The Mouth of the Bay Are Plastics the Next Battleground?

You may have been hearing a lot lately about how microplastics are causing problems in aquatic and marine environments. Defined as pieces of plastic smaller than 5 mm, microplastics are formed when larger pieces of plastic break down, or they can be manufactured as plastic microbeads and intentionally added to any number of consumer items, including health and beauty products, detergents, sandblasting mixtures and more.

I’ve seen some really disturbing videos of giant islands of floating plastic debris drifting around in the ocean, and of dead seabirds and whales with bellies filled with plastic bottle caps and plastic bags.

Some folks are even saying they won’t eat fish or shellfish anymore because of concerns that microplastics ingested by the animals could be harmful to human health. But perhaps most worrisome to our industry are the anti-aquaculture crusaders trying to link plastics used in shellfish aquaculture to the rising tide of microplastic worries gaining traction with environmental groups. Our industry must be proactive in dealing with this issue to ensure that it won’t be used as a bludgeon by those who would prefer not to see us working in front of their homes.

Few of us are old enough to remember this far back, but before plastics became so commonplace shellfish aquaculture was a lot harder. I remember painting galvanized hardware cloth with Flexabar® in an effort to get two seasons of use out of it before it rusted away. The invention of vinyl-coated galvanized wire, extruded polyethylene netting and shellfish bags revolutionized our ability to grow shellfish.

But those same features that make plastics the durable tool of choice for shellfish culture also mean that we need to be extra careful to make sure we don’t allow marine debris from our farms to escape into the environment. Because they are low density and last a lifetime, if plastics escape your farm they will eventually wash up on someone’s beach, giving anti-aquaculture crusaders something they can trot out at the next public hearing to give you a black eye.

It is incumbent upon everyone in our industry to remember that we are working in the commons and therefore have a duty to protect and preserve the waters that support our livelihoods. If you are still using zip ties I encourage you to evaluate better options. We cannot allow plastic waste or growing gear to escape from our stowing.

— Continued on page 16

Walk the Hill 2017: Aquaculture Grows Green Jobs

by Robert Rheault, ECSGA Executive Director

In early March, 15 ECSGA representatives joined two-dozen of their counterparts from the Pacific Coast Shellfish Growers Association (PCSGA) for our Walk-the-Hill trip to Washington, D.C. The annual pilgrimage occurred at an odd juncture in our national political history – just 50 days into a new presidency there was quite a bit of uncertainty swirling about the halls of Congress. Agency staffers were still unsure about their direction, as newly confirmed department secretaries had yet to appoint the deputy staff that typically do the work of assigning priorities and setting budgets.

Little more than a week before we got to town, leaked budget documents hinted at a proposed presidential budget that included $50 billion in cuts to discretionary domestic programs. The Washington Post foreshadowed proposed cuts to many of our cherished programs, including the elimination of Sea Grant, and 90-percent cuts to water-quality programs in Puget Sound and Chesapeake Bay. Before we left for D.C., I penned an op-ed piece detailing how many of these budget cuts were job killers, especially for our industry (See story on page 2).

Making the rounds of various congressional offices we emphasized the jobs created by Sea Grant programs and the economic benefits that flow to our communities. It was clear that budget appropriators on both sides of the aisle viewed the “President’s mark” as guidance, and they reminded us that they held the purse strings and wrote the budget. Thankfully none were willing to concede to the elimination of Sea Grant. Nevertheless, we still need to do our part to ensure that these critical programs remain intact. I encourage you all to write a letter to your local paper describing how your firm may have benefitted from a cherished government program like Sea Grant – how it helped you grow and employ more workers.

Our legislative agenda covered many of the same items we have requested in the past. We continue to push for a resolution to the...
On March 16 President Trump released his first budget, in which he proposed drastic cuts to, among other things: scientific research, the Department of Commerce (DOC) and the Environmental Protection Agency (EPA). The proposed 31-percent funding cut to the EPA alone includes the complete elimination of 50 programs and 3,200 positions. The budget seeks to cut DOC funding by $1.5 billion, a 16-percent decrease from the 2017 annualized continuing resolution level. The National Oceanic and Atmospheric Administration (NOAA), which is a part of the DOC, would lose “over $250 million in targeted grants and programs supporting coastal and marine management, research, and education, including Sea Grant, which primarily benefit industry…”

As the “President’s request,” the budget is only the opening bid in negotiations with Congress, which actually holds the purse strings and passes a final budget. Congress can consider the president’s requests, but many appropriators have indicated that the president’s “ask” is simply advice. When a group of ECSGA representatives from up and down the coast “Walked the Hill” in early March, we continuously preached the gospel of the jobs we create and the economic development shellfish aquaculture brings to communities. Now is the time for every ECSGA member to hammer the point home and remind your elected representatives how these cuts would be massive job killers. Our industry can be an engine of job growth in many ways, but a number of these proposals would damage our ability to grow shellfish. We could implement some measures (including regulatory reform), to create even more jobs, but stripping our national investment in marine science is counterproductive.

Eliminating Sea Grant
Perhaps one of the most wrong-headed proposals in this budget is the complete elimination of the $73-million Sea Grant Program. For 50 years Sea Grant has been supporting 33 college programs and dozens of aquaculture extension agents around the country. Especially now, as new entrants are jumping in to shellfish farming, we need extension agents to help these folks navigate the permit process and establish viable farms – just like county Ag agents help start-up farmers in square states. If we really want to create jobs we should be doubling our extension capacity, not axing it. Pulling money out of education and training makes it harder for fishermen and growers to find qualified deckhands. Vocational training improves job safety and performance in some of the most dangerous jobs out there. Sea Grant plays a big role in food safety and HACCP training, boating safety and survival suit training. These critical roles will need to be filled, so there is no real savings here, just a shift in who pays. Then there is the Sea Grant research program, a largely industry-driven request for proposals that funds work to solve key issues constraining the growth of fisheries and aquaculture. Sea Grant strives to be the trusted arbiter of coastal issues, helping communities reach common ground on contentious issues by providing solid science without a political agenda.

EPA cuts
The president’s budget also calls for huge cuts to the Puget Sound restoration efforts and the Chesapeake Bay Clean Water Blueprint, both of which were pumping dollars into states for sewage treatment plant upgrades and nitrogen controls. Whenever a sewage treatment plant fails or overflows...
NACE Is the Place for Shellfish Aquaculture

by Robert Rheault,
ECSGA Executive Director

Attendance at the Northeast Aquaculture Conference and Exposition (NACE) held in January in Providence, R.I., topped a record-high 550. Partnering with the Milford Aquaculture Seminar has proven to be a winning formula for the biennial event, with attendance growing by almost a hundred people every time it is held. I view this steadily increasing interest as a sure sign of a maturing industry.

Ninety participants also signed up for one of six field trips to see various hatcheries, farms and dealer operations in the area. This year we had 31 special sessions – so many that we had to go with three concurrent sessions. As always, it was difficult for organizers to choose between extending the conference by a day in order to limit the number of concurrent sessions, or to minimize the duration of the meeting, which forced people to choose between two or even three sessions of interest occurring at the same time.

Some of the feedback from participants at the 2017 NACE:

“I learned about the potential for workforce training to educate veterans in aquaculture through the respective state Departments of Veteran Affairs and a program called AgAbility. Maine now has this program in agriculture and it might be possible to expand it to aquaculture. I would assume that there might be programs which Veteran Affairs could set up in other states if the desire was there to train them as apprentices on shellfish or finfish farms.”

(See story on page 10)

GEF Flimlin, Extension Agent (Ret.) Rutgers Cooperative Extension

“Climate Change is upon us on many fronts – from unprecedented algae blooms and water temps to physical limitations of the industry to deal with these changes. The time is now to look to the future and adaptation of the industry.”

Alex Hay, co-owner and operations director for Mac’s Seafood and Wellfleet Shellfish Company

“I got the impression that sugar kelp is becoming to macroalgal aquaculture what salmon is to marine fish aquaculture – an overwhelming dominant species. I see a need for diversification coming very soon. I also now anticipate that probiotics produced specifically for oyster larviculture will be leaving the research phase and entering development for commercialization.”

Gary Wickfors, Supervisory Research Fishery Biologist, NOAA Northeast Fisheries Science Center

“I was pleased to see how well industry, government, extension and the research community were working together for common purpose. The new farms and faces at this year’s meeting demonstrate what can result from such collaboration. Don’t take that for granted because it is not the norm in other parts of the country. In fact, I wish I had that in all my regions.”

Mike Rust, Science Advisor, NOAA Fisheries, Office of Aquaculture

“A thought there was some great dialogue around breeding programs with staff from NOAA and VIMS [Virginia Institute of Marine Science]. Socializing with industry folks was as valuable as any of the special sessions.”

Chris Sherman, President, Island Creek Oysters

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While we were preparing for the Northeast Aquaculture Conference and Exhibition (NACE), I borrowed an idea for a fun oyster beauty contest put on by the Australian industry and written up in *World Aquaculture*. Since President Trump was too busy at the time to judge the contest, I recruited three graduate students from the University of Rhode Island’s Department of Environmental and Natural Resource Economics to lead the effort: Michael Weir, Azure Giroux and Jason Walsh. Thirteen growers submitted entries (though several more forgot to bring their contestants). The rules were simple: no makeup, no swim suits, oysters to be judged unshucked based solely on appearance. In an effort to gather some marketing data, we added a few questions to the ballot to see which traits people look for when eyeing an oyster, and to examine consumer awareness about post-harvest processing and irradiation.

We held the contest at the NACE reception, where nearly 100 attendees filled out ballots while mingling and waiting in line for beverages. The competition was fierce, with several growers working the crowd and lobbying heavily for their pretty pets. The contestants all proclaimed their desire for world peace, but the judges could not agree on which one had the best personality.

The much-awaited results of the balloting were announced the following day: third place went to Wash-Ashore Oyster Ranch, Wellfleet, Mass.; second place went to Wellfleet Oyster Company, Wellfleet, Mass.; and the title of *Most Beautiful Oyster, Miss Virginica 2017*, was awarded to Pemaquid Oyster Company, Damariscotta, Me. In lieu of a tiara and a lucrative modeling deal, the winner took home a signed copy of Rowan Jacobsen’s new book, *The Essential Oyster*.

The graduate students were able to glean some interesting data from the ballots. Following is their analysis.

**Summary statistics**

On average, the 99 voters were just under 40 years old, 64 percent were male, and nearly 75 percent were either oyster growers or academics involved with oysters (43 percent growers, 30 percent academics) with 11.5 years of experience in their respective fields.

**Search attributes**

Visual characteristics of consumer goods are considered search attributes in the economics and marketing literature, meaning these attributes can be easily evaluated prior to purchasing a good. Ballots asked voters to subjectively rank four common search attributes that might be considered when deciding to purchase an oyster: shape of the shell, shell coloration, cup depth and overall size. On average, shape was considered the most important attribute, followed (in order) by cup depth, shell size, and shell color.

**Post-harvest processing (PHP)**

The survey also asked respondents questions related to familiarity with post-harvest processing (PHP) methods, familiarity with food irradiation and the likelihood of purchasing oysters treated with irradiation. Responses were measured using a Likert Scale ranging from 1 (not very familiar/not likely to purchase) to 5 (very familiar/very likely to purchase). The respondents considered themselves to be relatively familiar with PHP methods, given the average response of 3.65. The level of familiarity with food irradiation was different from zero, but not significantly different from the scale mean, implying that respondents were more or less familiar with food irradiation. Respondents were weakly averse to purchasing oysters treated with food irradiation, given the average response of 2.76. Though not entirely informative in terms of statistical rigor, we can anecdotaly infer that even those involved in the industry are averse to purchasing oysters treated with food irradiation to control levels of *Vibrio* bacteria. This was not all that surprising, since this is the general consensus of works.

— Continued on page 6
The Interstate Shellfish Sanitation Conference (ISSC) is set to convene in Myrtle Beach, S.C., October 14-19 for their biennial meeting. I urge everyone to think about the ISSC regulations and consider what is not working well for your firm. Is there a particular rule or requirement costing you time or money that could be streamlined or fixed? We have a chance to submit proposed regulatory changes in May for consideration at the October meeting.

For example, at the last meeting I was able to push through bulk-tagging regulations that make it easier for growers to land hundreds of bags of product from the same lease without the need for hundreds of identical tags.

Another regulation I pushed through a few years ago obligates states to periodically train their harvesters on the harvesting rules (and rationale behind the rules — like why we chill product!) Why this was not an existing requirement and why several state regulators actually fought me on this one is hard to comprehend.

This year we hope to rewrite the entire aquaculture chapter in the Model Ordinance. This is a challenging opportunity to propose uniform, workable and intelligent food-safety regulations for our diverse and dynamic shellfish farming community. So please think about your process and what you do that wastes time or that could be done smarter if the regulations allowed it. Let’s work smarter, not harder!

Alternatively, we could push for tighter regulations that force unscrupulous operators to do the right thing (perhaps improving tagging or traceback to eliminate fraud, or improving the labeling requirements on wet-stored products, or keeping the reefer units on trucks engaged).

If you have a pet peeve or an idea on how to do things better, please bring it forward soon so we can submit an issue before the May deadline for consideration at the October meeting.

— RBR

Job-Killing Budget Cuts

our industry suffers. Harvests stop and jobs are killed.

The budget also proposed zeroing out the state beach water-quality-monitoring-assistance program. States use some of these funds to augment mandatory water-quality monitoring for shellfish growing areas. That funding will have to be provided by states that are already strapped for cash, and when states are understaffed, growing-area closures will last longer, income will stop, jobs will be lost.

I often cast stones at the folks writing our permits and handling our lease applications, but if we cut these positions too hard it will simply take longer to get permits processed. This again will kill our ability to start new farms and create jobs. Most of these tasks are handled by state employees, but there is typically a need for a federal consultation from NOAA, EPA or the Army Corps. So if we are going to strip these regulatory positions, we’d better fix the rules first or the whole permitting process will slow to a crawl — killing even more jobs.

Increasing seafood production

Cutting back on research efforts will limit our ability to maximize fisheries yields, delay stock assessments and make our fisheries managers less nimble — killing jobs. Likewise, further cuts to NOAA’s aquaculture research will slow the development of novel advances that could make fish farming more profitable, thereby slowing the rate of job development. Moreover, if we won’t agree to limit carbon emissions, then we’d better start aggressively looking at adaptive measures, because the pace of change of sea-level rise and ocean acidification could have a huge impact on jobs — and our industry is sitting right in the crosshairs.

Aquaculture could provide a huge boost in domestic seafood production, but to get there in 15 years would require a “moon-shot” investment in science, planning and management. If we could manage to do that (while fixing some of our regulatory roadblocks) it would unleash a dramatic explosion in private capital investment, creating thousands of new jobs.

Meanwhile, if we fail to boost domestic seafood production, and if we continue to import 91 percent of the seafood we consume in the U.S. while imposing a 20-percent-border-import tax, then Americans will face a huge bump in the cost of their seafood and many will simply switch to a cheaper protein — leading to significant health impacts like increasing rates of obesity and heart disease.

Many of our allies in Congress will push to save the programs we count on, but only if they hear from us! Please write or call them today.

To find out who your representatives are, just enter your zip code in the handy database at: whoismyrepresentative.com

To read The Washington Post’s searchable version of the president’s budget, visit: www.washingtonpost.com/apps/g/page/politics/president-trumps-first-budget-proposal/2179/?tid=a_inl

— Continued from page 2

Fish Farming News

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

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

Fish Farming News is published bi-monthly. Subscriptions are just $14.95 per year in the US.
— Continued from page 4

Most Beautiful Oyster

investigating consumer acceptance of PHP methods, including ir-radiation, conducted by the FDA and a few academic researchers.

Shape and size preferences

In designing the ballot we wanted to test the hypothesis that growers tend to prefer a larger oyster than non-growers. Unfortunately, all of the entrants were roughly the same size (7-10 cm). Since nobody entered a petite or a gagger, we couldn’t really draw any conclusions there. Most of the entries had dimensions roughly meeting a 3:2:1 height-length-cup ratio, curiously similar to the “dimension goal” set by Crassostrea gigas growers in Australia. Both the first and third place finishers had ratios very close to 3:2:1, whereas the second-place finisher had a relatively shallow cup.

Combining this and the fact that size of an oyster is least important given the rankings provided by our survey responses, it seems reasonable to conclude that a more visually appealing oyster will have ratios relatively close to the 3:2:1 ratio.

Help Us Help You: Join the ECSGA

Supporting the ECSGA by being a member is good for your business and good for our industry as a whole. Your membership dues helps pay for an executive director who looks out for your interests every day by working with regulators, educating lawmakers and helping the media get the story straight.

Whether it’s dealing with the Interstate Shellfish Sanitation Conference, Food and Drug Administration, NOAA, the Army Corps of Engineers or even local regulators, the ECSGA is constantly striving to ensure that regulations are workable and rational.

Our Listserv has 740 subscribers, we reach more than 1,200 people on FaceBook and we have 966 Twitter followers. But only a tiny fraction of that audience are dues-paying members.

Thinking about becoming a member for the first time?

Remember that we work hard for you, and your support determines how much we can do for you and our industry. We are stronger together!

Check out the membership info and form on the next page. You can snail-mail your application and check to the office in Toms River, N.J., or pay electronically by clicking on the Join button at ECSGA.org.
ECGSA Membership Categories and Dues
Growers, dealers and equipment suppliers enjoy full voting rights. (If you are both a grower and a dealer simply ask yourself where most of your revenue comes from.) If you don’t fall into one of these industry categories please consider joining as a non-voting associate member.

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EU Shellfish Trade
Embargo Update

Since 2010 the European Union has banned imports of molluscan shellfish from the U.S. This action was triggered by reciprocal reviews of each other’s shellfish sanitation programs (regulatory foundation, inspection program, training program, etc). The assessment was complicated by the fact that we use different methods to classify our waters: Europe uses a meat standard to ensure their shellfish is safe, while the U.S. uses water-quality standards for the growing areas, coupled with shoreline sanitary surveys of potential pollution sources. We maintain that the U.S. National Shellfish Sanitation Program provides some of the safest shellfish in the world.

EU markets represent a significant and lucrative export opportunity for U.S. producers. Prior to the ban many shellfish growers from both the East and West Coasts used to send tons of shellfish “across the pond.”

Sanitation program equivalency
EU auditors inspected the U.S. program in 2009 alleging certain deficiencies that were soundly refuted by the FDA. When FDA inspectors conducted their reciprocal audit in 2011 they found significant deficiencies in the EU program, initiating a protracted stalemate.

Finally, in 2015 after an additional round of reciprocal inspections, narrowing down initial trade to two states (Washington and Massachusetts) and two EU countries (Spain and the Netherlands) and limiting it to shellfish only from pristine harvest areas (Class “A” in Europe and “Approved” in the U.S.) it appeared agreement had been reached to allow trade to resume. Growers were assured that once the initial hurdles were cleared a process would be established to quickly allow other states and EU countries to join in trade.

Progress stalled in early 2016 when the EU announced it was changing the way it samples meats and defines Class “A” growing areas. Statisticians met in the U.S. for two days last spring, eventually concluding that the new program was still acceptable.

Before the FDA can finalize the equivalency agreement, a public process needs to be completed. The FDA General Council wants to ensure that the rollout of equivalence is properly conducted. This is the first such agreement the FDA has done in many years, and it appears that other commodity groups (milk) are seeking similar approval and are expected to follow shortly. Peter Koufopoulos, Director of the FDA’s Division of Seafood Safety told grower representatives while they were in Washington, D.C., the week of March 6 that necessary documents should be ready to go from FDA’s legal department to the Department of Health and Human Services in the next four-to-six weeks.

From there it’s on to the Office of Management and Budget for review and publishing in the Federal Register for public comment before the U.S. rulemaking process can be finalized. Grower representatives were told by FDA in December 2015 that a similar complex process would be required in Europe, but at the time we were assured that trade could resume in early 2017. It appears that we are still not close to achieving that goal.

Critically, a streamlined process to evaluate and allow other states and EU countries to reopen trade also needs to be devised. Several congressional offices are signing on to a letter to the FDA saying they are willing to apply pressure. Stay tuned.

—RBR
seven-year trade dispute barring our selling of shellfish to the European Union. We thought we had this solved over a year ago, but progress has been slow and we are pursuing several strategies to speed things up. (See EU trade embargo update on page 8).

We are also starting to plan for the next Farm Bill and will take another stab at attempting to push through an amendment granting Specialty Crop status to aquaculture crops. The Specialty Crop title in the Farm Bill provides block grants to states for smaller, non-commodity crops like nuts, fruits, grapes, cranberries and nursery plants so that farmers have access to funds for marketing and research activities. We are also hoping to improve access to crop insurance for aquaculture crops.

I want to offer special thanks those ECSGA members who took precious time away from their work to come to D.C. and convey our message. It is enormously helpful when we are able to walk into a congressional representative’s office and say we are growing jobs in rural towns in his or her district. Our contingent divided into two teams and met with 48 offices over four days, culminating in a Congressional Shellfish Caucus Reception attended by more than 200 House members and senior staff.

Special thanks to: Jeff Auger of Mook Sea Farm (Me.), Cam Ennis of the The Education Exchange (R.I.), Matt Behan of Behan Family Farm (R.I.), Ben Goetsch of Briarpatch Enterprises (Conn.), Steve Plant of Noank Aquaculture Cooperative (Conn.), Tom Kehoe of K&B Seafood (N.Y.), Tom Rossi of 4Cs Breeding Technology (N.J.), Johnny Shockley of Hoopers Island Oyster Aquaculture (Md.), Tal and Na Petty of Hollywood Oyster Company (Md.), Kim Huskey of Cherrystone Aqua-Farms (Va.), Dan Grosse of Toby Island Bay Oyster Farm (Va.), Frank Roberts of Lady’s Island Oyster Farm (S.C.), Mike Oesterling, director of Shellfish Growers of Virginia, and Paul Zajicek, director of the National Aquaculture Association.
Hiring Military Veterans on Shellfish Farms

compiled by Dan Barth, Patriot Shellfish Farms, Centralia, Wash.

It’s been projected that over the next 10 years the U.S. is going to need a million new farmers, and American veterans want those jobs. Veterans have a lot to offer employers – in the military they were trained to hone skills like organization, creative problem-solving, responsibility, duty, teamwork and a strong work ethic (www.va.gov/vetsinworkplace/docs/em_goodemployees.html).

Nevertheless, veterans may encounter hurdles in finding employment. To ease in their transition to the civilian workforce, a number of public and private programs have been set up to help eligible veterans start new farms or find work on farms – including shellfish aquaculture operations. Some of these programs offer substantial tax breaks and benefits as incentives to businesses that hire veterans.

In addition, businesses offering training and mentoring to veterans may also benefit from government programs.

Following are a few of those programs; the descriptions are taken mostly verbatim from the websites cited.

**Work Opportunity Tax Credit (WOTC)**

If your business employs an eligible veteran, the WOTC reduces your tax bill dollar-for-dollar, so each $1 of WOTC saves you $1 in taxes. The maximum tax credit is based on a set percentage of maximum first-year wages, which is fixed by law, and the number of hours worked. The tax credit can range from $2,400 to $9,600.

Eligible veterans include those who have service-related disabilities, or have been unemployed for specified durations, or are receiving SNAP benefits (food stamps).

There is no limit on the number of eligible employees you can hire for the credit. For example, if you hire three veterans with service-related disabilities who are unemployed at least six months, your tax credit is $28,800 ($9,600 x 3).

The WOTC is set to run through 2019, and you can take the credit year after year as you expand the size of your staff. So even if you take a tax credit for hiring a veteran in 2017, you can take it again next year.

For more info visit www.sba.gov/blogs/tax-credit-hiring-veterans-0

**Special Employer Incentives (SEI)**

Employers who hire veterans receive:

- reimbursement of up to 50 percent of the veteran's salary during the SEI program (which typically lasts up to six months) to cover instruction expenses, loss of production due to training, and supplies and equipment needed to complete training;
- tools, equipment, uniforms and other supplies, provided by the Veterans Administration (VA);
- appropriate accommodations based on individual needs of the veteran;
- the advantage of minimal paperwork to participate in the program; and
- VA support during the training and placement follow-up phase to assist with work- or training-related needs.

For more info visit benefits.va.gov/BENEFITS/factsheets/vocrehab/SpecialEmployer-Incentive.pdf

**USDA Beginning Farmer and Rancher Development Program (BFRDP)**

This is a competitive grant program administered by the U.S. Department of Agriculture that funds education, extension, outreach and technical assistance initiatives to help beginning farmers and ranchers of all types, including aquaculture. It’s targeted to collaborative local, state and regional networks and partnerships.

BFRDP grants support:

- vocational training and agricultural rehabilitation programs for veterans;
- financial and entrepreneurial training, mentoring, and apprenticeship programs; and
- education, outreach, and curriculum development activities to assist beginning farmers and ranchers. Topics may also include production practices, conservation planning, risk management education, diversification and marketing strategies, credit management, and farm safety training.

For more info on BFRDP visit nifa.usda.gov/program/beginning-farmer-and-rancher-development-program-bfrdp

Contact your state Department of Veteran Affairs or state Department of Agriculture for specific state programs and incentives for hiring or mentoring veterans.
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Steve Plant
Secretary

Steve has walked Capitol Hill with the ECSGA lobbying team every year since 2012, and attended the ISSC biennial meeting in 2015. Raised by parents who were botanists and marine biologists, he has always had a strong desire to produce a valuable product, but to do it in an environmentally responsible manner. He likes to point out that, “shellfish culture is the only area of agricultural production where the more product you grow, the better it is for the environment.” Steve remains active on both the state and national levels in educating lawmakers and the public on the challenges facing shellfish farmers. He believes that “shellfish will always struggle under a higher regulatory burden than other products, and as such the industry needs a strong presence from the legislative side.”

Steve has lived in Connecticut his entire life, and was a financial-market professional earlier in his career. He is one of the founding members of the Noank Aquaculture Cooperative, and the proud grower of Mystic Oysters.

Meet the Newly Elected ECSGA Board Members

Alex Hay
Vice President

Alex is the co-owner of Mac’s Seafood and the Wellfleet Shellfish Company and has worked closely with the aquaculture and fishing industries on Cape Cod for more than 20 years. He is a founding member and serves on the board of directors of Wellfleet Shellfish Promotion and Tasting, Inc./Wellfleet OysterFest. He is also an active member of the Massachusetts Aquaculture Association, serves on the Mass. Division of Marine Fisheries Shellfish Advisory Panel, and chairs the town of Wellfleet’s Wastewater Management Planning Committee.

Alex lives in Wellfleet with his wife, Elspeth, and daughters, Sally and Nora.

— Continued on page 13
Chris Sherman
Shellfish Dealer Rep.

Chris is president of Island Creek Oysters global, but his primary function is heading up their direct-to-chef distribution arm. The company buys oysters from more than 100 growers on the East Coast, including their own farms in Duxbury Bay (Chris is a leaseholder and farmer on one of those grants). Over the past five years he has become heavily involved in shellfish policy – catalyzed by a nagging, resident Vibrio parahaemolyticus problem in Duxbury Bay – and has attended three ISSC conferences and served on many ISSC committees. Chris sits on the Massachusetts Shellfish Advisory Panel and on the board of the Southeastern Massachusetts Aquaculture Center in Barnstable. For the last four years he has served as president of the 100-member Massachusetts Aquaculture Association, raising over $150,000, lobbying the state government for effective legislative and regulatory reform, building consensus among industry members, and forming potent coalitions among other fishing and farming advocacy groups. He has participated in the last three Walk-the-Hill outings in Washington, D.C., and would like to learn more about the inner workings of the association. Chris hopes to contribute positively to making the ECSGA the most effective industry advocacy organization it can be.

Ben Goetsch

After working on farms in Rhode Island for several years, Ben now runs the marketing department for Briarpatch Enterprises, Inc. in Milford, Conn., selling clams and oysters to local restaurants and to wholesale customers far and wide. He also consults on legislative issues and government affairs at the local, state and regional levels. Ben is aspiring to start his own small-scale oyster farm, called Red Rock Oyster Co., in the Thimble Islands (Branford, Conn.) This area is special to Ben, since it’s where he grew up and first developed his passion for oysters as a young boy.

A lover of all things oyster, Ben had a blast serving as the emcee at the Milford Oyster Festival Shucking Competition last year, and enjoyed his experience walking Capitol Hill with the North Team in March.

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Plastics a Battleground

Farms. Growers should team up and perform regular beach clean-ups, photograph any waste and culture gear collected and attempt to eliminate the source of any plastic farming debris.

From all the trash I’ve picked up while diving or dredging our lease, I know that the vast majority comes from careless boaters or litter that has been washed or blown into the water. My crew collected a bucket of other people’s trash almost every day. But when I think of the amount of plastic I recycle at the dump every week, it makes the plastic I bought for the farm look insignificant.

Scientists who are studying microplastic pollution suggest that there are significant differences between naturally occurring inert particles like dust and silt, and inert microplastics, but I’ve examined the literature with a fair amount of skepticism. As a scientist I just don’t see a significant difference between the microplastics found in shellfish guts and any other inert particles in the water.

Even though microplastic beads and fibers have been shown to attract some pollutants and bacteria to their surfaces, the same is also true of most other small suspended particles. The primary difference is that the plastics have a lower density so they tend to float or stay suspended in the water column longer.

Although I am not happy to be eating microplastic particles or silt in my oysters, at this point I have not seen evidence that either type of particle is a significant health concern for shellfish consumers. (Of course, if you are a copepod or a shellfish larva and the microplastic blocks your mouth or stomach, that is a problem, but the same blockage could occur from silt.) Nonetheless, some of our customers may choose to swear off seafood for life after reading about the purported perils of microplastics.

Starting this July, a law prohibiting “the manufacture and introduction ... into interstate commerce of rinseoff cosmetics containing intentionally-added plastic microbeads” goes into effect. Although the ban includes toothpaste, the “rinseoff cosmetics” part narrowed the law considerably, leaving out many other products containing microbeads. But at least it’s a start.

So let’s do all we can to keep plastic trash out of the ocean, and by all means let’s replace microplastic beads with alternatives wherever possible. We must be doubly careful to ensure that our farms don’t add to the plastic debris in our waters, but we also need to be honest about the major sources of plastic and microplastic in the marine environment. Shellfish farming is a tiny contributor in the grand scheme. Let’s do all we can to make sure it stays that way.