



# LONGLINES

Volume 22 No. 3  
Summer 2019



**AGENCIES GET  
THEIR BOOTS DIRTY...**

# PCSGA



PACIFIC COAST SHELLFISH GROWERS ASSOCIATION

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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: outreach@pcsga.org

# What the Tide Brought In

## *Notes from the Director*

Through my work at local and state government, I have planned and staffed hundreds of public meetings, hearings, workshops, and citizen advisory groups and taught classes on how to best engage the public. It's a skill set not worth bragging about, but I know what it takes to engage the public well. It's frustrating when public entities fail at soliciting input. There should be a clear connection between input given and the decision or outcome.

For better or for worse, the community of shellfish growers needs to see themselves as "the public". You not only reside in your community, but you produce a commodity that depends upon a healthy and pristine environment. Many of you provide jobs to your neighbors, create name recognition for your area, and all of you pay taxes. You have every reason to be at these meetings – especially when growing shellfish appears at the center of the discussion.

I've seen some crazy things at public meetings, including a lady who faked child birth labor to change the meeting's tone. But, there's no question that the public process relating to the use of coastal areas has gotten bizarre. A description of public discussions occurring in Rhode Island recently caught my attention. The state's permitting agency shared that "Concerns are wide-ranging: aquaculture makes water too clean, interferes with a resident's dog's enjoyment of the pond or encourages the establishment of eel grass, which is icky to swim in." Whoa! When did our pets' recreational opportunities become this important?

Your input into public processes, even just your presence at public meetings and hearings, is important. Any public entity who is charged with conducting public input knows it's their duty to listen to you. When shellfish growers show up to public meetings and introduce themselves, it makes an impression. And when they speak on behalf of their families, their businesses, and their heritage, decision makers take notice. If for some reason they don't, your input remains part of the public record that could be helpful in case legal challenge is necessary.

Right now, public processes in Mason and Thurston Counties (WA) need your input. There are likely others around our region. The shellfish story is a good one and in little need of embellishment. Decision-makers need to hear why their community is important to you and your business. They need to know you are not only vested in being there, but also committed to producing economic benefit and local food without compromising neither the character of the region nor the health of the environmental. Be respectful of both the public process and other attendees, otherwise all of those statements will be lost.

Attending public meetings are cheaper than cable, often as entertaining as most shows, and has a way of making the post meeting beer taste even better. Give it a whirl!

Be well.

Margaret A. Pilaro

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**Cover Photo:** Dave and Lee Steele with Rock Point Oyster Co. hosted a group of agency staff and related organizations at one of PCSGA's shellfish farm tours in Washington this past June. See more about these tours on page 15. Photo credit: Sara Grant, PCSGA

# Pearls from the Prez

*“Wet sneakers and muddy clothes are a prerequisite for understanding the water cycle” - David Sobel*

One of my first memories of studying science, specifically the water cycle, was in first or second grade. I was taught that water falls down as precipitation, evaporates into the atmosphere, and then comes back down again as precipitation - creating a cycle. To this day, teachers around the world still use this model to demonstrate this cycle to new generations and it is also what policy makers use as a basis of their knowledge for decision making. You might be asking yourself, what's wrong with this method? The problem is we are forgetting one of the biggest factors – us!

In depictions of water cycling through, on, and above the earth, researchers found that 85 percent of the diagrams failed to show any effects of humans. This is unfortunate, because as we've all seen recently, people have a profound effect on the planet's water resources in growing and producing food, making energy and manufacturing consumer goods, and the policies that surround water.

My point? We all have an impact on this planet, locally in our communities, in our states, and the greater world. We also have the opportunity to listen and educate the misinformed. Misinformation can be used as a source of guidance in our daily lives and sometimes an updated diagram is the key to understanding or better informing policy makers. Other times it's asking a question directly from the source of the misinformation and then spreading the truth yourself.

Learning, growing, teaching, and sharing are values we develop throughout our lives and its value to this world is immeasurable. How can you shake things up? How might you teach someone something new? Who are or were some of your most influential teachers?

Growing up on a shellfish farm, I thought I knew how to shuck an oyster, but boy was I wrong. Turns out you don't open a half shell like a shucking oyster...who knew?! Marco Pinchot, that's who! Given the opportunity and a teacher who saw the need, he showed me how to pop those babies open with ease!

The challenge, should you choose to accept it, is to teach someone something and then be open to being taught in return! I'd love to hear how this impacts you, in addition to your opinion on our water cycle and how it's understood.

I hope your summer, families, farms and friends are all bringing joy to your life.

Miranda Ries  
Coast Seafoods Co., CA

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## Monthly Winners of Ecosystem Services Photo Contest!



**April:** Duane Fagergren photographed wash water from one longline bag of seed that shows a sample of fish and invertebrates that use oysters inside bags as prolific habitat.



**May:** Greg Bates recorded a short video of a school of fish that congregates around their oyster farm. Kelp naturally grows around this location and provides additional habitat.



**June:** Duane Fagergren captures this dynamic scene around a bag of Olympia oysters: red, green, and brown algae settling; a molting Graceful crab seeking refuge; and shrimp exiting the bag as the tide receded.

**Snap a photo, win \$100!**

Contest rules at [www.pcsqa.org](http://www.pcsqa.org)

**Photo and caption are due on  
the 15th of every month!**

# Vibrio Parahaemolyticus - Talking Points & Background

by: PCSGA

Date: June 2019

It's Vibrio season, and based on historic illness trends and forecasted warm weather, we are anticipating an active year. As you are all aware, despite strict harvest and temperature control requirements, there were a high number of vibrio illnesses last summer attributed to commercial product. This got the attention of the Center for Disease Control and Food & Drug Administration and we understand they are watching closely to ensure the pattern is not repeated this year. We anticipate significant pressure to close harvest areas implicated in illnesses as well as use of press to alert consumers and discourage them from eating raw shellfish.

Certainly, none of us are interested in making consumers of our shellfish sick. It's important to ensure you and your staff are doing all you can to minimize the risk of *Vibrio parahaemolyticus* (Vp) illnesses by adhering to the requirements of your state's vibrio control plan. PCSGA has assembled the following points regarding Vp related illnesses, and management actions for you to consider for the May through October vibrio season and beyond. Please don't hesitate to share these messages with your employees and customers. Additionally, you can use this information in case you receive inquiries from media outlets.

Please contact the PCSGA office at 360-754-2744 if you'd like additional assistance or if your farm is involved in a vibrio-related recall.

## Vibrio parahaemolyticus

- *Vibrio parahaemolyticus* (Vp) is a naturally occurring marine bacteria that can become more prevalent during the warmer months of the year. There are a number of ways people can be exposed to Vp, one of which is consuming uncooked shellfish. Health agency regulations to prevent disease include controls on harvest areas, rapid cooling, and careful temperature control of harvested shellfish.
- Elevated levels of Vp bacteria can cause illness, the symptoms of which may include: diarrhea, abdominal cramps, nausea, vomiting, headache, fever, and chills. Symptoms typically develop within 1-4 days of exposure, and can last for up to a week. We encourage anyone who believes they have become ill from shellfish to contact their health care provider and/or public health authorities.
- Certain health conditions can make eating raw foods more problematic. This may include those with a compromised immune system from health issues such as cancer, liver disease, and HIV. Regular use of antacids can also make you more susceptible, as they make your body less resilient to Vp and other foreign bacteria. Raw foods are not necessarily safe for those who have undergone a recent stomach surgery.

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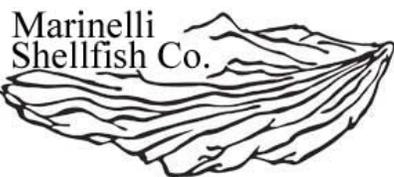
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Continued from previous page...

- For anyone concerned with consuming raw shellfish, restaurants and home recipes offer a number of enjoyable cooked preparations including several on the Pacific Coast Shellfish Growers Association website: <https://pcsga.org/recipes-nutrition/>. Proper cooking eliminates any illness risk associated with vibrio bacteria.
- While the risk of illness from vibrio bacteria is eliminated with proper cooking, it is very important for consumers to understand that cooking does not eliminate naturally occurring shellfish toxins associated with certain plankton blooms (e.g. paralytic shellfish poisoning/red tide). Commercial shellfish farms are required to have their shellfish tested routinely for toxins associated with plankton so consumers can be assured shellfish served in restaurants or purchased from stores is safe.

### Management Considerations

- Pacific Coast shellfish growers follow rigorous regulations under the National Shellfish Sanitation Program (NSSP) implemented by both federal and state agencies. Laws within the NSSP address the harvesting and handling of shellfish in order to ensure the highest quality, safest product for consumers.
- The public's health is the shellfish industry's top priority. Members of PCSGA work cooperatively with state and federal health officials to both ensure the waters where shellfish grow are clean and safe for shellfish harvest and to aid in investigations to identify and address the potential source of illnesses when they do occur.
- Once harvested shellfish leaves your farm, you should be using trustworthy dealers and transportation methods. The risk isn't over when it leaves your hands. Wholesale and retail distributors of your products are accountable and must be diligent about keeping shellfish cold. Continue to stay invested by urging anyone transporting and/or selling your product to ice the shellfish and handle with care.
- People who harvest shellfish from public beaches recreationally, (i.e. for personal use) are strongly encouraged to check with state shellfish authorities (listed below) to determine if those areas are open and safe for harvesting especially during summer months. State shellfish authorities along the Pacific Coast post notices about shellfish safety and beach-specific closures on-site or on the web. All harvesters should aim to get shellfish on ice as soon as possible and recreational harvesters are encouraged to bring a cooler of ice along with them to the beach. Note: it is impossible to tell that an oyster is infected with vibrio bacteria by looking at it.
- Proper handling and reputable shellfish companies are two of the most important aspects of seafood safety. We suggest consumers inquire about the shellfish when dining out or purchasing retail. Specifically ask where your shellfish is from and whether it has been kept cold.



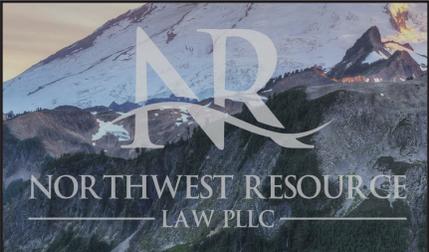
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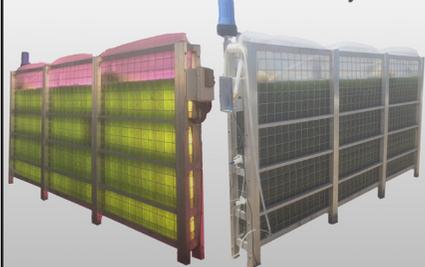
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## Farmers' Corner



Written for you, by you - this is a place to share all the news from your farm. Celebrations, acquisitions, new ventures, the sky's the limit. Submit your news any time! Send to [outreach@pcsga.org](mailto:outreach@pcsga.org)

### A Tour and Taste of Prince Edward Island

by: Marty & Debi Beagle, Fryecove Farms

"Compared to mussels, oysters are a whole lot of work!" says Dana Drummond of Atlantic Aqua Farms and Canadian Cove Cultured Shellfish on Prince Edward Island (PEI). On a trip to PEI, Dana gave us a tour of their oyster operations at Oyster Bed Bridge near Rustico. Dana also oversees approximately 250 acres of mussel operations. He recently ventured into farming oysters at the Oyster Bed Bridge site and is still expanding the operation. Their crop cycle is longer than what we have in the PNW- a minimum of three years is necessary to get the oysters to market size. Seed comes from the Bideford Shellfish hatchery on PEI and grows quickly in the onsite nursery.



Marty Beagle gets a close look at how Dana Drummond grows oysters on Prince Edward Island. They are transitioning to a common rack system used on the East Coast - 6 bags in a metal rack and held afloat by pontoons.

They initially planted in bags secured via longlines and it seems most of the operations in Malpeque Bay maintain a density of about 250 oysters per bag. As we toured, the crew was completing a transition to a more common rack system used on the East Coast: 6 bags in a metal rack, held afloat by pontoons that can be filled with water for lowering under the ice during the frigid winter months.

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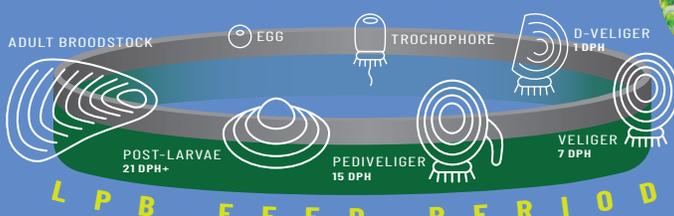
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A boat trip to their growing area revealed 40 racks on each line. Dana was a bit dismayed to find a significant algae growth coating the bags, making quick note to send the crew out to flip the racks, no easy task, but necessary to dry out the algae. Workboats use cranes to hoist up the racks. Harvesting in winter requires cutting through the ice with large chain saws. We tasted a few fresh oysters before the delivery truck left the yard – firm meat, mild brine, slightly sweet. A real treat on a beautiful bay!

Along with shellfish, PEI is also known for potato farming. Concern about nitrogen runoff from the potato fields influencing water quality in the bay are addressed by the Canadian Government through the use of setback requirements. Another concern comes from the tourist industry; while tourists enjoy the tasty shellfish of PEI, some vacation rental owners complain about the bays, filled with lines, buoys, and working boats. Dana says the company is an active member of Aquaculture Alliance of PEI. Much like PCSGA, the alliance provides education, advocacy, and other resources to support the local industry.

On the last day of our trip we met a rather shy, but friendly oysterman and his small crew on Malpeque Bay. He and his brother have been farming oysters for over 25 years. His passion for the work came through in his sun tanned face and the smile lines around his eyes while we shared oyster farming techniques and challenges. His Malpeque oysters were fabulous, both raw and barbequed, as was the sunset over the Gulf of St Lawrence. We left PEI with renewed appreciation of our life as shellfish farmers in the Salish Sea and of the fact we don't have to use a chain saw with a 6 foot long bar to harvest our oysters!



*Debi Beagle enjoys slurping an oyster while visiting shellfish farmers on Prince Edward Island.*

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 For the Coastal Engineering Research Center

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# Hoopers Island Unveils Laser-Guided Oyster Processing System

*Pearlception 2.0 grades, sorts and packs millions of oysters annually*

Source: Press Release  
 Date: March 11, 2019

**H**oopers Island Oyster Co - a full-service aquaculture equipment manufacturer, seed hatchery and oyster grower – unveiled Pearlception 2.0, the first high-speed, laser-guided oyster processing system designed and built in the U.S.

The second-generation model was developed in collaboration with Backbone Mechanical Design (Backbone) with lead engineer Richard Jiranek and manufactured at Hoopers Island’s Cambridge headquarters under the direction of master equipment fabricator John Tall.

Pearlception 2.0 automates oyster sorting previously done by hand. Using a touch-screen to drive the “OysterLogic” system, operators can specify speed, grading size (length/width or length/volume) and number of oysters per box. The system is capable of processing up to one million bushels of oysters annually.

“As oyster aquaculture has become a recognized source of delicious, sustainable seafood worldwide, Hoopers has focused our considerable experience on creating equipment and systems to strengthen oyster farming’s infrastructure,” said Managing Partner Ricky Fitzhugh. “Using real time data and predictive modeling, Pearlception 2.0 is the first “smart system” processor designed to grade, sort and package up to 20,000 oysters an hour allowing farmers to increase the quality and quantity of seafood sent to market.”

Pearlception 2.0’s automated handling process eliminates chipping and waste caused by hand-sorting. A vibrating, self-loading up-feed quickly moves oysters on a conveying elevator with staggered flights. The cross-feed then delivers oysters to a singulator tube where they are turned on two points and accelerated onto the conveyor for precise laser grading. Six air nozzles then move oysters quickly and gently to one of six pre-set stations for boxing or bagging.

The system is accurate and easy for oyster farmers to operate, according to Tall. “We designed a large touch-screen monitor and intuitive interface with seven distinct screens to configure, operate and manage processing,” he said. “The laser scanner precisely grades oysters and is capable of storing up to 20 oyster configurations with three grades each.”

Pearlception’s prototype was developed by Backbone, a Baltimore-based engineering company renowned for equipment design and production. Fitzhugh selected Backbone based on its reputation for successfully integrating ergonomic requirements, safety standards, and lean manufacturing concepts in high volume automotive production environments.

“The design process started with defining customer requirements. Using our background designing automotive machinery, we transformed the requirements into performance criteria for oyster handling, oyster grading, hygiene, safety, quality, durability, throughput, maintenance, and cost,” said Jiranek. “Pearlception 2.0 has satisfied our performance criteria, passed rigorous testing, and it is ready for market.”

*Continued on next page...*

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Photo credit: Hoopers Island Oyster Co.

The growth in the U.S. and global aquaculture market has increased demand for equipment and gear. According to a 2017 NOAA report, bivalve shellfish production represents a large and growing segment of the United States and global seafood industry. In 2016, U.S. shellfish farmers produced 37 million pounds of oysters.

The East Coast Shellfish Growers Association anticipates the demand for high speed, resilient equipment to support oyster farming will continue to grow.

“Over the past five years, aquaculture has enjoyed impressive growth in oyster production and as firms grow in scale it will be important to be able to mechanize some of the more menial tasks like sorting and counting,” said ECSGA Executive Director Robert Rheault. “The development of innovative tools like Pearlception is critical to the maturation of our industry.”

Also key to aquaculture’s technological growth and capabilities is the need for rapid, responsive service to the mostly rural areas where farmers operate.

“As an oyster farm, we understand growers’ needs, the desire for more innovative equipment and the importance of customer service,” said Chris Wyer, Hoopers’ senior manager for equipment and sales. “Whether a farmer needs trouble-shooting, programming or technical support, we can respond immediately and have an equipment specialist on site within 24 hours at most locations in the United States.”

For information on Pearlception 2.0 or to arrange a demonstration, contact Chris Wyer at 410-397-3664 or [cwyer@hoopersisland.com](mailto:cwyer@hoopersisland.com)



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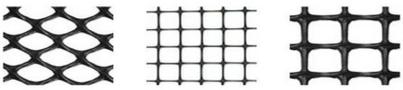


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# A Brief Look at the Shellfish World in Chile

by: Dan Cheney, Pacific Shellfish Institute  
Date: June 2019

Several months ago I was able to travel twice to Chile as the guest of the government to review progress being made on several large-scale ocean science and education projects and to present an overview of shellfish aquaculture research in the Pacific Northwest. I was supported by the Millennium Science Initiative, a national organization funding a wide range of large-scale basic and applied research projects, including shellfish aquaculture. You can view the scope of their funded studies at [http://www.iniciativamilenio.cl/en/home\\_en/](http://www.iniciativamilenio.cl/en/home_en/). Let me know if you'd like more details about these interesting projects.



*A Chilean oyster.  
Photo credit: Dan Cheney*

Shellfish aquaculture is mainly restricted to Chilean mussels and Peruvian calico scallops, with smaller amounts of native Chilean and Pacific oysters. The scale of mussel aquaculture is massive, greatly exceeding other counties and regions with the exception of China. The farm market value in 2017 was reported by the UNFAO at over \$2.5 billion! US mussel harvest in 2017 was valued at about \$10 million. The mussel industry in Chile generates 12,000 direct and 5,000 indirect jobs, with 619 companies, of which about 90% are small businesses.

Cultured and wild harvested shellfish and seaweeds account for a wide range of seafood and seafood products I saw while exploring fresh seafood markets in coastal towns. There I found whole scallops and scallop meats, whole and half-shell oysters, clams, several types of barnacles, Chilean abalone, squid, sea urchins, and dried kelp. Most shellfish were displayed fresh, some in ceviche and others smoked. The mixed shellfish products looked especially inviting, and were reasonably priced.



*Dr. Bernardo Broitman at a fish market.  
Photo credit: Dan Cheney*

My first trip to Chile, late last year, mainly focused on project reviews. I was able to briefly visit a grower in Colquimbo north of Santiago, where scallops are cultured in lantern nets hung beneath buoyed longlines. Scallop production is currently much reduced in Chile, so there are now relatively few growers. Remember the keynote speaker from the last PCSGA/NSA conference, Dr. Bernardo Broitman? He lived near this area and was my guide and host.

In early January I flew south to explore the northern Patagonia area of Chile with much needed assistance and translation support from Luis Oliva, Cristian Segura, Cristian Vargas and Bernardo (their contact information is listed below). My first stop was the port city of Puerto Montt, where I met Luis and his staff at CETMIS.

*Continued on next page...*

CETMIS offers instruction to small and medium sized growers in the latest farming methods and uses advanced methods such as epifluorescence microscopy to predict the timing and extent of mussel larvae production. The latter is especially important as the mussel farming industry currently depends exclusively on collectors to catch seed from the natural environment. Not surprising, environmental variations such as upwelling, HABs and sometimes volcanic activity, cause big fluctuations in seed production and growth.

My next stop was Chiloé Island with Luis as my guide. Chiloe Island is about half the length of Vancouver Island and has a highly irregular shoreline with numerous inlets and small offshore islets. Mussel buoys and fish farm rafts are present in about all protected areas on the east coast of the island. Mussel harvests in this region account for the bulk of the production in the country. I was told there are important cost advantages of producing in Chile given the rapid growth cycle. Harvest is within 9 to 12 months from seed.



Rows of buoys at a mussel farm.  
Photo credit: Dan Cheney

We had an opportunity for a short visit to a mussel farm owned by Justo García and an adjacent government shellfish experiment station. Justo farms mussels, as well as scallops, and native and Pacific oysters. We happily sampled all of these as well as “piure” which is a tunicate or sea squirt and a popular item in mixed seafood plates and chowders.



St. Andrews Mussels processing plant.  
Photo credit: Dan Cheney

My final stop on Chiloé was the St. Andrews Mussels processing plant. This was a very large, modern and highly mechanized operation which combines cleaning, selection, cooking, freezing, selection, packing, storage, and shipping on trucks to export terminals. We were given an up-close and personal tour of this amazing facility by the plant manager, Branco Papic. He asked us to fill out and sign a form indicating our contacts with other shellfish growing areas outside of Chile, and ensuring we had no food borne

illness. We then decked out in white galoshes, white lab coats, gloves, eye goggles, noise cancelling ear muffs, and masks, and then lead through the many phases of the process operation. Here thousands of tons of mussels are cooked, frozen, and shipped in bulk or in consumer ready packs to major export and domestic markets. Check it out at <http://en.standrews.cl/>

This interesting conclusion to my visit in Chile demonstrated the sophisticated scale of their aquaculture development and the coordination, such as the Millennium projects, between the public and private sectors. In future visits, I plan to set aside more personal time in the wild and historic areas of the country, and for travel to the Andes.

Contact Dan Cheney if you would like to learn more about his travels to Chile:  
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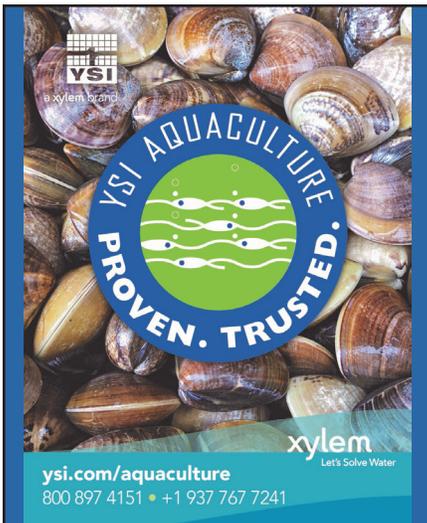


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# PCSGA Welcomes Juliet Maurer: Executive Administrative Assistant

I was born in Durango, Colorado, and moved to Seattle in childhood. From the San Juan's to the Cascades and now Olympics, I have spent my entire life surrounded by mountains. To no surprise, hiking is a huge part of my life, and one of my defining passions. Please chat with me about trails you love!



I graduated from the UW in 2010 with a double major in Sociology and History. I have worked primarily in non-profits since then, though my last job before leaving Seattle was managing a chimney sweeping company, which I actually loved! The human and social aspects of work are what elevate any good job to a great one, and I am thrilled to have found a place at PCSGA with such fun, intelligent women.

Outside of my position here, I own a writing and editing company. I have assisted clients with everything from poetry collections to memoir. Aside from publishing articles, I write a popular blog about my outdoors excursions. I am part of a writing group here in Olympia, which has been hugely helpful and expanding. I have found such an inviting and authentic community since moving here a year and a half ago.

In the few short months I've been with PCSGA, I have already learned so much. I am grateful for a position that allows me to explore marine ecosystems and environmental policy. I look forward to meeting many of you at our upcoming conference in September!

- Juliet Maurer



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# How Artificial Intelligence Can Help Predict Toxic Algal Blooms

by: Liz Allen, Forbes

Date: June 27, 2019

A team at the Nelson Artificial Intelligence Institute has developed technology they claim can detect tiny algal cells in the ocean before they multiply to create toxic algal blooms.

Toxic algal blooms, also known as 'red tides', pose a risk to human health, damage ecosystems, close fisheries, and hurt the economy. But if a bloom is accurately predicted before it begins, fisheries management can plan for closures in advance.

Shellfish fisheries in particular stand to gain a lot from this type of technology. Shellfish like oysters and mussels are filter feeders, meaning they eat by pumping water through their gills and trapping food particles. With the capacity to filter fifty or more gallons of water in a single day, oysters quickly accumulate the toxic chemicals released by harmful algal blooms. Artificial intelligence technology could inform fisheries management of impending blooms, closing fisheries before any toxic shellfish are collected, thereby preventing fisherman from wasting resources while adding extra protection to consumers.

The technology developed by Nelson can distinguish healthy algal cells from toxic cells, and labels the toxic cells accordingly.

Using artificial intelligence is much more efficient than having scientists process samples manually. "In a sample, there's thousands [of algal cells] and you've got to count them and detect the one or two toxic ones," explains Brian Russell, director of the Nelson Artificial Intelligence Institute. "[It's a] really challenging job [for] a trained biologist with a science degree and then one to two years training."

The Nelson Artificial Intelligence Institute is not the first group to develop artificial intelligence to track algae, but their strategy is unique. In addition to automating the identification of algae, Russell's team, in collaboration with the Cawthron Institute, have developed a system that takes a photo and records a 'label' every time a different algae is identified. "So now we're growing this database of all this labelled data," says Russel. "Basically, it's becoming as expert as the scientist and we can scale it and go faster and faster and faster."

The Cawthron Institute and Nelson Artificial Intelligence Institute recently received \$6 million of funding for continued efforts studying and tracking algal blooms, and plan to expand their use of artificial intelligence to help understand why whales beach in New Zealand's Golden Bay.



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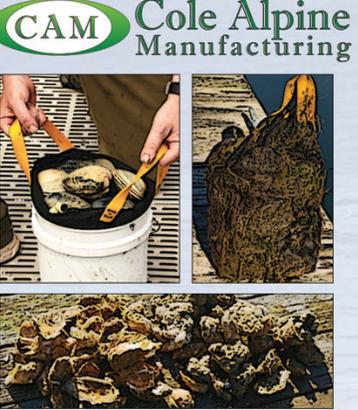
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WOOD TIG / © ANDY LACATELL

# Texas Passes Law Allowing Oyster Aquaculture

by: Eric Luening, SeafoodSource  
Date: June 5, 2019

Texas Governor Greg Abbott recently signed a bill into law establishing a new regulatory framework allowing for oyster aquaculture on the state's Gulf Coast.



Photo credit: SeafoodSource

Before passage of House Bill 1300, Texas was the only coastal state in the U.S. that didn't allow oyster mariculture off its coasts. The new law allows oysters to be raised for their pearls, as well as their shells and meat.

Set to go into effect, the new law requires the Texas Parks and Wildlife Commission to adopt rules that would establish a program to regulate the process of growing oysters. Abbott signed the bill into law last month, the last day of the 2019 session of the Texas Legislature.

State Rep. Todd Hunter, an author of the legislation, said the bill has the potential to transform the Texas coast.

"The arrival of oyster mariculture in Texas will benefit everyone from oyster farmers to the people who work in restaurants along the coast to all of the people who visit our region," he said in a statement.

The law defines a cultivated oyster as an oyster grown at any point in the life-cycle of the oyster in or on an artificial structure suspended in water or resting on the bottom of a body of water.

The rules adopted under the new law establish requirements for the location and size of a cultivated oyster mariculture operation; the taking, possession, transport, movement, and sale of cultivated and broodstock oysters; marking structures for the cultivation of oysters in a mariculture operation; and fees and conditions for use of public resources, including broodstock oysters and public water.

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# PCSGA Launches LISTSERV for Members

Thanks to our friends at Oregon State University, PCSGA is now hosting a LISTSERV as an added benefit to our Grower and Allied Members (Friend level and above). If you are unfamiliar with LISTSERV, it is an electronic mailing list that makes it easy and convenient to communicate with a large group. This list was created as a way for members to ask questions, offer advice, and share relevant industry news. This list will be moderated by PCSGA staff.

If you are interested in joining, please send an email to [outreach@pcsga.org](mailto:outreach@pcsga.org)

with your name, email, & which company you are affiliated with.

# PCSGA Hosts Shellfish Farm Tours for Agency Staff in Washington

PCSGA organized two farm tours in Washington this June to offer an educational experience for current agency staff and organizations that work closely with the shellfish industry. A sincere thank you to everyone who participated and to the members who hosted a tour: Rock Point Oyster Co., Taylor Shellfish Farms, Goose Point Oyster Co., Ekone Oyster Co., and Northern Oyster Co.



Lisa Long (Rock Point Oyster Co.) engages with the tour group explaining how they set their oysters at their nursery in Dabob Bay. Photo credit: Sara Grant, PCSGA



Eric Hall (Taylor Shellfish Farms) guides the tour group around Willapa Bay and talks about the different growing techniques being used in the bay. Photo credit: Sara Grant, PCSGA

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## Calendar of Events

### July

- 15: Ecosystem Services Photo Contest Submission Due
- 21: Allyn Days Geoduck Festival - Allyn, WA
- 25: PCSGA Board Meeting via Conference Call

### August

- 5: National Oyster Day
- 9-11: Charleston Seafood Beer & Wine Festival - Charleston, OR
- 15: Ecosystem Services Photo Contest Submission Due
- 22: PCSGA Board Meeting via Conference Call

### September

- 9-13: Int'l Conference on Molluscan Shellfish Safety (ICMSS) - Ensenada, Baja California
- 14: Brady's World Famous Oyster Feed - Aberdeen, WA
- 15: Ecosystem Services Photo Contest Submission Due
- 16: PCSGA Live Board Meeting - Portland, OR
- 16: PCSGA Annual General Meeting - Portland, OR
- 17-19: PCSGA Annual Shellfish Growers Conference & Tradeshow - Portland, OR
- 21: WA CoastSavers Int'l Coastal Cleanup - WA Coast
- 21-22: Bellingham Seafeast - Bellingham, WA

### October

- 8: PCSGA Fall Beach Cleanup - South Puget Sound WA

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