

Maine Shellfish

An Analysis of the Market & An Exploration of Trade-Based Associations



Presented to the Maine Sea Grant
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Introduction

Mainers are very proud of the products that their State produces. They recognize that the word Maine is synonymous with characteristics like hard work and quality. In addition, Maine has such a rich and diverse environment that it allows such products to be produced and flourish. From the potatoes in Aroostook County, to the blueberries of Eastern Maine and the seafood all along Maine's rugged coast, all these represent a piece of what Maine truly is.

Some of these associations have transcended Maine to the rest of the United States and out into the world. When you think of Lobster, Maine is the first word associated with it. This rings true in advertisements, where Lobster sellers are quick to make the association to show the quality of their product. This association also exists, to a lesser extent, with blueberries. Many products make the connection between blueberries and Maine. Most recently, Ocean Spray juices used Maine to sell their new Blueberry flavored juices.

However, the shellfish harvested in Maine's beautiful waters do not share that quick association. Maine is lauded for its seafood, but in many ways that plays only while in Maine on the coast. Outside of the State, many people wouldn't know to think to find Maine oysters or Maine mussels.

In its current form, many of Maine's shellfish harvesters have found success in their jobs. Demand for their products have increased steadily over the last few decades, and producers have seen their prices and profits go up. While things look as good as they could be, what should be of concern is what is on the horizon. Many new competitors are taking strength in the United States, and many new competitors entering the market internationally. These new entrants, and increased collusion between past competitors pose a great threat to Maine's market share and the industry's success in Maine.

Rationale

The aquaculture industry has increased worldwide over the past decade. Many countries such as China, Canada, and the United States are realizing the benefits of aquaculture as a sustainable way to harvest fish and other species. This world-wide phenomenon has caused many new entrants into this marketplace. This marketplace also experiences a high deal of seller power as it is the seller and not the buyer that dictates the price of the product. Maine's shellfish growers currently tend to sell everything they grow and are comfortable with the price. The Maine Aquaculture Association believes that this complacency is risky and that there are several areas of the country that are aggressively producing and marketing cultured shellfish. Eventually this will impact the demand and price for Maine's product. It is for these reasons that the individuals at the Maine Sea Grant Program and the Maine Aquaculture Association have seen the need for Maine's aquaculture industry to market their products worldwide in order to remain competitive in the marketplace.

An assessment of marketing activities for oysters around the country, and an estimation of demand in coming years would help the industry to understand this challenge. The industry can use this information in considering whether to develop a state marketing strategy to enhance

demand for Maine's quality product and secure and safeguard the most lucrative markets available. Tasks needed to be completed in order to make this decision include the following:

- Collect information on Maine's current Shellfish Aquaculture Sector
- Collect information on actual and potential production of cultured shellfish in the US
- Collect information on existing shellfish marketing efforts elsewhere in the US
- Collect information on efforts to market shellfish in the restaurant and retail sectors
- Conduct a preliminary analysis of the potential impact on Maine's Shellfish Aquaculture sector due to successful production and marketing elsewhere.
- Report on the feasibility, cost and benefit of developing a Maine shellfish promotion campaign

Approach

We spent a month and a half collecting data on the production of cultured shellfish. We collected this data by conducting secondary research. The secondary research was conducted by reviewing government publications such as the 2007 Census on Agriculture, the World Bank Aquaculture Report, and the U.S Department of Commerce Trade Report. We also collected data from the State of Maine Department of Marine Resources, the Maine Aquaculture Association, the Maine Aquaculture Innovation Center, etc. We also contacted many individuals to help us with this part of the research including Stephen Fadel, business librarian at Fogler Library; Bryan Bozsik at the Maine International Trade Center; Dana Morse, Extension Associate for the Maine Sea Grant College Program; Marianne LaCroix, Director of Marketing at the Maine Lobster Promotion Council; and Chris Davis, from the Maine Aquaculture Innovation Center. The results of this data are reported in the results section of this paper and are reported in three categories: World-wide production, United States production, and State of Maine production.

In order to collect information on existing shellfish marketing efforts elsewhere within the United States, we reviewed many trade associations throughout the United States to see what sorts of marketing programs they have implemented. Four of the trade associations we reviewed are the Alaska Seafood Marketing Institute, the Louisiana Seafood Promotion and Marketing Board, the East Coast Shellfish Growers Association, and the Maine Blueberry Commission. The questions we wanted to answer by conducting this type of research are as follows:

- How does the trade association create revenue?
- What are the benefits of being a member of the trade association?
- What types of marketing programs does the trade association implement?

We also researched many national seafood restaurants in order to determine what types of seafood products they serve and what types of marketing programs are directed towards them. This was done primarily by reviewing the company's menu to determine what types of seafood they were selling and from where. Many companies, for example, will have a section on their menu that says where they get their oysters or clams from. Once the customer experiences oysters from a specific state, the idea is that they will go to another restaurant and request oysters from that state. This helps the state create brand recognition for their oysters. The results of this research are also in the results section of the paper.

Results

The following are the findings from our research and a discussion on what these findings mean for Maine's cultured shellfish industry.

World-wide Production

World aquaculture production has grown at an annual average rate of 10% since the mid-1980's. Total world production of aquaculture products will reach between 35 and 40 tons by the end of 2010. Total world production of aquaculture already accounts for over 40% of the global food fish supply and more than 70% of total growth in food fish supply since 1985 is due to aquaculture. However, aquaculture production must increase by 1.4-5.3% a year to bridge the projected gap between the supply of food fish product and the demand of food fish products. This presents a huge opportunity for Maine's cultured shellfish industry as this projected gap allows for new entrants into the marketplace and allows for existing aquaculture farms to gain market share in the global food fish industry. There is a rising demand for food fish, which is driven largely by population growth, increasing incomes worldwide, and urbanization in developing countries. Aquaculture is seen as the only major source of additional supply to meet this rising demand.¹

United States Production

The following is a table that lists the top ten aquaculture producing countries by quantity and by value.

Country	Million Tons	%	US \$Millions	%
China	30.6	67.3	30,870	48.7
India	2.5	5.4	2,936	4.6
Vietnam	1.2	2.6	2,444	3.9
Thailand	1.2	2.6	1,587	2.5
Indonesia	1	2.3	1,993	3.1
Bangladesh	0.9	2	1,363	2.2
Japan	0.8	1.7	3,205	5.1
Chile	0.7	1.5	2,801	4.4
Norway	0.6	1.4	1,688	2.7
U.S	0.6	1.3	907	1.4

By looking at this graph one can see that the United States is the tenth largest producer of aquaculture products. As a country, the United States needs to differentiate its aquaculture products from these other countries based on the high quality of the product. The United States

¹ World Aquaculture Report

and the State of Maine need to target developing countries with their products because the income in these countries is increasing rapidly.

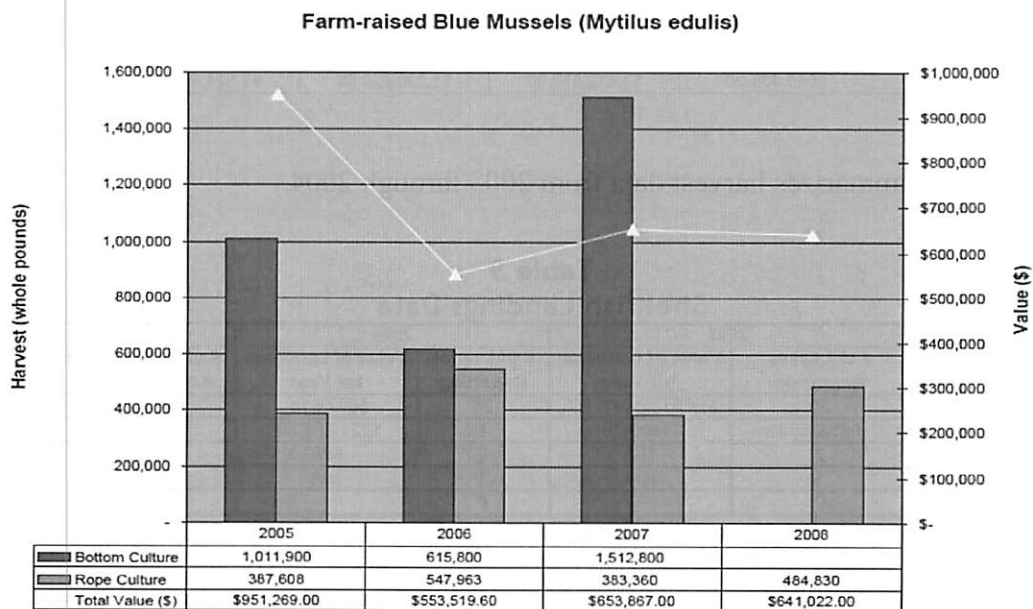
In 2008, the United States shellfish output decreased by 12,939 metric tons, which was a 2% decrease. However, the value of the output increased by \$23.7 million dollars, which was only a 0.35% increase. The United States output for oysters decreased by 17% between 2007 and 2008; however the amount of mussels produced in the United States increased by 2.4% and the amount of clams produced in the United States increased by 9% during this time period.² These results do not differentiate between cultured shellfish and wild shellfish.

The United States has a total of 1,097 aquaculture shellfish farms. In 2007, these farms produced \$243,007,000 worth of shellfish. Despite the decrease in the overall shellfish market, this market has increased since 2002.³

State of Maine Production

The State of Maine had 56 aquaculture mollusk farms in 2007 and these farms produced a value of \$3,286,000 in goods. Maine’s cultured mollusk production represents about 1% of the total United States cultured mollusk production. In comparison, Massachusetts’ mollusk production represents about 4.5% of the total production; Connecticut’s mollusk production is about 4.7% of the total production; and Virginia’s mollusk production is about 15% of total production.⁴

The following is harvest data for the Farm-raised Blue Mussels in the State of Maine between 2005 and 2008.

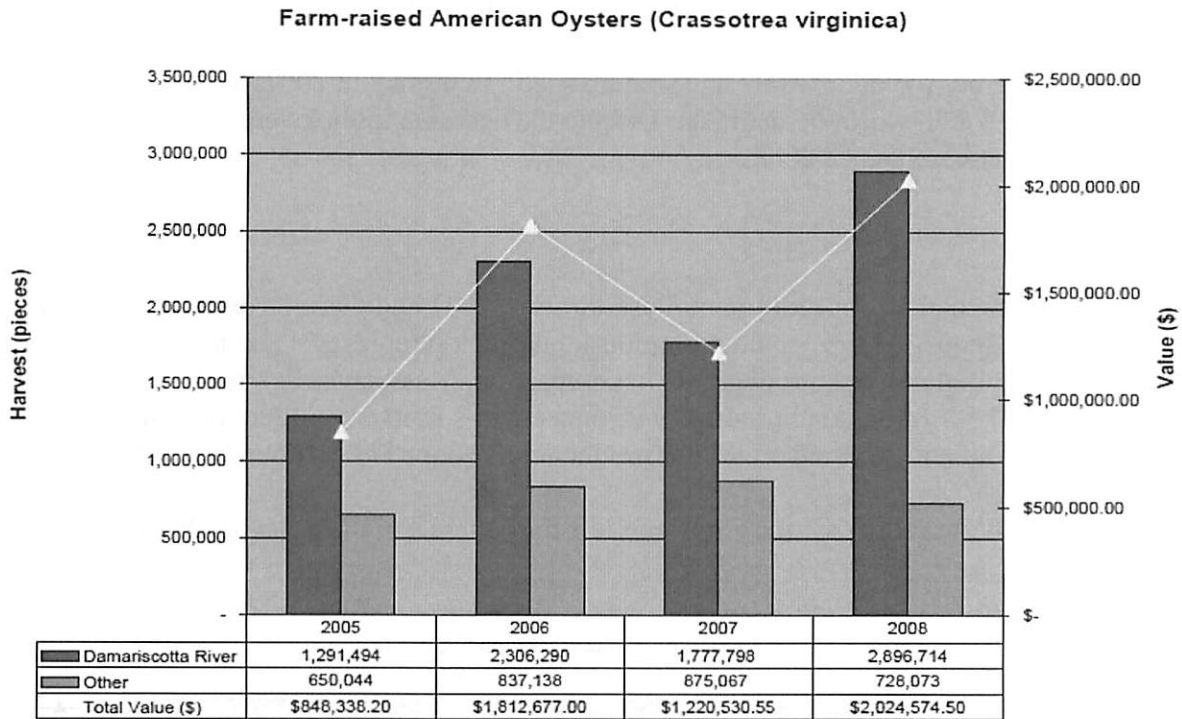


² Imports & Exports of Fishery Products Annual Summary 2008

³ 2007 Census on Agriculture

⁴ 2007 Census on Agriculture

By looking at the graph one can see that production has increased between 2007 and 2008, but overall has remained stagnant over the four year period. The graph below depicts harvest data for Farm-Raised American Oysters in the State of Maine from 2004-2008. This graph shows that production for the American Oysters has increased steadily over the past four years, especially in the Damariscotta River region. Production in other areas of the State has remained relatively stagnant over the four year period.⁵



The table below summarizes harvest data from 2003 through 2004.

**Table 9
Shellfish Landings Data**

Species	2003		2004		2005	
	# of Leases Reporting	Value of Landings for Year	# of Leases Reporting	Value of Landings for Year	# of Leases Reporting	Value of Landings for Year
Oysters	20	\$737,441	25	\$667,614	24	\$848,338.20
Mussels	10 (raft & bottom)	\$168,470	8	\$221,659.80	8	\$951,269
Quahogs	2	N/A	2	N/A	1	N/A
Surf Clams	1	N/A	1	N/A	0	-
Urchin	0	-	0	-	1	N/A

Source: Maine Department of Marine Resources

This table shows that the value of landings over this three year period increased, especially for oysters and for mussels. These results show that Maine aquaculture production has increased steadily over the past decade.

⁵ Maine Department of Marine Resources

Despite these increases in production, the State of Maine still represents only about 1% in cultured mollusk production. This strengthens the need for developing a marketing program for the State of Maine's cultured shellfish market. Since the State of Maine cannot compete with other states in terms of volume, it needs to differentiate its products based on quality. The only way to do so is to market the high value of the product due to Maine's cool waters and strict regulations.

Maine Shopping Patterns

Maine consumers are dividing into those who will purchase their food from fresh food vendors and specialty markets and those who will purchase their groceries from grocery stores and general merchandise discount stores. This divide plays an important role in how farmers, including fishermen, will target these consumers.

The 7% of Maine households with disposable incomes and the 27% with reasonable incomes represent purchasing power that can drive the cultured shellfish market in the State of Maine. In general, Maine consumers will try to support local farmers and fishermen when they can. This behavior is also true of residents in other New England states. However, studies also report that Maine consumers are willing to, on average, travel only 5-10 miles for local food products. Unfortunately, for Maine's cultured shellfish farmers, this poses an extreme challenge, as the majority of Maine's consumers live more than 5-10 miles away from their

Restaurant Data

In our research, we reviewed several seafood chains to determine whether or not they sold any shellfish from Maine. We found that McCormick and Schmick's Seafood does not carry any Maine shellfish in their restaurants. Legal Seafood sells Oysters from Prince Edward Island, but not from Maine. Red Lobster advertises that they sell Maine Lobster, but does not advertise that they sell any Maine oysters or mussels. Glidden Point, a local oyster grower, sells their oysters to Tabard Inn in Washington D.C. This inn does advertise that they serve Glidden Point Oysters.

Trade Associations

The Alaska Seafood Marketing Institute (ASMI) has a seven person board, which is comprised by five processors and two harvesters. These members are all nominated by the Governor of Alaska. ASMI has three different marketing divisions, which are international, foodservice, and retail. The international and retail divisions are responsible for coordinating in store promotions in major retail stores, where Alaskan seafood is sold. ASMI receives half of its revenue, about \$9,000,000, from a 0.5% industry assessment tax. ASMI receives a third of its revenue from the Federal MAP Grant, and the other 20% of its revenue comes from other federal grants and from money received in previous years that was not spent. In total, ASMI, has an operating budget of about \$17 million each year.⁶

The Louisiana Seafood Promotion and Marketing Board was created in 1984 and has a board of directors that is appointed by the Governor of Louisiana. These board members are from

⁶ <http://www.alaskaseafood.org/>

different sectors of the seafood industry. The Louisiana Seafood Promotion and Marketing Board receives a portion of its revenue from license sales to all Louisiana commercial fishermen and seafood wholesalers and retailers. They also receive money through state and federal grants. They market their products through promotional events, such as the New Orleans' Sea Fest, which is held in October. They also market their products through the trade association's website. Suppliers can join this board through the board's website.⁷

The East Coast Shellfish Growers Association represents farmers from Maine to Florida. They act as lobbyists for legislation and for creating uniform regulations across the east coast states. Pemaquid Oyster Company and JP's Shellfish are the only two Maine companies apart of this association. Members can join on the association's website and the member fees are used to finance the association's operating budget along with State and Federal Grants. The association organizes many marketing events throughout the entire east coast, such as the Milford Oyster Festival, the Warwick Oyster Tasting, and Romancing the Clam.⁸ While there are many benefits to this trade association, one issue is that the trade association is for the entire eastern coast. This does not help Maine growers to market the "Maine Brand" of cultured shellfish.

Similar to the ECSGA, the Pacific Coast Shellfish Growers Association represents the combined efforts of growers in Alaska, Washington, Oregon, California and Hawaii. This association was founded in 1930, and supervises and directs all efforts of the growers on the coast. They combine efforts and resources in terms of research, marketing, production numbers, and networking. To be a member, growers must pay 1% of their farm-gate sales or \$200 annually, whichever is less. The Pacific Coast, and Washington State especially, are one of the chief competitors in terms of oyster sales. Washington produces nearly 77 million lbs of oysters annually, representing \$72 million in annual sales.⁹ In comparison, Maine's oyster market produces approximately \$2.02 million in annual sales.

The Maine Lobster Promotion Council is the governing board of all lobster growers. They focus their efforts on the advertising, promoting, marketing and branding of Maine Lobsters. The council was founded in 1991. At the time of the founding, annual production of lobster was approximately 20 million pounds. Currently, production is at nearly 80 million pounds.¹⁰

One commission that has seen great success in the recent decades is the Wild Blueberry Association of North America. This association is a combination of the Maine Wild Blueberry Commission as well as its Canadian counterpart. While the two have their own separate boards, they have teamed up to be a part of the overarching WBANA. Over the last two decades, growers have seen product explode through the efforts of the Association. In the early 90s, growers in Maine were successful if they yielded 2000 pounds of blueberries per acre; this was a fraction of the production potential of the acreage, however demand did not warrant more production. Through the efforts of the Association, through marketing and market exploration, farmers are pushing their fields to yield anywhere from 6000 to 10000 pounds per acre.¹¹

⁷ <http://louisianaseafood.com/>

⁸ <http://www.ecsga.org/index.htm>

⁹ http://www.pcsnga.org/pub/farming/production_stats.shtm

¹⁰ LaCroix, Marianne. Email interview. 8 Apr. 2010.

¹¹ Kirchofer, Tom. "Blueberry Growers Increase Overseas Sales Efforts." *Marketing News* 32.19 (1998): 40.

Currently, the Wild Blueberry market in Maine produces more than \$165 million in annual sales, and their plans are to continue to develop new international markets to expand business.

Another successful trade commission is the Washington Wine Commission. This recent expansion oversees 400 wineries and 350 vineyards. To test their effectiveness, the WWC tried a pilot marketing program in Tampa, FL. This was a market that was unfamiliar with most, if not all Washington wines. In a 12 week integrated marketing program, using print, advertisements and promotions, the commission saw a net retail gain of nearly \$500,000.¹² This represents a 45% increase in sales. The increase was a major expansion of the larger Washington brands, and allowed many smaller and newer brands to gain a foothold in the Florida market.

Maine Shellfish Association

As highlighted above, trade associations and promotion councils in both similar and wholly different industries have seen success through organization. They experienced increases in demand and through sales, through unified promotion. While on the surface, it should be a natural to quickly say that the Maine Shellfish industry should create a association, however there are hurdles to cover in the process.

While some groups, like the Washington Wine Commission, see immediate increases in sales and demand, many groups are slow to take, and must be handled with patience. Some of the most successful commodity based associations have been around for a long time, and have the benefit of years of establishment. One of the most successful is the Florida Orange Growers. Above all, Florida and Orange go hand in hand in the minds of most Americans. Yet, this is because of the time they have put into creating that steadfast association. Florida Orange Growers first established themselves as an association in 1890, so they have over 100 years of establishment to help with the association.

Another significant hurdle is finances. There are two main ways of paying for the associations efforts: dues and taxes. Some of the larger associations, like the ECSGA and the PCSGA charge annual dues, based of the amount you produce or your relation to the industry. Due to the scale and the amount of members, these groups can operate using such a method. The other method, taxes are used in many smaller cases. A majority of the smaller association use the standard of 1% of your sales go to the association.¹³ However, in some cases, like the Maine Lobster Promotion Council, it is even less, and that can be a problem.

The MLPC was created by the Maine State Legislature, at the request of the Lobstermen. They are the ones who established the contribution margin, and chances are that the Maine Government may not step in again. It most likely will fall on the shellfish growers and their support system to establish the council.

The last major hurdle that some associations face, including the shellfish industry, are imitation products. The orange juice from Florida or the wines from Washington do not face this problem, because they are clearly labeled and covered with their logos and branding. However, seafood

¹² <http://www.thefreelibrary.com/Washington+State+Wine+Sales+Skyrocket+in+Tampa,+Fla.:+Test+Market...-a0148581466>

¹³ LaCroix, Marianne. Email interview. 8 Apr. 2010.

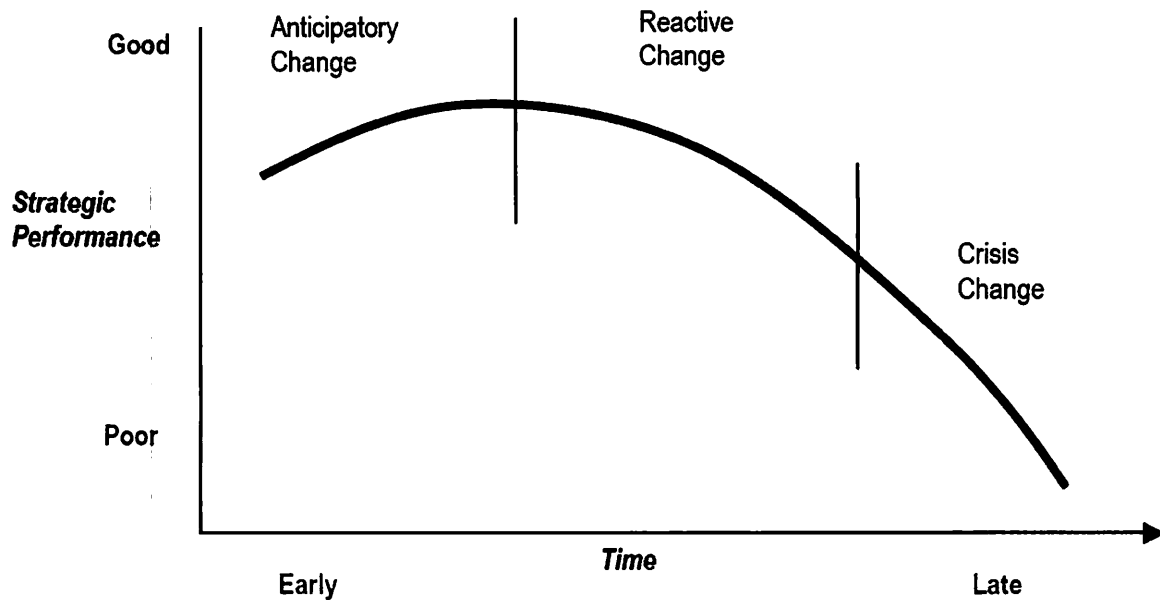
products are often sold by the piece and do not have packaging to reveal where it comes from; that responsibility belongs to the retailers and distributors. A major issue for the MLPC has been lobsters from Canada and other states claiming to be Maine lobsters to piggyback on the branding. These imitators do not have the same quality of Maine lobster, and when sold as one, they reduce the brand image. In light of this complication, the promotion councils in industries like this have the additional responsibility of policing to ensure the continued success of their brand. Ultimately, this will be a problem the Maine Shellfish Association will have to tackle.

While there may be hurdles to cover, organization is the correct move in the case of the Maine Shellfish Industry. The factors to encourage the move are the monetary success of similar associations and the fact that many in their market are doing the same. Groups like the MLPC, the WBANA and WWC have found financial success in their commissions by having an effect on the market's demand. Augmenting and creating an increase in demand of the product are the main goal of these groups, and if done correctly, this is what they do. Maine represents only 1% of the United States shellfish production, and the United States represents only 1% of the international shellfish production. Looking at this number, the Maine Shellfish Industry is a very small piece of the puzzle. In order to overcome the scale dilemma, Maine Shellfish needs to focus on differentiation to drive demand, and the only way to really differentiate your product is through marketing. If Maine wants to stand against Washington oysters, Delaware oysters and International oysters, they will have to unite and focus their efforts.

Conclusion - Where to go from here

The Maine shellfish industry, like all seafood based industries has experienced decades of increased production and sales success and is currently in a very strong position. While it is one of the smaller producers of shellfish products in the country, their association with Maine and its associated characteristics of quality and clean have helped translate into moderate success. A future outlook for the industry would assume continued growth of demand of all shellfish products, so likely an increased demand of Maine shellfish. However, many competitors have begun combining their efforts in Associations to help sell their products and compete in the market. As their efforts are rewarded with increased market share, that will translate into decreased expansion of the Maine market, and a loss of sales and revenue for both the growers and the State of Maine. In order to combat these efforts by their competitors, the Maine shellfish growers need to look beyond the Maine market to the United States and World markets, and seek to compete there. To do this, they must come together and create the Maine Shellfish Associate. By combining their efforts and resources, they stand to create a greater impact in the national and international markets, and this will translate into greater production and sales.

The industry is currently performing well, is seeing growth, and will likely not see any problems in the near future; any issues will be years down the line. Due to this positioning, the Maine shellfish industry would need to operate an anticipatory change. Highlighted in the graph below, anticipatory change occurs when there is strong performance and there is a significant amount of time to operate. This type of change is making improvements to continue the success of the organization or industry.



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It should be noted that Anticipatory change is the most difficult to undertake. In light of the fact that the industry is doing well, many people will be more resistant to change than they normally would, because they do not see the need to change. To combat that, it is necessary to identify and empower change agents, people who see the necessity in change and will be able to help move it forward. A positive to anticipatory change is that because things are going well, there is a large amount of time that can be used to implement the change. A slow and steady pace can and should be used in the process, because effectiveness is more important than efficiency in this case.

Now that the time and pace have been set, the specific details of the commission need to be set. While there are two ways to fund organizations like this, due the scale issue, only the percentage of sales method would work in this case. So, all of the members that are desirous of becoming members of the commission need to contribute a percentage of their sales to the group for funding. A good measure to use would be the industry standard of 1%¹⁵ of final sales are a contribution margin. This allows all parties involved to have a semblance of equality, and is not a barrier to entry for smaller firms looking to get into the industry.

A Board of Directors should be elected to oversee the operations of the commission. The members in charge should be of the industry, owners and operators within Maine's Shellfish industry. However, this can also include associate members of the industry, distributors, retailers, academics, and members in the various support organizations. This allows people who may not be the major players but still have a vested interest in the industry to have say its direction. The Board will be in charge of deciding the direction of the industry and should be elected/appointed to their positions. A good model to use would be the Maine Lobster Promotion Council's, who break the State into regions and the council into the sub-groups such as harvesters, dealers and public representatives. In addition, the group will need a Staff to handle the day to day

¹⁴ Strategic Analysis and Action (5th edition) © 2002 Pearson Education Canada

¹⁵ LaCroix, Marianne. Email interview. 8 Apr. 2010.

operations. Their job will be to research, create and implement the marketing strategy for the commission.

Maine is blessed to have such a rich and clean environment, that produces some of the highest quality seafood in the world. While the State may only be a small player in terms of production volume, this natural production cap can be used to help cement its status as a differentiator in the market. Like its sister product, lobster, Maine shellfish represent high quality, which translate to great taste. Everything is in place to carve out a significant niche portion of the market, except the marketing plan. To truly cement Maine shellfish as the high-quality competitor to the mass produced shellfish of Asia, South America and the Western United States, they need to unit and sell themselves as such. This can only be done by a unified marketing plan. It does not need to be expansive or creative, or cost a lot, it only needs to exist. It will be something that public opinion can build off of. By pooling resources and competing together rather than against, the Maine Shellfish industry can make its mark of the national and international markets, something that many are waiting to happen.¹⁶



¹⁶ <http://www.mainebiz.biz/news46109.html>