



LONGLINES

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Fall 2018



ALASKA GOVERNOR WALKER DIGS SHELLFISH!

PCSGA



PACIFIC COAST SHELLFISH GROWERS ASSOCIATION

120 State Avenue NE #142
Olympia, WA 98501
www.pcsga.org
pcsga@pcsga.org
360-754-2744

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

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What the Tide Brought In

Notes from the Director

The fall, particularly September, is one of the most difficult times for me. This seems to be the time when “fresh starts” collide head on with “last calls”. September has me both preparing for my kids to head to school (fresh start) and frantically tying loose ends with projects prior to our Annual General Meeting and Conference. This is when I often think of what has been accomplished, and try to not let our successes get overshadowed by what still needs to be done before the end of the year.

We’ve accomplished some great things since last September, including the much anticipated progress on NWP48 permit verifications from the Seattle District of the Army Corps of Engineers. When I started with PCSGA over eight years ago, members were groaning about the process. Over the years, that groaning evolved into overt frustration, and then pure anger. Then in March, all of that went away. We were finally done! Unbelievable, given the entire process has literally consumed thousands of hours and hundreds of thousands of dollars over a 12 year timeframe.

The nine-year shellfish trade embargo between the European Union and the US is another issue merrily working its way toward success. PCSGA has been diligently working with the FDA and the federal delegation to encourage talks between the two governments. If we had a clam for every time we were told, “it should be completed any day now”, we’d have enough for a hearty clam bake! While we can’t completely claim that this process is over, it does look like trade between Washington, Massachusetts, the Netherlands and the United Kingdom is eminent. We will continue working to get all of our member states included in the opportunity to trade.

Closer to home, this year PCGSA moved to a bigger office space. We welcomed two new staff who are tremendous assets to our team. We were able to ward off a serious budget deficit through prudent decision making and careful spending and a small group of Board Members accomplished the daunting task of revising the PCSGA Bylaws, last considered in 2011. All great things!

We still have much work ahead in educating the public about the environmental benefits of shellfish farming, the importance of integrated pest management, and safe shellfish handling. But if we’ve learned anything from 2018, it’s that slow and steady progress sometimes does actually get us where we need to be.

Be well.

Margaret A. Pilaro

Cover Photo: Governor Bill Walker toured Hump Island Oyster Farm on August 27th, 2018 where he signed an administrative order and a bill aimed at growing the mariculture industry throughout Alaska. See pages 10-11 for article.

Photo Credit: Brice Habeger, Office of the Governor

Pearls from the Prez

It has been a year now since I was elected as your President, an honor and responsibility I hold in the highest of regards. As I look back on the past 12 months, I found myself searching for some momentous occasion, dramatic change or new expectation, but couldn't find anything that was special enough to write about. That's not to say that the last year was a waste or unproductive. In fact, it was very much a productive year, just not in a fabulous, sparkly, bold in your face way.

Instead, it was consistent, in some ways tiresome and monotonous, and for the most part anticlimactic. I'd like to call all those things the lemons. Those lemons are weekly Friday morning calls with fellow Executive Committee members immediately followed by an Army Corps call, typically followed by emails to communicate next steps along with the who, when and where details. These lemons are the countless committee hours spent cleaning up the PCSGA Bylaws that govern how we operate our association. Each important and necessary for today and our future, but nothing to put up in lights, and that's okay.

We have been able to take those lemons as they pile up at our feet and be thoughtful about how they fit with our work, our goals and our mission. Not just now, but into our future. We must first identify our issues before we decide how to address and satisfy a solution. Make a move. Even if the move proves to not be the best option, at least you've eliminated a possible solution, making the next move toward plan B, C or D in a more manageable way.

Through these twist and turns of life and work, we learn the art of muddling, slicing, peeling and squeezing. This journey brings us closer to our destination although most of the time we are just going through the motions because that, too, is part of the art of making this life of lemonade work. Steady on my friends and thank you all for allowing me to serve you over the last year. I look forward to all the work we have yet to do in the years to come.

"For most of history, man has had to fight nature to survive; in this century he is beginning to realize that, in order to survive he must now protect it." - Jacques-Yves Cousteau

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Miranda Ries
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Monthly Winners of Ecosystem Services Photo Contest!



JULY: Josh Cahill snaps a photo of a sea lemon, *Peltodoris nobilis*, preying on sponges growing on a bag of mussels.



AUGUST:

Dawn Smart says "There's nothing of greater importance to the sustainability of a healthy ecosystem than educating the younger generation."

Snap a photo, win \$100!

Contest rules at www.pcsga.org.

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

Addressing the Labor Crisis

By: Dan Fazio
Director/CEO wafla

For west coast shellfish growers, the 2018 labor picture is a perfect storm: U.S. Immigration and Customs Enforcement (ICE) agents camped out at every grocery store, the lowest unemployment rates in the past 20 years, and politicians who feel your pain but can't deliver.

Is there hope? Yes. Many shellfish growers are eligible for both the H-2A and H-2B federal guest worker programs. The H-2B program is more favorable for employers but harder to make work due to a strict limit on the number of visas available each year. As the executive director at wafla, one of the nation's leading providers of H-2A and H-2B, I sometimes recommend that employers consider both programs. Let me explain.

Both H-2A and H-2B allow employers to petition for foreign workers when there is a shortage of qualified seasonal domestic workers, both allow visas for up to 10 months each year, and both require you to pay a wage of around \$14.00 per hour. H-2B employers are not required to provide free housing, and that is a huge advantage. Finally, both programs require employers to justify a period of need – a time when you are going to need extra workers for seasonal jobs.

I was recently contacted by a frustrated shellfish grower. She filed an H-2B application for the period of April 1 through October 30 based on the need for more workers to perform maintenance during the summer. She did not get the visas

and was not happy with the law firm she hired. She called me in July, and I agreed to take a look at her operation. They owned a decent enough unoccupied rental house, and with a few phone calls and some elbow grease, she was able to qualify it for H-2A housing. This employer justified the need for foreign workers in the fall due to high school workers going back to school, coupled with the deferred maintenance due to the government's inability to fill her H-2B visa request. We delivered 4 extremely qualified workers just after Labor Day, and the employer could not be happier. We also have a solid plan to rework the H-2B application and hope for a better outcome.

The bottom line: If you are a PCSGA member facing a labor shortage, give us a call and we will walk you through your options, as well as reviewing your strategy in the event you are visited by someone from ICE. Keep clam and carry on!



Contact Dan Fazio at
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Neil F. Bourne, Distinguished Shellfish Scientist (1927 – 2018)

Tribute by: Kenneth Chew, Professor Emeritus, University of Washington

Neil passed from this earth on July 21, 2018. His daughter Mary McKenzie noted that her father passed quickly and peacefully at the hospital in Nanaimo. He has contributed greatly to knowledge of biology and culture of select molluscan species in North America. His interest in shellfish began when he joined the Fisheries Research Board in 1959 at the St. Andrews Biological Station with early monographs and research publications specifically on scallops; his later research activities concerned several other molluscan species as noted in his publication listing. His trail of experiences and accomplishments to his last location at the Pacific Biological Station (PBS) in Nanaimo can be found by accessing:

<https://www.nanaimobulletin.com/obituaries/Neil-Fitzroy-Bourne/>

Neil became a close friend and colleague since he returned to the Pacific Biological Station in 1976. His interest in shellfish and aquaculture and proximity to Seattle brought us together for a lasting relationship in discussions and promotion of shellfish research that was beneficial for the Pacific NW shellfish growers of North America and BC. As I was beginning to develop an expanded shellfish teaching and research program at UW, Neil was encouraged to join me in this effort even though he could only afford limited time from his duties at the Pacific Biological Laboratory in Nanaimo. Subsequently, he agreed and was appointed to a faculty position as Affiliate Professor in the UW School of Aquatic and Fishery Sciences (formally School of Fisheries) to help serve on a number of MS and PhD graduate student supervisory committees from the late 1970s through the 1990s.

Neil belonged to several professional societies and associations; but with his major interest in shellfish, he became an active member of the National Shellfisheries Association (NSA). I remembered the many times we attended the annual meetings of NSA at different cities in the US, with each of us elected to serve as president. Around the 1960s, due to the number of state agencies and universities

along the US Pacific Coast educating and doing shellfish research, the Pacific Coast Section of the NSA was started. The late Dr. Albert K. Sparks of the UW being the main mover. Later, Neil became an active member greatly devoted to see this section grow when he arrived at Nanaimo.

The Pacific Coast Section of NSA now meets jointly and annually with PCSGA. Neil always claimed the researchers need to meet regularly with the shellfish growers and producers to share on-going studies and current new information useful to them. This was also good for students who were doing their thesis research or senior projects; this would encourage students to gain experience in presenting their findings before a more local audience as part of their training in the west coast arena. Generally, this could later lead to a more formal presentation at the regular annual NSA meeting for the whole of US and in other countries.

Many shellfish undergraduate and graduate students were educated and trained at the UW during my tenure at the UW School of Aquatic and Fishery Sciences. I would be remiss if I were to not mention the role that Neil Bourne had in helping me in the shellfish training at the UW for so many years as many students have continued on in the shellfish profession coast wide in North America and other countries. Neil retired from public service in 1994 and was an Emeritus Research Scientist at the Pacific Biological Station in Nanaimo, BC. A tribute is due for Neil Bourne for his unselfish desire and contribution to the encouragement and training of our UW and other university students, and the promotion of shellfish biology and aquaculture locally, nationally, and internationally. Well done Neil, and we miss you!

Per Neil's request, there was no service. Contributions made in memory can be donated to the Nanaimo Hospital Foundation, 1200 Dufferin Crescent, Nanaimo, BB V9S 2B7, Canada.



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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

Farm Tour with Kim Holmes of Plastics Industry Association

Over the course of two days in August, PCSGA staff and growers met with Kim Holmes of Plastics Industry Association to discuss how plastics are utilized in shellfish aquaculture. We were able to get hands-on with plastics in the field and started conversations about the lifecycles of plastic gear in shellfish aquaculture. We look forward to this new relationship with Kim and plan to continue the conversations in hopes to find solutions to some of our current issues with plastic.



Miranda Ries, Coast Seafoods and Kim Holmes



Shina Wysocki, Chelsea Farms and tour group



Margaret, Connie, Sara, PCSGA and Kim Holmes



Kim Holmes and Jerry Sanford, NorPlex, Inc.

***Thank you to our members who generously hosted us on this tour:
Coast Seafoods, Taylor Shellfish, Ekone Oyster,
Chelsea Farms and NorPlex, Inc.***

SHELLFISH GROWERS:

Want to stay connected with the East Coast Shellfish Growers Association (ECSGA)?

PCSGA members can join the ECSGA ListServ for FREE!

Contact outreach@pcsga.org for more information



Improved boat sewage management leads to shellfish area upgrades

Washington State Department of Health News Release, August 30, 2018

OLYMPIA –The Washington State Department of Health announced today that portions of commercial shellfish areas around 20 Puget Sound marinas would no longer be classified as prohibited.

Improved sewage management has allowed DOH to remove shellfish harvest restrictions on nearly 700 acres of commercial shellfish beds.

The reclassified marinas affected include the following:

1. Clallam County (67 acres impacted) – John Wayne
2. Island County (5) – Sandy Hook
3. Jefferson County (144) – Cape George, Fisherman Harbor, Pleasant Harbor, Port Hudson, Port Townsend, and Quilcene
4. Kitsap County (228) – Blake Island, Brownsville, Kingston, Keyport, Liberty Bay, and Poulsbo
5. Mason County (43) – Hood Canal and Jarrell Cove
6. Pierce County (43) – Day Island
7. Thurston County (104) – Boston Harbor and Zittels
8. Whatcom County (27) – Birch Bay

Over the past 20 years, progress has been made to reduce the potential for sewage discharge from boats and this includes better waste-holding capacity in most boats, increased boat waste pump out stations, and the implementation of a No Discharge Zone throughout the Puget Sound. The improvements have led to better water quality, a lowered illness risk to people who eat shellfish, and greater protection of public health.

The DOH website (www.doh.wa.gov) is your source for a healthy dose of information. Find us on Facebook and follow us on Twitter. Sign-up for the DOH blog, Public Health Connection.



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Hot Shots: Herpes-resistant Oysters in the Making


by: Konstantin Divilov

Research Associate, Oyster Breeding and Genetics, Oregon State University

A large proportion of the Pacific oysters grown on the West Coast are derived from broodstock selected by the Molluscan Broodstock Program (MBP), a breeding program at Oregon State University that was initiated in 1996. Oyster pathogens, such as *Vibrio* sp. and herpes virus, are serious disease risks for the West coast oyster industry and their spread can be facilitated by human activities. This was the case in the summer of 2010 when an extremely virulent oyster herpes strain (termed a herpes microvariant) was found to be the cause of >95% spat mortalities in both Australia and New Zealand. Temperatures above 16°C (61°F) for an extended period of time, a common summer occurrence on the West Coast, triggered high oyster mortalities in herpes-infested seawater.


In 2018, as part of a USDA ARS-funded project, we have evaluated mortalities of 70 MBP broodstock families (a family is the progeny from a controlled cross between a male and female oyster) when exposed to both the French microvariant strain and a strain endemic to Tomales Bay, CA, the only significant oyster-growing bay on the West Coast where herpes has been detected. This project is designed to prepare the industry for a possible introduction of the microvariant strain to the West Coast or the spread of the less virulent strain from Tomales Bay to other bays. For the French microvariant trial performed in collaboration with IFREMER (French research institute), MBP families were sent to France and tested in laboratory conditions. The same families were also planted out in Tomales Bay with the assistance of the Hog Island Oyster Co. MBP families showed variation in mortalities in the trials (see Figure 1) and genetics explained 70% of the variation for both strains. The correlation between mortalities against the two strains was positive but not strong. Assuming our selection of families does not affect the amount of genetic variation in the future generations, commercial-scale quantities of seed with mortalities below 10% for both the French microvariant and Tomales Bay strain could be available in four to five years, after three generations of selection. We hope that development of these resistant families will give oyster growers some peace of mind about concerns of the possible spread of the herpes virus to the US West coast.

See Figure on page 9



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The Nature Conservancy 

WORD: TNS / © ANDY JACATELL



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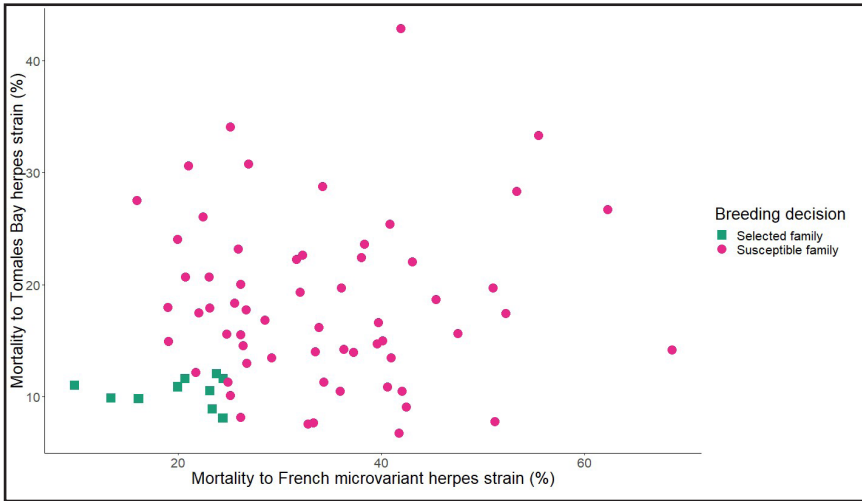
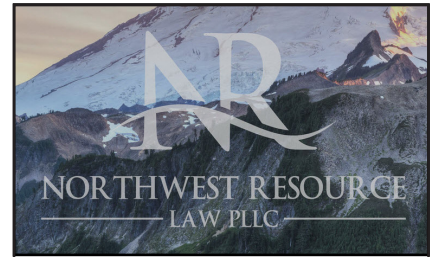


Figure 1: Identification of MBP families to use for broodstock for the next generation, based on mortality data from the French microvariant laboratory experiment and the Tomales Bay field trial. Note: no surviving oysters will be transported outside of the test conditions to prevent any risk of contamination. Instead we will use siblings from the same low-mortality families as broodstock to produce the next generation for selection against herpes.



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Ecosystem Services Photo Contest 2018 Grand Prize Winners



1st Place \$500

Weatherly Bates - Alaska Shellfish Farms

The giant Pacific Octopus, just one of the many creatures that utilize our farm as habitat. This juvenile octopus was found inside an oyster shell. Oyster shells provide perfect habitat for juvenile octopus and there are ample invertebrates thriving in the oyster cages that the octopus eat.



2nd Place \$300

Nicolas de Witt - Fanny Bay Oysters

Something caught my eye while inspecting our Manila Clam beds. A fish had laid several eggs in one of the panels that covers and protects our clams. They stood out from the rocky beds in the light of my headlamp, otherwise I might never have noticed them.



3rd Place \$200

Wesley Hull - Coast Seafoods

Our oyster longlines proved substrate for diverse algal communities to grow throughout the late spring and summer months. These alga, like the Ulva in this picture, provide food for native fish, invertebrates, and birds, promoting a healthy and diverse ecosystem within Humboldt Bay.

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Help for Alaska's Growing Mariculture Industry Signed Into Law

by: Mary Kauffman

Source: excerpt (e) SitNews, August 28th, 2018

Alaska's blue economy took a big step forward yesterday at Trevor Sande's Hump Island Oyster farm outside Ketchikan, where Governor Bill Walker signed an administrative order and a bill aimed at growing the mariculture industry throughout Alaska.



Photo Credit: Brice Habeger, Office of the Governor

Walker signed legislation into law Monday to help participants in Alaska's growing mariculture industry get access to capital. Representative Dan Ortiz (I-Ketchikan) sponsored House Bill 76 after learning that many of the small businesses in Alaska's mariculture industry were having trouble securing financing for improvement projects through private lending institutions.

HB 76 changes the Alaska Mariculture Revolving Loan Fund to allow up to 40 percent of the fund to be used for loans to help pay for shellfish and seaweed hatcheries or enhancement projects. Expanding the purview of the loan fund to include hatcheries will allow those invested in the mariculture industry to develop a stable supply of seed for resident marine plants and shellfish at no additional cost to the State of Alaska.

"Mariculture is a uniquely well-suited industry for Alaskan investment,"

Governor Walker said. "It expands our strong renewable fisheries industry, creates jobs, offers a scalable business model that can thrive from Alaska's smallest coastal communities to our largest ports, and opens the door to a new knowledge economy that can be a model for the world. From oysters to scallops to sea cucumbers to kelp, I look forward to seeing how Alaskans approach a new industry frontier."

The Alaska Mariculture Revolving Loan Fund was created in 2012 with a \$5 million investment. The purpose of the fund was to provide loans for the development of Alaskan-owned mariculture operations with a goal of diversifying the economies in many coastal communities. To date, the Alaska Mariculture Revolving Loan Fund has made seven loans totaling \$598,000 with no delinquencies or defaults. To better accommodate

Continued on page 11

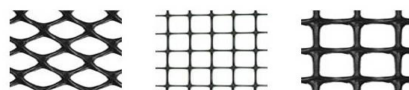


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the time-consuming nature of the mariculture industry and the long lag time from seed to a product that can be sold, HB 76 includes provisions allowing loan repayments to be deferred for up to six years for most loans and up to 11 years for the new hatchery loans authorized by the bill.

New growers are expected to add to the 35 farms and 6 hatchery/nurseries that already are producing a mix of oysters, clams, mussels and various seaweeds. Eventually, sea cucumbers, scallops, giant geoduck clams and algae for biofuels will be added into the mix.

Data from the state Department of Natural Resources show that two farms have applied at Kodiak totaling nearly 37 acres, and one Sitka applicant has plans for a 15 acre plot. Other communities getting into the mariculture act include Seldovia, Port Chatham, Juneau, Naukati, Cordova, Ketchikan and Gustavus.

In 2017, Alaskan farms produced 11,456 pounds of clams, 1,678 pounds of mussels, 16,570 pounds of seaweeds and 1.8 million oysters.

Oysters always have been the dominate mariculture crop, and several farmers have added kelp to their acreage. The seaweed takes just three months to grow to harvestable size and can provide a ready cash flow to farmers while they wait for up to three years for their bivalves to ripen.

“If only 3 tenths of a percent of Alaska’s 35,000 miles of coastline was

developed for oysters, for example, it could produce 1.3 billion oysters at 50 cents adding up to \$650 million a year,” said Julie Decker, director of the Alaska Fisheries Development Foundation and head of an 11-member mariculture task force established in 2016 by Governor Walker through administrative order.

The task force concluded that mariculture crops could yield \$1 billion for the state within 30 years.

Governor Walker also issued Administrative Order 297, extending the life of Alaska’s Mariculture Task Force. The 11-member Task Force, established in February 2016 by Administrative Order 280, released their Alaska Mariculture Development Plan earlier this year, a comprehensive plan for growing the mariculture industry in Alaska.

The Development Plan includes five priorities:

- Expand participation,
- Coordinate and refine regulations,
- Establish accessible funding, and
- Conduct necessary research to create a thriving mariculture industry worth \$100 million by 2040.

By renewing the Task Force Monday, Governor Walker established it as an ongoing advisory panel to work with state, federal, tribal, industry, and other stakeholders to support the implementation of the Development Plan. The Task Force will present recommendations and a progress report to the Governor by May 1, 2021.



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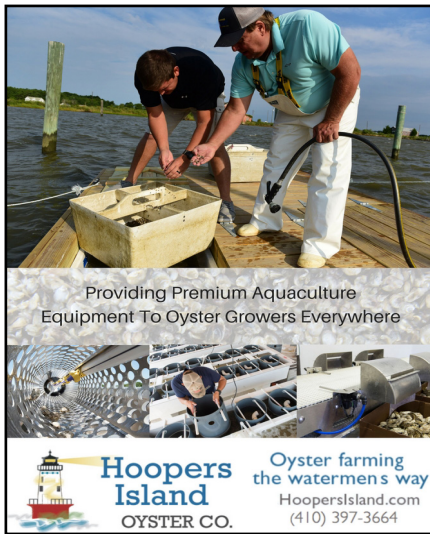
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Heather Brandon to lead Alaska Sea Grant

Source: (e) Alaska Sea Grant, August 13, 2018

The University of Alaska Fairbanks has chosen Heather Brandon as Alaska Sea Grant's new director.

Brandon is an environmental policy leader with experience in fisheries issues on a broad geographic scale, ranging from Alaska to the Arctic and Russian Far East. The Juneau resident was selected after a competitive national search.

Before joining Alaska Sea Grant, Brandon was a foreign affairs specialist for NOAA's Office of International Affairs and Seafood Inspection. Brandon has also worked for World Wildlife Fund, Juneau Economic Development Council, Pacific Fishery Management Council, and Alaska Department of Fish and Game, and served on the U.S. Department of Commerce Marine Fisheries Advisory Committee. She has a master's degree in marine affairs from the University of Washington and a bachelor's degree in biology from the University of Oregon.



Photo Credit: Heather Brandon

"I'm excited to lead Alaska Sea Grant into this new chapter. It's a vital program to our state's fishing and seafood industries and a leader in applied research that benefits coastal communities from Utqiagvik to Metlakatla," said Brandon. "I especially look forward to getting involved with Alaska Sea Grant's training and education programs, such as the Alaska Young Fishermen's Summit."



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Vote Yes on Initiative 1631

By: Charlie Stephens, Kamilche Sea Farms

At the September conference in Blaine we heard several presentations on how the marine environment affects our ability to grow our crops: measuring and predicting the continuing acidification of ocean waters; recognizing ecosystem services provided by our culturing activities; threats to shellfish health. A common thread seems to be that climate change is upon us, and will play a larger role in our businesses in the years ahead. Although we can't magically stop the climate from spinning out of control there are actions that, taken collectively, will help to slow the oncoming "freight train."

One of these, in Washington state, is to pass Initiative 1631, the Clean Air/Clean Energy initiative which is up for voter approval on November's ballot. In a nutshell, the measure would establish a carbon fee (starting at \$15 per ton of CO2 emitted) on the state's largest fossil fuel polluters, such as oil refineries and utilities. The fees collected would be placed in a dedicated fund to invest in clean energy infrastructure and projects across the state.

The fees levied, when shifted down from the polluters to us consumers, are expected to cost the typical Washingtonian about \$10 per month in the form of higher prices at the gas pump, for example. While not an insignificant amount, we can think of it as a "subscription to the future." After all, we are all beginning to pay

for the effects of a deteriorating climate already: the drought of 2017 was estimated to have cost agriculture \$400 million in losses. And this summer's extensive wild fires, with accompanying unhealthy smoky air, is expected to be the norm in future years until we get a handle on climate change.

On the bright side, 41,000 new jobs per year are projected to be created in the clean energy field (solar, wind, others) as a result of I-1631 passage. A diverse coalition of 200 organizations and businesses in the state are supporting its passage, including environmental advocates such as Audubon, The Nature Conservancy, the Trust for Public Lands; companies like REI and restaurant chains; health professionals such as the American Lung Association, and Physicians for Social Responsibility; nine tribal nations in Washington; and civic groups like the League of Women Voters.

In conclusion, we shellfish growers have a lot to lose from the continuing affects of a climate gone haywire. We also have a great deal to gain from putting the brakes on climate change and stabilizing the earth's natural systems. I-1631 is our best hope for doing just that in the near term. Please join me and Kamilche Sea Farms in supporting this initiative and remember to vote in November (mail-in ballots will appear in your mailbox soon). And consider, strongly, voting in favor of I-1631.

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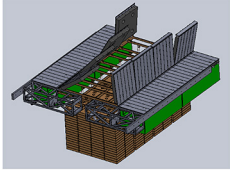
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Small-Craft Harbors: Design, Construction, and Operation

By James W. Dierham and Arnold A. Fenn
For the Coastal Engineering Research Center

72nd Annual Shellfish Growers Conference & Tradeshow

For 3 days, shellfish growers, industry professionals, scientists and students came together for presentations and discussions relating to all things shellfish. Thank you to everyone who attended, who helped organize the event, who sponsored a student, and to all the presenters and tradeshow vendors - we couldn't have done this without you! We look forward to next year's conference in Portland, OR.



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Drayton Harbor Oyster Co. with conference attendees at Monday's Oyster Bar.



Prince of Tides recipient, Dan Cheney with Margaret Pilaro and Connie Smith of PCSGA.



Conference attendees engaging with vendors at Tradeshow Reception.



Dale Murff with Englund Marine talking with attendees at Tradeshow Reception.

A special Thank You to our event sponsors: Washington Farm Bureau for organizing the Schley Golf Scramble; Drayton Harbor Oyster Co. for hosting the Oyster Bar on Monday evening; NorPlex, Inc. for hosting the Hospitality Suite; Duncan & Associates Inc. for hosting a Coffee Break and the Tradshow Reception; Alaska Packaging Inc. for hosting a Coffee Break; Rock Point Oyster Co. for hosting a Coffee Break; and lastly to our Tradeshow Reception shellfish donors: JJ Brenner Oyster Co., Rock Point Oyster Co. and Penn Cove Shellfish LLC.

Photo Credits: Sara Grant, PCSGA



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Pacific Coast Beach Cleanups



Photo Credit: WGHOGA

Willapa Bay, WA

Willapa-Grays Harbor Oyster Growers Association organized a beach cleanup event that took place over the course of one week in mid-July. Local shellfish companies and employees together removed 7,220 lbs of trash and marine debris from the banks of Willapa Bay! PCSGA sponsored dumpsters for the event.

Tomales Bay, CA

From September 10th - 15th, over 115 volunteers gathered in West Marin to support International Coastal Cleanup Day and removed more than 2,500 pounds of trash from the Tomales Bay and surrounding watersheds. Hog Island Oyster Co. and other Tomales Bay aquaculture growers took out 40 volunteers on 10 boats on September 15th, removing roughly 700 pounds of debris from Tomales Bay.



Photo Credit: Remy Galvan-Hale, Hog Island Oyster Co.



Photo Credit: Jacqueline Laverdure, Olympic Coast National Marine Sanctuary

Washington Coast

In support of International Coastal Cleanup Day on September 15th, Washington CoastSavers organized a massive event that had sites spread out all along the WA Coast. They had over 500 volunteers and collected 7,500 pounds of marine debris! PCSGA helped to fund several dumpsters for the event.



Photo Credit: Sara Grant, PCSGA

South Puget Sound, WA

On September 15th, PCSGA sponsored an International Coastal Cleanup event in Olympia hosted by Oly Surfrider and Puget Sound Estuarium. On October 2nd, PCSGA hosted their South Sound Fall Beach Cleanup out of Arcadia Boat Launch in Shelton, WA. Thank you to all that helped out - on land and by boat, and Brian Phipps with Taylor Shellfish and Carol Phipps with Salish Seafoods for cooking a delicious hot meal for all the volunteers and crews!



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Calendar of Events

OCTOBER

2: PCSGA Fall Beach Cleanup - South Puget Sound WA
5-7: Dungeness Crab & Seafood Festival - Port Angeles WA
6-7: OysterFest - Shelton, WA
10-24: PCSGA: Shellfish in France

NOVEMBER

3: 26th Annual Oyster New Year - Elliot's Oyster House, Seattle, WA
13: PCSGA Board Meeting

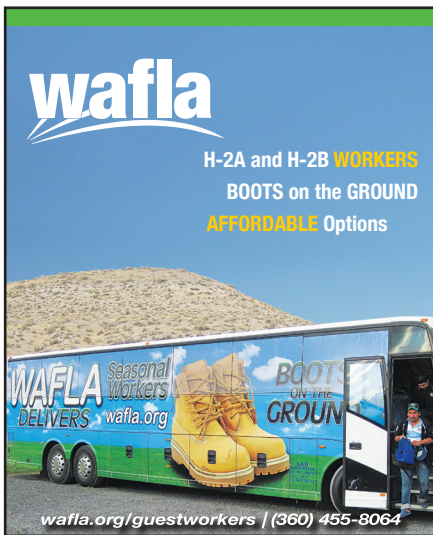
DECEMBER

11: PCSGA Board Meeting



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Contact Dan Fazio at
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