Sea Grant Seaweed Hub

Needs Assessment Results
Needs Assessment Goal

- Objectives of the survey:
  - Describe overarching challenges for the industry
  - Document the breadth and depth of stakeholders
  - Identify opportunities for the Seaweed Hub
Survey Design

- Survey effort was reviewed and approved by the URI Institutional Review Board (IRB1920-121) for Human Subjects Research.
- Questions designed collaboratively with SG Hub membership
- Focus on identifying challenges and needs across geographies and industry roles
- Differing lines of questions based on role(s) in industry
  - Some parallel questions
Survey Administration

- Qualtrics XM platform via anonymous link
- Rollout via recruitment email from 11 Sea Grant representatives to their respective contacts
  - Follow up/reminder email sent
- Responses covering January 6, 2019 to February 18, 2020
- Total respondents = 259
States Represented

In what state(s) do you engage in the seaweed industry?
(N = 291)
How would you describe your role in the seaweed industry? (N = 351)

- Prospective grower
- Permitted grower
- Nursery/seed-string producer
- Regulator
- Processor
- Value-added processor
- Culinary professional
- Researcher
- Other
- Harvester
- Extension
- Educator
- Government
- Conservation

Number of Responses

0 20 40 60 80
Species

Culinary Species Use (N = 33)

- Kombu
- Kelp
- Sugar kelp
- Wakame
- Alaria
- Dulse
- Nori
- Laver
- Irish moss
- Other

- N = 55

Number of Responses

- Processor
- Nursery
- Permitted Grower
- Researcher
Species of Interest for Growers

- Sugar kelp
- Bull kelp
- Alaria spp.
- Dulse
- Nori/Laver
- Irish moss
- Gracilaria
- Sea lettuce
- Other

Number of Responses

- Prospective Grower
- Permitted grower

N = 55
Challenges Identified - Regulators

Regulators - Public Health (N = 35)

- Education about regulations for industry participants: 8
- Clear regulations: 7
- Information on food safety: 10
- Information about safe environments for growing: 6
- Funding: 1
- Other: 2

With a total of 35 respondents.
Challenges Identified - Regulators

Regulators - Permitting (N = 88)

- Assistance for growers about regulations
- Environmental information on favorable growing conditions
- Gear design and/or farming infrastructure
- Potential environmental interactions
- Spread of non-native species, pathogens, HABs
- Source of seed-stock
- Public perceptions
- Applicant experience in boater/on-the-water safety
- Other
Prices – Processors & Growers

Please note: The small sample size represented here are NOT representative of the market as a whole.

- Processor range of all reported prices = $0.50 – $22.00/lb (N = 5)

- Grower range of all reported prices = $0.55 - $20.00 (N = 14)

![Bar chart](chart.png)

In the last year, did you purchase seaweed at a guaranteed or set price?
(Processors - N = 22)
Challenges Identified - Processors

Challenges - Processors (N = 38)

Number of Responses

- Source options: 10
- Consistent supply: 12
- Transporting product: 6
- I haven't tried to secure local seaweed: 1
- Other: 9
Challenges Identified - Nursery

Challenges - Nursery (N = 24)

- Obtaining wild seed-stock: 2
- Culture contamination: 3
- Meeting demand: 4
- Operational costs: 3
- Identifying nursery facilities: 3
- Meeting or obtaining certifications (i.e., licenses): 3
- Other: 6

Number of Responses
Challenges Identified – Permitted Grower

Permitted Grower (N = 40)

Number of Responses

- Access to infrastructure: 5
- Food safety guidelines: 4
- Post-harvest guidelines: 4
- Access to nutritional information: 3
- Access to consistent supply: 3
- Access to locally produced seaweed: 8
- Finding buyers for product: 7
- Access to financial resources: 4
- Economics on costs of production or market value: 4
- Other: 2
- I have not encountered any challenges: 2
Challenges Identified - Culinary Professionals

Culinary Professionals (N = 25)

- Infrastructure for processing, storage, and transportation
- Food safety guidelines
- Post-harvest guidelines
- Nutritional information
- Consistent supply
- Obtaining locally-produced seaweed
- Availability of desired product forms
- Quality of product
- Price point
- Consumer demand
- Other
- Doesn't apply

0
1
2
3
4
5
6

Infrastructure for processing, storage, and transportation
Food safety guidelines
Post-harvest guidelines
Nutritional information
Consistent supply
Obtaining locally-produced seaweed
Availability of desired product forms
Quality of product
Price point
Consumer demand
Other
Doesn't apply
Challenges Identified – Prospective Grower

Prospective Grower (N = 173)

- Assistance with business planning: 12
- Market opportunities: 28
- Information on the permitting process: 33
- Information on food safety and handling: 17
- Technical assistance with production: 33
- Access to seed: 25
- Other: 15
Challenges - Researchers

Researchers (N = 109)

- Finding growers/producers to participate
- Access to local seed-string
- Understanding of post-harvest opportunities (including processing, storage, and transportation infrastructure)
- Concerns about public health
- Concerns about food safety
- Guidance on the permitting process for seaweed research
- I haven’t found any challenges
- Other

Number of Responses
Challenges by Work Group

Challenges - Categorized by Work Group (N = 397)

- Production systems
- Post-harvest opportunities and infrastructure
- Regulations
- Market opportunities

Number of Responses

- Processors
- Nursery
- Proposective Grower
- Permitted Grower
- Culinary Professionals
- Researchers