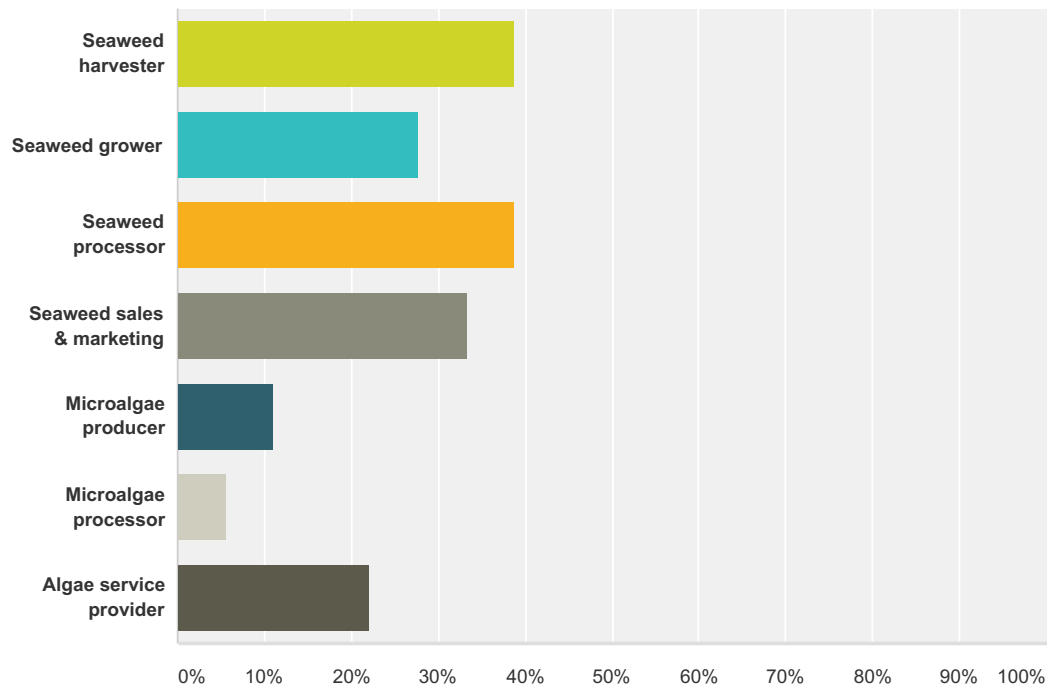


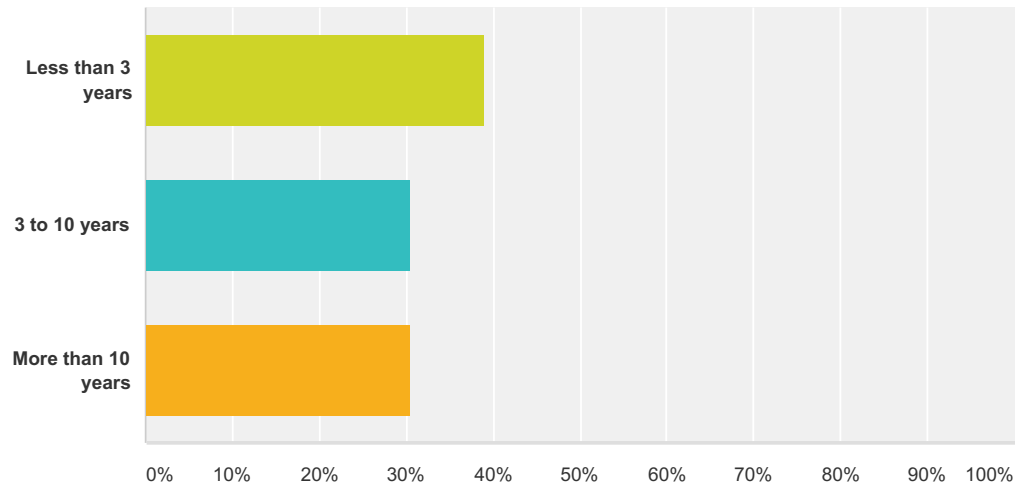
Q1 What best describes your affiliation to the Maine seaweed/microalgae industry?

Answered: 18 Skipped: 6



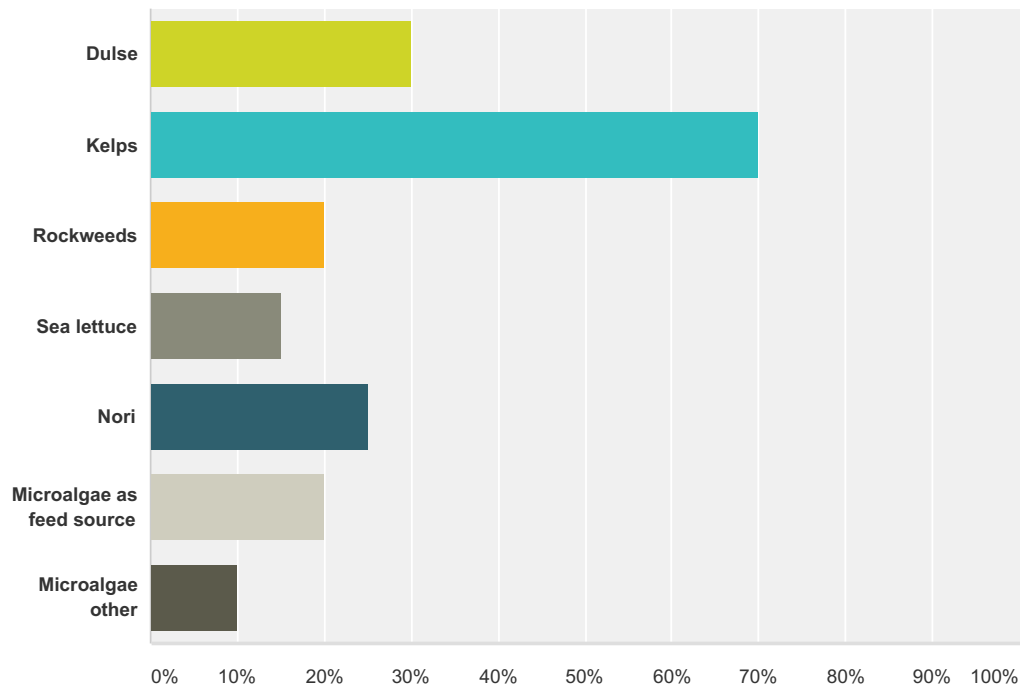
Q2 How long have you worked or been involved with the seaweed/microalgae business?

Answered: 23 Skipped: 1



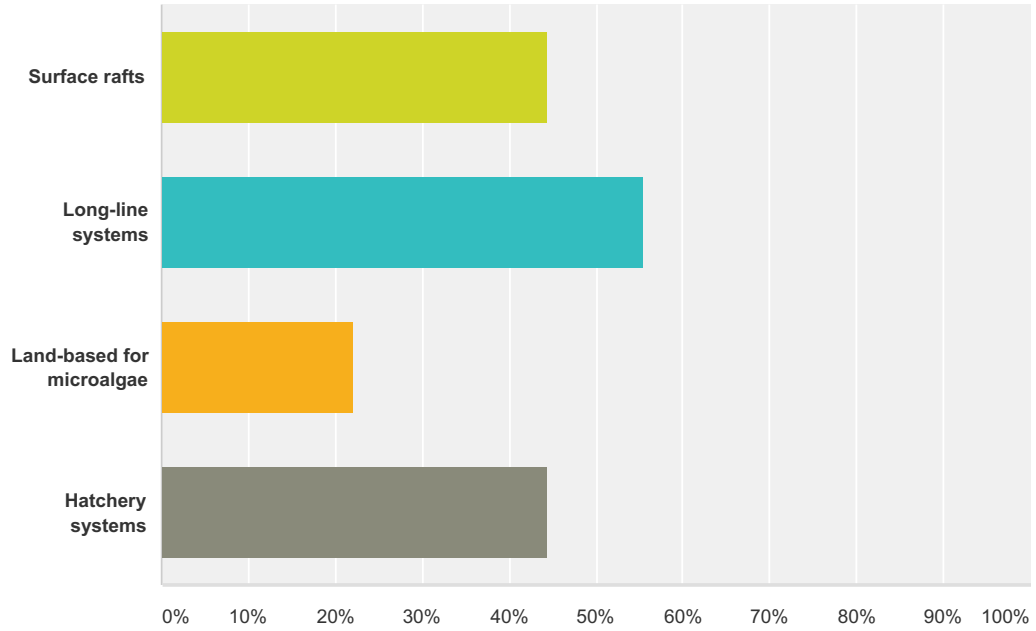
Q3 Please indicate the principal species you harvest or culture.

Answered: 20 Skipped: 4



Q4 Which of the following culture systems do you work with (check multiple boxes if necessary)?

Answered: 9 Skipped: 15



Q5 What is the single greatest barrier to your business success?

Answered: 22 Skipped: 2

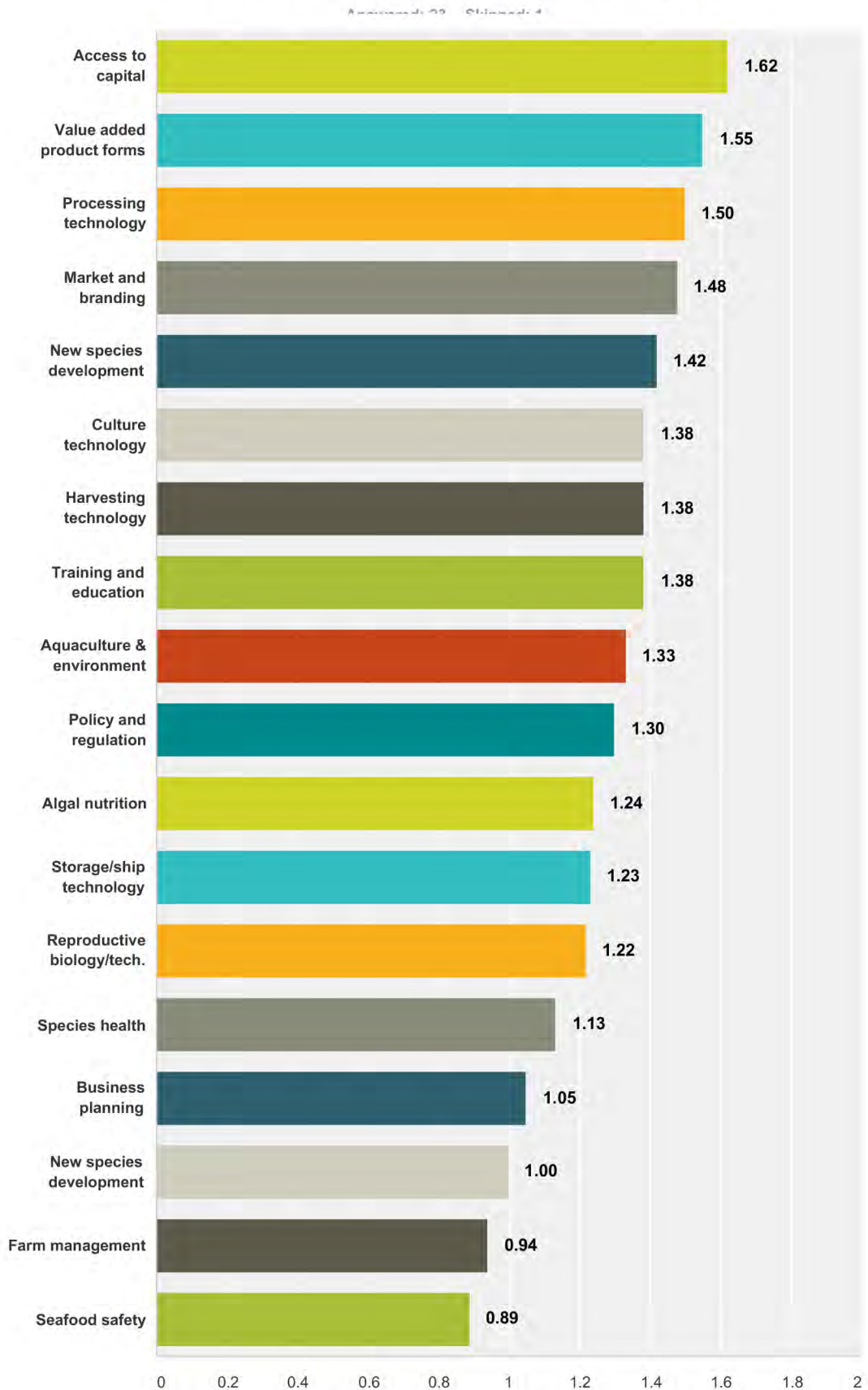
- "...get the word out about our capabilities as a seaweed co-packer and processor, and our ability to help with R&D and new product development."
- Uncertain regulatory environment
- Information about combinations of microalgal diets that provide most efficient growth and survival rates for cultured bivalves
- lack of secondary processors
- "Inherent technical hurdles related to R&D of growing, maintaining and processing algae"
- consistent market and preorder
- Adequate supply.
- Effort and time required to obtain leases
- lack of consumer awareness
- Large scale market acceptance
- \$\$CAPITAL\$\$
- development of products that are economically viable.
- Funding
- "Growout sites, industry participants and the market for macroalgae (all connected)"
- The need for reliable information to support products; the need for new product development; the need for resource management to ensure ongoing sustainable harvest.
- Access to capital and consistent markets.
- "Ability to meet demand due to currently only working with wild harvested product. Our biggest seller, Dulse, doesn't have a lot of growth potential in terms of area to expand harvesting into. Our only direction for growth is if a farmed Organic Dulse can compete."
- Adequate sustainable supply of Ascophyllum
- "Consensus on making this a priority. Lowering barriers and increasing funding for the basic research necessary to get aquaculture off the ground on a large scale. without funding, it is difficult to set up the infrastructure necessary to support a growing aquaculture sector."
- Market

Q6 What do you see as the greatest opportunity to expand your business?

Answered: 21 Skipped: 3

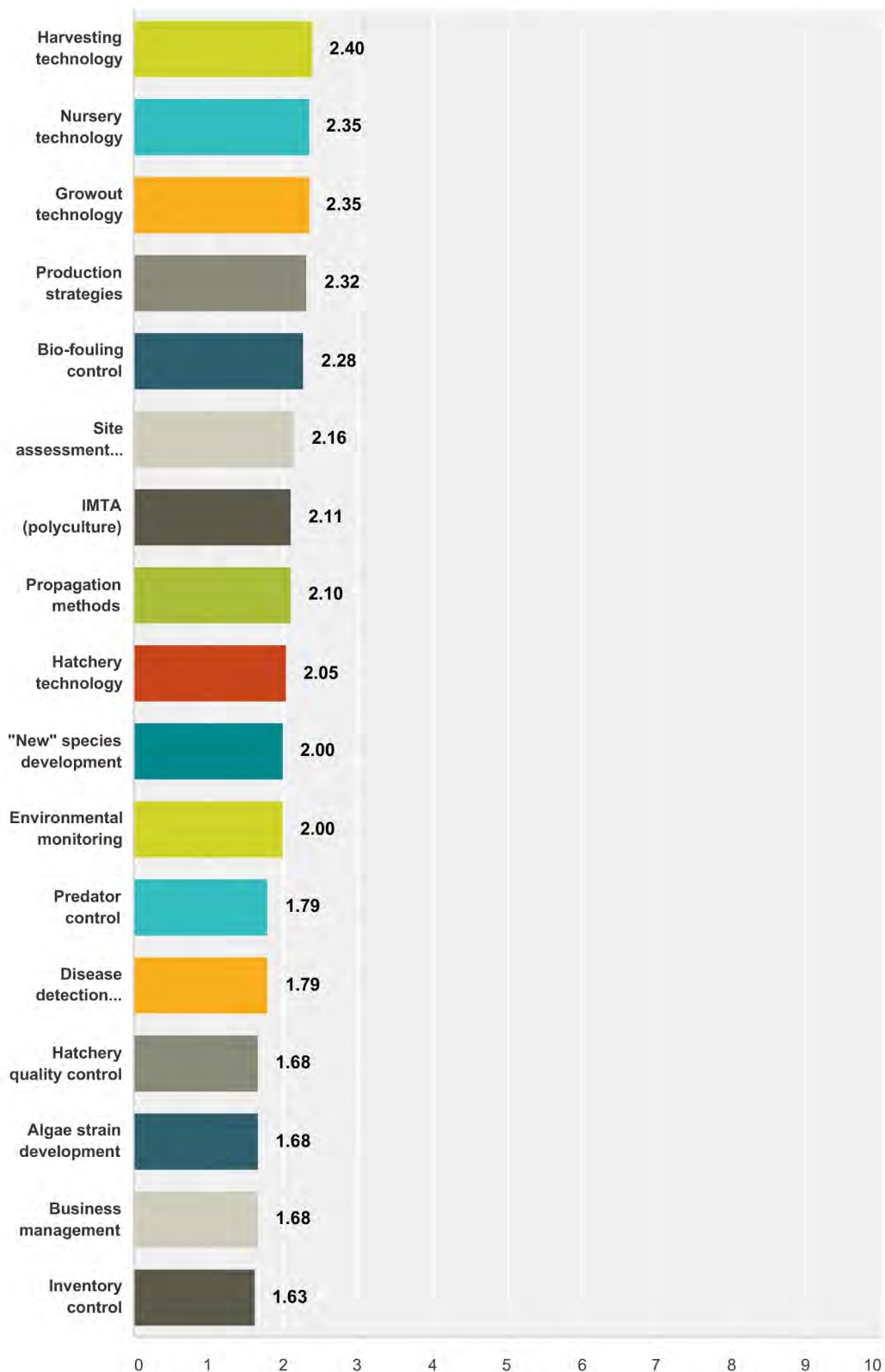
- "The opportunity to help connect aquaculture and wild harvested sea products into the mainstream food systems conversations, while also helping to increase economic opportunity for sea vegetable and other marine product producers by creating access to new markets."
- Commercializing the floating photobioreactor technology as it significantly reduces production costs (lowest CAPEX and OPEX) and resource requirements.
- Test new shellfish species
- secondary processing
- "public awareness/education of potential benefits of algae sector which hopefully leads to an acceptance of a growing industry, Which in turn would hopefully lead to attention which leads to financial and technical opportunities to further our work"
- preorder for quantities of kelp at \$700/ton or more
- Supplementing the wild harvest with cultured product.
- consumer education
- Food/agricultural uses of extracts
- Integration with other marine businesses such as aquaculture
- The large amount of wild resources
- New initiatives on the water and in processing
- Continued awareness of seaweeds benefits and uses and how Maine can be a leader in the industry
- Increased number of growers that need seed
- "Integrating wild-harvested and cultured seaweed; developing infrastructure to gather, make accessible and provide information about seaweeds."
- Farmed Organic sea vegetables.
- Development of a sustainable harvest plan to open up Cobscook Bay for Asco harvesting
- Public opinion that marine macro algae is beneficial to its health and the environment. We finally have a sink for the products int he west.
- Regional sales of fresh product including but not limited to kelp.

Q7 How would increased R & D in the following areas impact your business?



Q8 Please rank the following production areas with respect to the need for further research.

Answered: 20 Skipped: 4



Q9 If you were provided \$25,000 (per problem) to hire a researcher, what are the three most pressing problems facing your business you would like them to solve?

Answered: 18 Skipped: 6

First Priority

- Seaweed product development
- scalable dewatering/concentration technology
- getting seeded lines at the right density
- epiphyte/biofouling in wild kelps
- Product Development Food
- media awareness
- Harvest to production preservation strategies
- growing alaria on ropes
- Fertilizer regulations
- product development
- Lobbying Augusta
- growout methods for more species
- Marketing
- Arsenic in sea vegetables
- optimized drying facilities
- cost affective ways to dry farmed sea veggies
- reliable grow out stocks
- Methods to maximize annual production of kelp (longline growout).

Q9 If you were provided \$25,000 (per problem) to hire a researcher, what are the three most pressing problems facing your business you would like them to solve?

Answered: 18 Skipped: 6

Second Priority

- Seaweed processing methodology and best practice
- low-cost nutrient feed
- doing agricultural trials on kelp as fertilizer
- "cultivating kelps, nori and dulse"
- Product Development non- Food
- consumer education
- how to 'gear up' for kelp supplement caps markets
- Field trials on more crops
- market research
- Lobbying Augusta
- integration of algal culture with traditional fisheries
- Improved seed production methods
- Drying and processing infrastructure
- "better understanding of secondary growths, bryozoans, lacy crust, etc."
- Ways to farm/raise sea veggies that meet Organic Standards
- crop management in grow out sites
- "Growout of "summer" species for local and regional fresh market"

Q9 If you were provided \$25,000 (per problem) to hire a researcher, what are the three most pressing problems facing your business you would like them to solve?

Answered: 18 Skipped: 6

Third Priority

- Equipment design
- optimization/integration of growth and harvest systems
- developing markets
- drying more cost effectively in larger volume
- Product Development By-product
- Plant hormone measurement techniques
- Processing technology
- "Development of plans for handling invasive species, bot at sea and when stranded"
- Growout techniques
- "Sustainability--in packaging, products, etc."
- better testin protocols for heavy metals (and other things) in sea veggies
- Seedling production of summer species