

2019 Update to Connecticut Shellfish Initiative Vision Plan

Description: A meeting was held on August 14th, 2019 with members of the commercial aquaculture industry from the western part of the Connecticut coast. This meeting follows a previous meeting with the aquaculture industry from the eastern part of the state on July 15th. State Department of Agriculture Commissioner Bryan Hurlburt met with representatives of commercial shellfishing and kelp businesses, along with state Bureau of Aquaculture and Connecticut Sea Grant staff, to brainstorm revisions and updates to the 2016 Vision Plan created under the Connecticut Shellfish Initiative. The meeting, at BRASTECH, follows a survey in January of commercial shellfishermen about their research needs (also included in this document), and is the second of two brainstorming meetings held with shellfishermen about updates and revisions to the plan.

Attendees at July 15th meeting:

Nancy Balcom, Connecticut Sea Grant
Judy Benson, Connecticut Sea Grant
Anoushka Concepcion, Connecticut Sea Grant
Sylvain DeGuise, Connecticut Sea Grant
David Carey, CT DA/BA
Kristin DeRosia-Banick, CT DA/BA
Brian Hurlburt, Commissioner of Agriculture
Lauren Gauthier, Norm Bloom & Son, Aeros Cultured Oyster, Noank Aquaculture Cooperative
Tessa Getchis, Connecticut Sea Grant
Mike Gilman, Indian River Shellfish
Ben Goetsch, Briarpatch Enterprises
Mark Harrell, Aeros Cultured Oyster
Tim Londregan, Niantic Bay Shellfish Farm
Jim Markow, Aeros Cultured Oyster
Steve Plant, Connecticut Cultured Oysters

Attendees at August 14th meeting:

Nancy Balcom, Connecticut Sea Grant
Anoushka Concepcion, Connecticut Sea Grant
Sylvain DeGuise, Connecticut Sea Grant
David Carey, CT DA/BA
Lauren Gauthier, Norm Bloom & Son, Aeros Cultured Oyster, Noank Aquaculture Cooperative
Tessa Getchis, Connecticut Sea Grant
JP Vellotti, East Coast Kelp Farms
Kristen Jabanowski, NOAA Fisheries – Milford
Steven Schafer, Stella Mar Oysters
Rachel Precious, Norman Bloom and Son
Donald Bell, Norman Bloom and Son
Brian Hurlburt, Commissioner of Agriculture

Sea Grant reviewed the accomplishments – see Connecticut Shellfish Initiative Accomplishments to Date (as of August 2019) for more information

Sea Grant provided the status of new aquaculture permitting guide

The new Connecticut shellfish book containing interviews from industry is being finalized. No official release date yet

Ongoing/emerging issues – list is inclusive from meetings held on July 15th and August 14th, 2019

Jobs and Economy

- Industry needs expanded access to 3” approved growing areas
- Interest in shellfish sales to EU; want more information on how states were chosen for the pilot program and why Connecticut was not included (Sea Grant send message to Bob Rheault, ECSGA who will reply with explanation of the situation)
- Aug 14th meeting – (Industry) When EU market opens up, CT should be ready to address concerns/misconceptions on cultivated oysters so CT doesn’t lose out on benefiting from the potential market

Research

- Fund research to better understand bioaccumulation of microplastics, pesticides and heavy metals in shellfish; information sought on safe levels of these in shellfish
- Fund climate-related research (from Jan 2019 survey):
 - Storm surge, flooding, erosion; impacts to seafood operation infrastructure
 - Ocean acidification; impacts on cultivated shellfish
 - DA/BA involved with regional OA efforts and DABA/UCONN seeking funding for enhanced network for monitoring
 - Rainfall, runoff; harvest area closures; trends and economic impacts
 - DA/BA working on pilot project with NOAA for pathogen modeling/forecasting and conditional area closures with FDA
 - Temperature; impact on species cultivated
 - Sea level rise; impacts to seafood operation infrastructure
 - Waste water and storm drain efficiency and design; improvements that would benefit aquaculture
- Fund pathogen-related research (from Jan 2019 survey):
 - Vibrio rapid detection; improve understanding (*also mentioned at July meeting*)
 - HAB rapid detection; improve understanding (*also mentioned at July meeting*)

- *DABA Expanded HAB monitoring in 2019, including training new HAB specialist, expanded network of plankton collection, training of shellfish commission volunteers in sample collection, implemented procedure for toxin testing of blooms and rapid testing of shellfish: see 2019 CT Biotoxin Management Plan*
- Fund contaminant-related research (from Jan 2019 survey):
 - Plastics in cultured shellfish, improve understanding, purging *(also mentioned at July meeting)*
 - Heavy metals in cultured shellfish *(also mentioned at July meeting)*
 - PCBs in cultured shellfish *(also mentioned at July meeting)*
- Fund product research and development research (from Jan 2019 survey):
 - Species diversification; cultured shellfish including mussels and softshells *(also mentioned at July meeting)*
 - Shellfish grow-out systems; comparisons, improved efficacy
 - Develop probiotics to prevent/reduce contaminants in microalgae cultures
 - NMFS Milford Lab has on-going research into probiotics
 - Develop dried diatom feed for hatchery reared clams/oysters
 - Continue efforts in oyster genetics and breeding
- Fund economics and marketing research (from Jan 2019 survey):
 - Develop marketing strategies for local product *(also mentioned at July meeting)*
 - Develop marketing strategies for value-added products *(also mentioned at July meeting)*
 - Conduct value chain analysis for aquaculture sectors
- Other research (from Jan 2019 survey):
 - Better understand the lack of northern quahog sets in Long Island Sound, causes and influencing factors *(also mentioned at July meeting)*
 - Conduct social science to explore how to improve social and political will regarding aquaculture *(also mentioned at July meeting)*
 - Better understand the environmental benefits of shellfish culture
 - Conduct Microbial Source Tracking (MST) of both human and animal source, and include species identification to determine and remedy pathogen inputs adjacent to aquaculture harvest areas

Outreach and Engagement

- (Industry) interest in working pro-actively with Aquaculture Permitting Work Group to describe their gear and practices in hopes that this will facilitate application review

- (Industry) interest in working pro-actively with Aquaculture Permitting Work Group to describe their gear and practices in hopes that this will facilitate application review
- (Industry) expressed desire to have 3rd party and impartial persons (state attorney, representatives, regulators and outreach professionals) at public meetings about aquaculture; interest in discussing how these groups team up to conduct outreach on shellfish aquaculture
- (Industry) expressed desire to have advocates to refute inaccuracies at public meetings about aquaculture; DA/BA expressed a desire to serve in an advocacy role, but need to be careful about their positions and right now are understaffed
- (Industry) expressed desire to share their outreach materials with outreach professionals in order to broaden their reach on shellfish aquaculture
- (Industry) expressed more frequent “sounding boards” similar to this meeting to keep communication flowing
- (Industry) expressed the need for a liaison to help track/address illegal branding
- (Industry) expressed interest in reinvigorating the CT Seafood Council with a focus on marketing local products and helping to diversify products; in including DECD and DEEP; (Sea Grant) suggested that industry select appointees that will show up to the monthly meetings and voice common needs
 - (Commissioner) is willing to assist in reinvigorating the CT Seafood Council and can conduct a process to do so within the next few weeks
 - (Industry) expressed concern that ex-vessel value for oysters is strong, however, competition with other states is high on the purchasing side from wild oysters, makes it difficult for cultivated oysters
 - (Industry) expressed the need for a branding initiative and efforts to address buyers prejudice toward cultivated oysters vs. wild oysters and overcome perceptions
 - (Sea Grant) suggested thinking about different words/terms to represent aquaculture or wild to not scare or confuse people; suggested hiring someone from the marketing industry to assist with marketing through words or develop a campaign
 - (Industry) asked if there are funds available to support and promote marketing of CT seafood at local, regional, and national level
 - (Commissioner) explained that these efforts are usually industry-based and supported
 - (Industry) expressed the need for better information on wild vs farmed-raised oysters for dealers and determine which marketing is best for which product
 - (Industry) expressed the need of having organized representation to market CT oysters at trade shows as well as attend and participate in

- Restaurant shows (NYC, Chicago, etc.) and other venues/events that gets recognition closer to end-user
 - Trade events with end-user buyers nationally and internationally
- (Industry) expressed the need to develop comprehensive information or packet to provide to potential buyers - give them all of the info they need on safety and other regulatory information, consistent supply, production methods, etc. so they don't need to verify - i.e. booklet, fact sheets, etc. (can be used for EU market and other potential international buyers)
- (Commissioner) suggested working with FFAS (USDA - foreign ag trade within Department of Commerce) to start the conversation on how to develop these products
- (Industry) expressed the need for a point person to be a representative of the industry for media and consumer groups and to develop a coordinated communications campaign
- (Industry) expressed the need to be more proactive to address "flesh-eating" bacteria and Vibrio scare - develop information to address people's concerns?
 - (Industry) suggested promoting CT's good water quality standards for oysters for consumers (marketing efforts) to "defend" CT oysters vs MA oysters
 - (Sea Grant) suggested developing documents to address concerns of the consumer - coordinated communications campaign on food and water safety/quality
 - (Sea Grant) suggested creating "did you know..." type of documents
 - (Industry) cited Bloom's campaign about icing for buyers and consumers
- (Industry) cited how at the ISSC meeting it was discussed how each state handled addressing shellfish illnesses; improve ways to report illnesses; provide consumers information on how and where to report if they get sick; who should avoid shellfish; and inform consumers on the differences between illnesses.
 - (Commissioner) suggested developing different types of information guides for different audiences and situations (i.e. dairy farms adopt industry standards and promote what they are doing);
 - (NOAA) suggested creating an infographic to show what the industry standards are toward seafood safety to address consumers concerns on water quality and benefits that oysters provide
 - (Sea Grant) mentioned the results and report on the CT Seafood Survey
 - (Industry) cautioned that consumers don't want to eat oysters that are being used in restoration and that consumers need info to know the difference
 - (Industry) suggested addressing consumer "pollution" perception and target campaigns on how to separate "conservation" vs. "consumption"

- (Sea Grant) suggested promoting industry best management practices (i.e. that HACCP requirements start upon harvest on-vessel in CT, unlike other states)
- (Industry) expressed the importance of promoting CT's unique type of oyster and shellfishing heritage; adds quality to the products produced in CT
- (NOAA) suggested to better coordinate social media sources within the state so everyone is sharing the same message at the same time (i.e. share infographics, notices, announcements, etc);
 - Create a centralized hub or listserv to connect a representative to each group that can promote the same information?
- (NOAA) asked if there is a need for an industry association
- (Industry) suggested focusing on efforts to develop new aquaculture opportunities for other crops (i.e. green crabs, mussels)
- (Industry) suggested more consumer education and outreach, especially restaurants and distributors on local aquaculture practices and product
 - Commissioner asked for announcement about events or activities that industry participates in so they can include it in the State Ag Report that goes out weekly
- (Industry) suggested to add agenda item to discuss quahog recruitment and how towns feel about the current lack of clam availability at Annual Gathering of Shellfish Commissions
- (Industry) desire a mechanism for developing process to arrive at industry consensus on issues and to find a representative to speak on behalf of industry; suggestion to form a state shellfish association and start with common goals and work from there
- (Industry) expressed interest in DA/BA website and when overhaul would be complete; DA/BA responded that work is in progress; Sea Grant mentioned that in the interim DA/BA has provided the aquaculture licensing and permitting materials which are posted at <http://www.aquaculture.uconn.edu/commercial/>.
- (Industry) regularly conducts tours and promises to provide number of tours provided and number of participants (follow-up with Donald Bell)
- (Industry) expressed need to engage with school-age children to promote and recruit shellfish producers; asked if anyone was participating in summer marine camps, the content being presented, and impacts.
 - (Industry) asked if there were funds available for summer school programs allowing it to be free for local children to get involved in aquaculture and marine sciences?
 - (Sea Grant) expressed the need to acknowledge and promote other educational opportunities (i.e. apprenticeships) so it can be publicized
- Non-research actions (from Jan 2019 survey):
 - Public outreach and legislative actions to reduce plastic use

- Develop hatchery and grow-out techniques courses; on-water, classroom and online
- Develop aquaculture training courses for technical/community colleges
- Offer apprenticeship programs

Management, Policy and Planning

- DA/BA requesting funds for a new vessel that will be used for sampling eastern CT waters
- (Industry) Interest expressed in expanding sample collection in Thames; requesting permission to access military “off limits” sites because some industry members have relationships with subbase personnel
- (Industry) Interest expressed in expanding sample collection to reopen harvest areas in town waters; DA/BA noted that Old Lyme and Old Saybrook are developing sampling plans; Clinton now has a seasonal recreational area
- (Industry) Interest in accessing quahogs in “Prohibited” areas for transplanting; interest in learning what the NSSP guidance is for this activity; why there can be no movement of shellfish from prohibited areas now that Vessel Monitoring Systems (VMS) are in place
- (Industry) Question expressed about VMS “geofencing” and when that will be made available to industry
- (Industry) Question expressed about why some licenses were reissued when at the annual meeting, DA/BA said that licenses would not be reissued unless VMS was installed on boats; according to DA/BA VMS has not been installed on all boats
- (Industry) expressed desire to have VMS policies and procedures guidance; DA/BA mentioned that this is in progress
- (Industry) expressed desire to have Intellectual Property protection and would like this discussed with Aquaculture Permitting Work Group; some designs that were the result of working with a paid consultant have been provided by DA/BA as an example for other industry members to follow
- (Industry) Question why some towns are increasing taxes on shellfish beds unless they are tied to a land-based operation; who can help them with this legislative issue (PA-490? Maritime Heritage Land)
- (Industry) Interest expressed in investigating the possibility of towns without a shellfish commission turning over jurisdiction of shellfish grounds to state
- (Industry) Interest expressed in establishing spawning sanctuary (closed to harvest) clam beds in towns areas
 - DA/BA suggested see RI model for spawning sanctuaries
- (Industry) Interest expressed in expanding recreational oyster harvest programs in town waters

- (Industry) Question expressed as to why they need to seek endorsement letters from CT DEEP to harvest conch
- (Industry) Question why the Aquaculture Advisory Council was never initiated and positions not appointed. Commissioner Hurlburt said that he is conducting an internal review all of the ag-related boards and councils and having discussions about the future of these. He suggested that the Governor's Council on Agriculture Development may be a better way for diverse stakeholders to work together to achieve common goals; this Council would need an appointee from industry
- (Industry) suggested a legislative action that would require shellfish tags at the point of sale
- (Industry) suggested a "use by" date for shellfish (OR WAS THIS WITHDRAWN?)
- (Industry) question expressed about the announcement of interest in developing state-run shellfish cooperatives similar to the Noank Aquaculture Cooperative; industry wants to know what this is about and how one might get involved
- (Industry) suggested that an industry representative be placed on the Blue Plan Advisory Council so that as the plan is revisited, there will be an industry voice
- (Industry) suggested an expedited review process for experimental projects with minimal impacts; Sea Grant suggested that the Aquaculture Permitting Work Group review this request and respond with guidance in the new Permitting Guide which identifies review processes by project type
- (Industry) expressed lowering the size restriction (to 2 3/4 in) for oysters; stating that the smaller size would increase shelf-space, ability to increase yield and shorter harvest time, and compete with other states
 - (DABA) stated the challenge comes with ensuring appropriate size protections for natural/wild oyster beds which can't be harvested below 3 inches. Changing size would be for all or none. Competing states (MA) doesn't have "wild/natural" beds so they can sell at a smaller size. Doesn't translate to CT's industry structure
 - (Industry) asked if DABA could only enforce smaller size for cultivated-only oysters?
 - (DABA) stated enforcement would be difficult.
- (Industry) expressed the desire to cultivate triploid oysters
 - (DABA) expressed their concern for doing so relates to potential importation hazards as well as genetic background of these oysters and how they will perform in CT (i.e. disease issues can be introduced that may affect local oysters)
 - (DABA) stated they have a grant to evaluate samples from USDA for Roger Williams University to conduct genetic analysis and performance in CT waters
- (Industry) asked if there are agreements with famers who work in other states in addition to CT in terms of movement of seed

- (DABA) said no. They want to promote CT hatcheries and natural recruitment. They will require health certificates for importation of seed
- (Industry) expressed needing more information on policies and reasons for policies with regard to seed availability in CT and why DABA doesn't allow imported seed from south/north of certain locations
- (Industry) would like better clarification on why DABA makes the decisions they do
- Submitted from Comment Period: (Industry) suggested providing DABA with assistance to craft a management plan for the Branford Shellfish Incubator Initiative
 - Can demonstrate how small scale aquaculture can be promoted and sited with minimal user conflicts
 - Look for grant funding to support the effort?
- Non-research actions (from Jan 2019 survey):
 - Public outreach on aquaculture industry benefits/impacts *(also mentioned at July meeting)*
 - Streamline application process for marine aquaculture *(also mentioned at July meeting)*
 - Laws encouraging growth of small-scale shellfish operations; leasing
 - Develop nutrient credit trading program for farmers
 - Law to increase fines for poaching aquaculture product
 - Create notification system via text or email for harvest area closures
 - Develop municipal shellfish management plans *(also mentioned at July meeting)*