existing PCSGA programs and tools. Additionally, this position will provide administrative support for the organization in order to help PCSGA achieve its mission and goals.

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Oystering - Why We Farm

a poem by:
Dawn Smart & Dan Hanson - HC Snail LLC
December 2021

*A chance to be outdoors
breathing the air, feeling the weather
A chance to be physical
lifting, toting, moving, sweating
A chance to learn something new
about the oysters, the environment, the work
A chance to do some good
for the water, the eco-system, the industry*

*Seeding, sorting, bagging on the beach
hard work to be sure
exhaustion by day three, but then some respite
Midnight tides in the rain
soggy clothes, frozen fingers, fogging glasses
but the beauty of the night and the moon clear and cold
the silent flight of the owl and the curious growling seals
Saturdays in summer
sunny and warm
shorts and t-shirts
opera or jazz on the radio*

*Why do we do it? For the pride of it
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Calendar of Events

February

- 15: Ecosystem Services Photo Contest Submission Due
- 15: PCSGA Board Meeting - via Zoom
- 02/28 - Aquaculture 2022 - San Diego, CA
- 03/04



March

- 5 - 6: Penn Cove Musselfest - Coupeville, WA
- 7-8: WA Sea Grant Shellfish Conference - Alderbrook Resort, WA
- 13-15: Seafood Expo North America - Boston, MA
- 15: Ecosystem Services Photo Contest Submission Due
- 20: PCSGA Board Meeting - via Zoom

April

- 15: Ecosystem Services Photo Contest Submission Due
- 26: PCSGA Board Meeting - via Zoom
- 26 - 28: Virtual Salish Sea Ecosystem Conference 2022

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