I. Welcome and 2020 recap

This meeting had 20 participants representing the following states:

- Alaska
- Connecticut
- Maine
- New Hampshire
- New York
- Washington
- Other

Last Meeting we:

- Reviewed the structure and purpose of the Seaweed Hub
- Discussed the purpose of the topical Work Groups
- Took a look at "big picture" challenges and opportunities for Market Opportunities
- Broke into smaller groups to discuss these priorities

Goal for this meeting: narrow in on priority topics identified at previous meetings. Priorities that we heard in last meeting’s breakout groups:

- **Consumer education** campaigns and efforts can be effective ways to build markets and can be accomplished relatively short-term
- **Product development** and success has key considerations, like standards and grading, consistent supply, and nutritional info
- **Industry representation** can tap into more long-term marketing efforts, and future efforts to pursue this will need to meet the size of the industry
II. Breakout Groups

1) Product Development
2) Trade Representation (Associations, Institutes, etc.)
3) Consumer Education and Outreach Opportunities

Each breakout group utilized Miro, an interactive online 'whiteboard', and participated in a discussion touching on these three topics:

1) Existing Resources
2) Challenges
3) Opportunities

The following notes represent comments on the whiteboard and breakout group discussions.

**Product Development Breakout Group**
*(9 participants)*

**A. Existing Resources**

_Q: What seaweed products do well?_

- Dried seaweeds
- Fresh frozen products
- Food Safety guidelines-FSMA available
- MCSV, kelp krunch is great!
- Red's-laver, dulse or Irish moss all sell well
- Fermented seaweed salad
- In food CPG space: not reinventing the wheel, something that can be matched against an existing ingredient
- Existing products with added kelp. Cosmetic, foodstuff (saucers etc.) Hidden ingredients for entire family
- Supplements with seaweed
- Products we all know and love! Ex: salsa

_Q: What resources do we already have?_

- Costs and upfront capital is necessary, be patient with testing, certain companies can help develop products, and float a seaweed company through the entire process
- Universities can offer consumer and product research, assistance, etc.
- Food safety guidelines like FSMA
- Interest in non-food products and monetizing environmental services
- A mill for making more "sprinkles" or finer to be used like flour
- Seaweed kelp cutter

**B. Challenges**

_Q: What challenges exist in seaweed product development?_
• It’s hard for those not familiar with this products development space to get into it
• How do you find a food producer/company to take on a new project?
• A lack of understanding that it can be actually easy to add to what exists
• Consumer aversion to the flavor of seaweed or the thought of seaweed
• No consistency in naming (not using Latin)
• National standards for determining composition. What needs to be determined for food, feeds, etc.
• A lack of studies to go with some of the "claims" that exist about seaweed
• Predicting what the next trend is. What kelp product will be next?
• Many 'trends' have trade associations/national efforts behind them
• It’s really hard to predict food trends- sometimes this is seasonal! (ex. Christmas foods begin development in May)
• For any product development you need to think WAY ahead
• Matching the buying (farmed or wild) needs to the seasonality of the harvest/putting in seeds out to your development plan
• Short very seasonal harvest window, must be harvested and processed immediately
• Nutrient concentration dependent on time of harvest, consistent nutritional information
• Supply chain costs need to be considered (ex. National labs were testing biocrudes in AK. but it wasn't feasible)
• How to monetize ecosystem services
• Funding

C. Opportunities
Q: What do we need to create or do to eliminate these barriers?
• If there is an "umbrella"/generalized agreement about species naming
• Other food sectors have made names familiar with consumers
• There is some data available about consumer preferences which we can use
• How to differentiate American products vs. Asian or now European products?
• Master list of food producers in New England and beyond
• Marketing seaweed as a flavor enhancer, umami/savory
• Baseline data and planning tools
• FDA 3rd party audit for our industry
• Regulators and inspectors know what processing (and therefore products) is going on
• Streamlined processing, or just more processing in general
• Celebrity/ social media influencers

Trade Representation Breakout Group
(4 participants)

A. Existing Resources
Q: What resources do we already have?
Q: What similar models or associations already exist?
B. Challenges:

Q: What challenges exist in establishing trade representation for farmed seaweed?

- Small number of producers
- Small companies unable to pay to support representations
- Funding mechanism
- Agreeing on goal, focus, direction
- Differences between wild harvested and farmed
- Barrier: Benefits of trade representation not priority for new businesses
- Relatively young sector
- Wild harvesters want differentiation; have needs around wild resource management that farmers don’t have
  - From comments: Not an issue in CT, wild harvest not allowed; farmers have stringent, HACCP, state testing regs.
- Different needs and issues of macro and micro algae
- Micro algae historically represented by biotech industry
- Many growing seaweed as a part-time business

C. Opportunities

Q: What do we need to create or do to advance this priority?

- Help seaweed producers see the value of existing trade associations so they are not the only ones paying for representation and become part of strategic alliances
- Trade org needs to bring value to farmers/industry
- Encourage existing trade associations to form seaweed subgroups
  - Other species groups have gone this way: organize under NAA, difficult financially to support organization for one species/species group
  - Seaweed representation in the National Aquaculture Association?
- Need national organization to engage in national issues (then could have subgroups within national org for relevant regions)
- National Seaweed Trade Association?
- More frequent Seaweed Hub gatherings! Getting everyone on the same page and connected
- Identify needs of the greater seaweed industry and give this list of priorities to (future) trade org.
- Have a seaweed group with high visibility on what they are doing
- Look for models from overseas
- Regional vs national level: industry looks different in ME and CT., not to mention AK
• Organize a meeting of regional associations to see how different regions are approaching organization
• Make use of different communications channels to get the word out on the value of trade org., on the benefits of joining, etc.

Consumer Education and Outreach Breakout Group:
(5 participants)

A. Existing Resources:
Q: What consumer education and outreach efforts (events, media, consumer research, etc.) currently exist?
• New England Kelp Harvest Week - just launched a couple of weeks ago - will be an annual event
• Virtual Seaweed Mania (NH Sea Grant) with Public Library
• Algae Technology Education Consortium/Algal Culture Extension shortcourse +links into numerous schools throughout USA
• CT Seaweed Week
• Maine Seaweed Week
• Videos
• Seaweed Mania (NH)
• Milford Oyster Festival - Ed and Kathy Rhoads
• Maine Coast Harvest - Title IX fisheries videos on kelp aquaculture
  https://www.mainecoastharvest.com/the-films

B. Challenges
Q: What challenges exist in developing consumer education and outreach?
• Consumer awareness/perception/literacy
• The term 'seaweed' to many consumers
• Showing the benefits of domestic kelp vs. imported seaweed
• Engaging with customers and educate them on the domestic kelp difference
• How do we reach those who don't already know about seaweed?
• Other words than sea veggies?
• Highlighting the Maine Kelp difference
• How do we get seaweed on a menu for more than just a week?
• Seems like there is opportunity with the fact that there are more women than men in seaweed farming (is this true?)
• How can we get partners to keep talking about seaweed throughout the year and not just a week?

C. Opportunities
Q: What do we need to create or do to advance this priority?
Q: How can we use existing resources?
• Chef/restaurant events focused on food/cooking as the connection
• Continue to look at pairing/complimenting with other foods
• Focus on 'foodies' first
• Integrating into other 'mainstream' foods?
• Emphasize food security and safety, health benefits
• Use/emulate sushi (even crawfish) model/experience
• Seaweed info campaign
• Adding seaweed to oyster/shellfish focused outreach events
• Can we piggyback with other events (e.g. Zoe's Food and Wine?)
• Adding Maine aquaculture films to the Maine Outdoor Film festival
• Add seaweed to oyster booth at Milford Oyster Festival
• Project Blue at Southern CT State University- student innovation teams think about kelp products and start to design kelp products
• Highlight women in the marketing and education process out front – leaders in this industry
• ATEC/ACES would be willing to do a couple more seaweed videos in areas that are not covered, especially with women. Looking forward to MAA videos.
• Forming a cooperative (e.g. Long Island)?