Assessing the Market Potential for "Local" Seafood in Rhode Island: Qualitative Results of a Survey of Consumers' Preferences and Perceptions

by

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Introduction

Since 2004, the number of farmers' markets managed by Rhode Island Department of Environmental Management has grown from four to eight markets, in addition to 30 other active independent markets found in the state (RI DEM 2010). These markets cater to a growing number of consumers who seek locally produced food products, and this demand has helped to revitalize Rhode Island's small farm agriculture sector (Lord 2010). The 2007 Census of Agriculture showed that Rhode Island had the largest growth in the nation in small farms, or farms grossing less than $50,000 in revenue, between 2002 to 2007 (USDA 2009).

In contrast to the agricultural sector, the Rhode Island capture seafood sector has been slow to capitalize on potential consumers' preferences for "locally caught" seafood products. Even though Pt. Judith, Rhode Island is described as an economically viable port with a diverse fleet producing a variety of seafood products (NEFSC 2010), the majority of seafood products at farmers' markets in the state are limited to aquacultured shellfish products, wild lobsters and crabs (Farm Fresh RI 2010). Only a handful of vendors have obtained the proper federal and state required licensing to sell fish products at Rhode Island farmers' markets (Farm Fresh RI 2010). Outside of Rhode Island however, other New England states have witnessed a growing trend in the number of coordinated initiatives that sell seafood at farmers' markets. For example, fishermen working collaboratively through the Cape Ann Fresh Catch cooperative in Massachusetts and the Eastman's Local Catch in New Hampshire have been successfully selling a variety of locally caught fish products at farmers' markets (Cape Ann 2010; NAMA 2010).

In addition to expanding seafood sales in Rhode Island farmers' markets, labeling programs may provide an avenue for development of a seafood market that identifies "local" Rhode Island products. In the local agriculture sector, much of the farmers' markets' popularity can be attributed to initiatives such the "Get Fresh. Buy Local." campaign developed by USDA and RI Division of Agriculture. This campaign seeks to "heighten recognition of and demand for Rhode Island specialty crops and our farm stands and farmers markets", through educational programs, social networking, and community outreach initiatives (RI Division of Agriculture 2009). Despite the success of this program, similar state-sponsored strategies involving Rhode Island seafood are difficult to find in the state.

Developing a local Rhode Island food initiative has been particularly successful for the agriculture sector, but the effort has not yet included local seafood to a significant extent. It is not entirely clear as to why the local seafood market has been slow to develop in Rhode Island. Several factors are critical to the success of a local seafood initiative, including consumer demand for such differentiated products.

Objective of this Study

The purpose of this study is to assess consumer preferences for local seafood, as well as to explore consumers' perceptions of an appropriate definition of 'local' seafood for a state such as Rhode Island. Understanding consumer preferences and purchasing choices is key to successful implementation of marketing strategies (Thimany et al 2008). Research from evaluation of consumer preferences for local agricultural products shows that common motivations for purchasing locally produced food include concerns about the production processes used in large-scale farming (including environmental effects), showing support for local small-scale farmers, preferences for products grown closer to home rather than far away whether within the U.S. or in another country, and perceived quality (Allen and Hinrichs 2008; Nurse et al. 2010). It is of interest to determine if similar motivations drive consumers' preferences for locally produced seafood.

Prior consumer preference research has also shown that some consumers are willing to pay a statistically significant amount more for food products that are labeled as local or environmentally responsible (Mambiso 2005; Batte 2005; Vermeir et al. 2006; Johnston et al. 2001). In aggregate, the information sought in this study will help to establish a marketing framework for a successful Rhode Island "local" seafood initiative.

Methodology

To gather information on consumer preferences and determine consumers' ideal definition of 'local' for Rhode Island seafood, a consumer survey was developed to be implemented around the state. Additional data was sought, including consumers' current buying habits, current consumption habits of fish harvested by local fishermen, and perceptions of local seafood. A version of the consumer survey can be found in Appendix A.

The survey was administered from July 1 to August 15, 2010. Because the focus of the survey was on "local" seafood, the survey was conducted at eleven different Rhode Island farmers' markets, and elicited responses from random market attendees. Prospective participants were asked if they had an interest in local Rhode Island seafood and if so, to anonymously complete the survey while on-site at each market. A total of 200 surveys were collected.

Results

I. Profile of Survey Respondents: Of the 200 responses collected, Table 1 shows the distribution of responses across the locations and across genders: 35.5% responses were from men, 62% were from women, while 2.5% respondents did not complete the gender question. Market locations were randomly selected across geographic distribution of the State, date and time that the market was open, and size of the market to ensure that a variety of markets were captured.

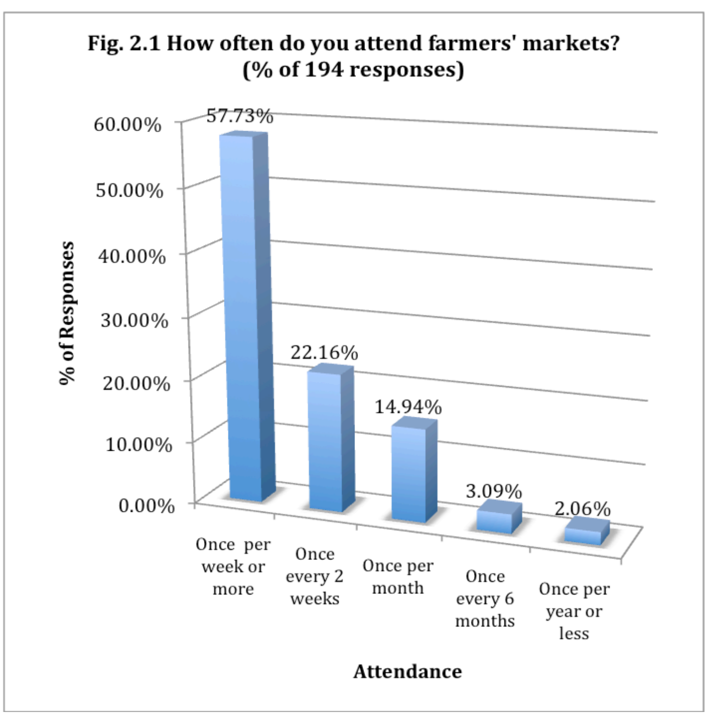
Table 1 Responses by Gender from Market Locations (n=200)

Market Location	Male	Female	Blank Response	Total
Cranston (Pawtuxet Village)	6	24	2	32
Bristol (Colt State Park)	4	7	0	11
Charlestown (Cross Mills Library)	6	9	0	15
Providence (Armory Park)	3	4	1	8
North Kingstown (Casey Farm)	9	12	0	21
Newport (Memorial Drive)	8	20	0	28
Narragansett (Fishermen's Memorial Park)	11	3	1	15
South Kingstown (East Farm)	7	17	1	25
Providence (Lippett Park)	6	9	0	17
Pawtucket (Broadway and Exchange St.)	3	8	0	11
Warwick (Goddard Park)	6	11	0	17
Total	71	124	5	200

The mean age of 196 respondents who completed the age question fell between 45-55 years of age. Of the 175 participants who responded to pre-tax annual household income question, the largest percent (30.86%) fell between $35,000 - $70,000. A large number of respondents had advanced levels of education, with 41.84% (out of 196 responses) who had a post-graduate degree, followed by 41.33% who had received a college degree. The largest percent (41.97% of 193 responses) of consumers came from households consisting of only two people.

Respondents were questioned as to their town of residence, which received 195 responses. Because of the numerous towns found throughout Rhode Island's geographical size, respondents' town of residence were grouped into the following regional classifications; Northern RI, South Shore RI, East Bay RI, neighboring New England Sates and Other Locations. The largest number of participants (45.64%) resided in Northern RI. This was followed by 35.38% from South Shore RI, and 16.92% from East Bay RI. Respondents from neighboring New England States and Other Locations only made up 4.10% of the sample size.

II. Farmers' Market Attendance: Since the majority of Rhode Island's farmers' markets operate on a seasonal basis, participants were asked if they attended farmers' markets year-round or seasonally. While a greater percentage of people indicated they only

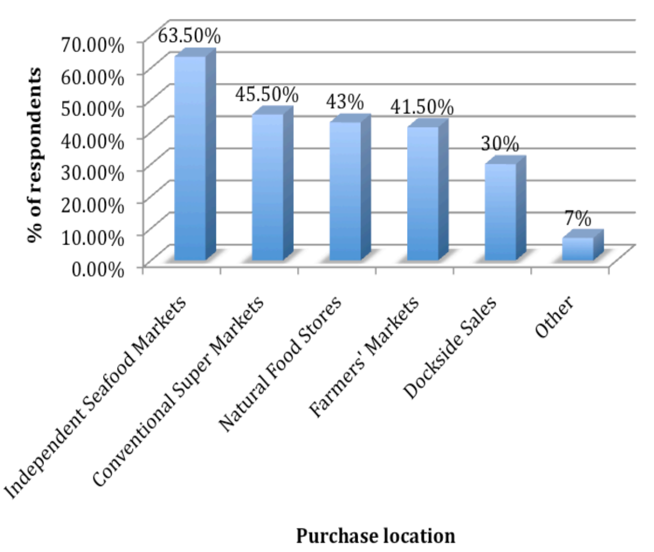


attend markets during the summer (55.96% of 193 responses), these results also show that a considerable percentage of market attendees (44.04%) surveyed continue to visit markets that operate throughout the year.

With the recent growth in the number of farmers' markets, it was hypothesized that a majority of consumers would attend the markets on a frequent basis, helping to sustain the large number of markets. The results of the survey confirmed this prediction, as 57.73% of 194 survey respondents indicated they attend markets on a weekly basis (Fig. 2.1). This was followed by 22.16% of respondents that attend farmers' markets once every two weeks, while only 2.06% of consumers indicated they attend markets once per year or less.

III. Seafood Purchasing and Consumption Habits: To better assess where consumers currently purchase seafood in relation to whether they might switch and purchase more seafood in the future at farmers' markets if it were available, respondents were asked where they purchase seafood for home consumption. Respondents were allowed to select more than one response to this question. Figure 3.1 shows that the most popular

Fig. 3.1 Where do you purchase seafood for home consumption? (% response for each location, n=200)



choice among respondents was independent seafood markets, as 63.50% of the 200 respondents indicated they purchase seafood from these stores. Conventional supermarkets received the next largest response (45.50%), followed by natural food markets (43%), which included stores such as Whole Foods and Trader Joe's.

Along with seafood purchase locations, consumers were also asked how often they purchase a variety of finfish and squid products. Because species such as cod, haddock, and flounder, have similar taste and appearance attributes, these products were grouped together as "white fish". The same was done for products such as tuna and swordfish, which were grouped as "steaks" on the survey. Examples of each species were listed under their grouping on the survey to ensure clarification.

Consumers' responses to these purchase questions were then coded using the following scale; 1=Weekly or more, 2=Once every two weeks, 3=Once per month, 4= Every 3 months, 5=Every 6 months, 6=Once per year or less, 7=Never, thus the lower the numerical code, the greater the frequency of product purchases. The total responses for each product were then analyzed to gain the mean consumption rate

Table 3.2 Mean responses to the question "How often does your household purchase each seafood product?".* (n=200)

Products in descending order from most frequently to least frequently purchased.

Seafood product	% of responses	Mean response
White Fish (e.g. flounder, haddock)	93%	2.29
Salmon	86.5%	2.85
Shrimp	87%	3.08
Steaks (e.g. tuna, swordfish)	78%	3.39
Shellfish (e.g. clams, mussels)	76.5%	3.58
Scallops	82.5%	3.67
Lobster	82.5%	4.68
Oysters	60%	4.92
Squid	61%	5.15

*Responses coded using the following scale: 1=Weekly or more, 2=Once every two weeks, 3=Once per month, 4=Every 3 months, 5=Every 6 months, 6=Once per year or less, 7=Never.

for each finfish and squid product (Table 3.2).

In New England, where white fish species, such as haddock and flounder, are readily available and typically cost less than species such as tuna, it was hypothesized that white fish products would be purchased with the most frequency. This was confirmed as the average response from 186 participants indicated they purchase white fish between once every two weeks and once per month. Consumers indicated purchasing salmon between once every two weeks and once per month, but fewer participants (173 of 200) responding to the salmon question. Squid was purchased the least frequently, with the average purchase rate falling between once every six months and once per year or less.

Using the same question and scale, consumers were also asked about their purchase habits of shellfish and crustaceans. Because of the numerous species of shellfish, the option of "shellfish" was given along with individual species of "oysters" and "scallops". These results are also found in Table 3.2, and indicate that shrimp was consumed the most often at an average of once per month. Following shrimp, consumers indicated they purchase shellfish and scallops between once per month and once every 3 months. Of the responses for shellfish and crustacean purchases, oysters were purchased with the lowest frequency, averaging slightly more than once every six months.

For any seafood product that consumers indicated they rarely purchased (every 6 months or less), consumers were then asked what attributes contributed to the infrequent purchases. The same groups (white fish and steaks), were applied in this question. For those consumers who rarely purchase whitefish, salmon or squid, "taste preference" was selected by the greatest number of respondents as their reason for a rare purchase. Consumers who infrequently purchased steaks (e.g. tuna, swordfish) products cited "environmental concerns", followed by "price". Table 3.3 shows the factors related to infrequent purchase of finfish and squid products.

The same question was also posed to consumers who infrequently purchased shellfish and crustacean products. Infrequent purchase of lobsters, shrimp, and scallops was due primarily to "price" and was the feature selected the most often by consumers, followed by "taste preference", while the inverse was true for scallops.

Table 3.3 Percent of respondents who indicated the following reasons infrequently purchasing each seafood product (n=200)

Seafood Products	Factors contributing to purchases of products less than once every 6 months.						
	Price	Taste Preference	Availability	Health Concerns	Environ. Concerns	Quality	Difficulty of preparation
White fish (e.g. haddock, flounder)	9%	11%	7.5%	5%	3%	4.5%	2.5%
Steaks (e.g. tuna, swordfish)	15.5%	12.5%	3%	10.5%	19.5%	6.5%	2%
Salmon	8%	13%	5.5%	5.5%	6.5%	2.5%	1%
Squid	3%	20.5%	4.5%	1%	1%	1.5%	4%
Lobsters	26%	14%	7%	3%	3%	3%	3%
Shrimp	7.5%	5.5%	4%	4%	3%	2.5%	0.5%
Shellfish	8.5%	17%	7%	7.5%	4%	3.5%	3%
Scallops	12.5%	11.5%	7%	3%	3%	4%	1%

Consumers were also asked to rank the importance of certain product attributes when making buying decisions regarding seafood products. These attributes were measured using a scale of 1 through 4, with 1=Very Important up to

4=No Importance, resulting in the lowest scores depicting greatest level of importance. The list of attributes and results can be found in Table 3.3.

The attribute that received the highest level of importance from respondents was "freshness" (mean=1.05). This result is similar to the outcomes of other empirical studies that have depicted "freshness" as an important attribute in influencing purchasing decisions of seafood and other food products (Seafood Choices Alliance, 2003; Wessells and Morse, 1995; Hicks, Pivarnik and McDermott, 2008; Loureiro 2001; Thilmany et al. 2008). The importance of the "freshness" was followed by the attributes "taste" (mean=1.10) and "health/safety concerns" (mean=1.36).

Table 3.5 Mean responses to the question "How important is each attribute when purchasing seafood?".* (n=200)

Attributes listed in descending order by level of importance.

Attributes	% of respondents	Mean response
Freshness	98.5%	1.05
Taste	97.5%	1.09
Health/Safety Concerns	95.5%	1.36
Environ. Concerns	95.5%	1.47
Health Benefits	94.5%	1.55
Visual Quality	93.5%	1.59
Knowing when product is caught or landed	96.5%	1.66
Country of origin	96.5%	1.72
Texture	93%	1.78
Price	94%	2.01
Ease of preparation	93%	2.47

*Responses coded using the following scale: 1=Very important, 2=Important, 3=Moderately important, 4=No importance

The attributes "ease of preparation" (mean=2.47) and "price" (mean=2.01) received the lowest levels of importance. This finding indicates that while consumers still view these characteristics as maintaining importance, consumers perceive attributes such as "visual quality", "health benefits", and "environmental concerns" as having a greater influence on buying decisions.

IV. Impacts of Country of Origin Labels on Seafood: To establish what role, if any, that country of origin plays in consumers' purchasing decisions, consumers were asked if they recall the country of origin (COO) of the seafood they last purchased. Of the responses, more than 50% of the consumers indicated they did remember the COO after purchasing cod, wild salmon, oysters, flounder, haddock, clams, shrimp, scallops, or lobsters. Fewer than 50% of consumers surveyed could recall the specific country for the farmed salmon, tuna, swordfish, or crab, from their pervious purchase. (This did not apply to those consumers who had not recently purchased these particular products.)

Of the countries listed by respondents, the U.S. was the most likely country of origin recalled for each seafood product listed. Thus, even though over 85% of all seafood consumed in the U.S. is imported, these consumers who indicated that they recalled the COO during their purchases, either tended to buy products from the U.S. or tended to recall that products they purchased were from the U.S. Additional research findings on consumer preferences have also shown that food labels that include origin of food production have had significant impacts on consumers' preferences (Jaffery et al. 2004; Verbeke et al 2006).

V. Perceptions of "local" RI Seafood: The term "local" can be particularly ambiguous and difficult to define when applied to seafood products from Rhode Island. Unlike agricultural products which are grown on land clearly defined as within or outside Rhode Island boundaries, defining seafood products as "local" can be a complex issue. In particular, licensed fishermen, who are residents of Rhode Island, capture fish both within State and Federal waters but may land that fish in Rhode Island ports or other State's ports. Similarly, fishermen from other States may land fish in Rhode Island ports. Therefore, is a local fish one which is caught by Rhode Island resident fishermen, or one which is landed in a Rhode Island port? Should 'local' fish be limited to those fish captured from fishing zones managed by the State, excluding those zones managed by the Federal government? Since these are complicated issues, it is prudent to ask the consumer what their preferred definition might be.

The local labeling problem is further compounded due to the lack of transparency surrounding where the product was processed. Traceability becomes an important issue to develop regarding seafood, resulting from an often-complex seafood supply chain (Thompson et al. 2005). Fish landed at a Rhode Island port by a Connecticut fisherman may be processed in Rhode Island, and sold to retailers or shipped to seafood auctions. This further complicates the factors used to determine "local" seafood.

The local Rhode Island agriculture sector has a significant advantage, as many of the small-scale farmers are solely responsible for growing, harvesting, and selling their products directly to consumers (Farm Fresh RI 2010). This reduces the number of intermediaries along the supply chain, reducing price margins, while allowing consumers to witness food production by visiting farms and buying directly from producers. Also, if the distance were applied when determining "local", the land-based RI food products would have an advantage because of the state's geographically small size.

When respondents to the survey were asked if they prefer to purchase "local" seafood products, almost 100% (n=178 of 182) indicated in the affirmative, while only two people stated "No", along with two responses for "I don't know". These results were in spite of consumers not being provided a clear definition of "local".

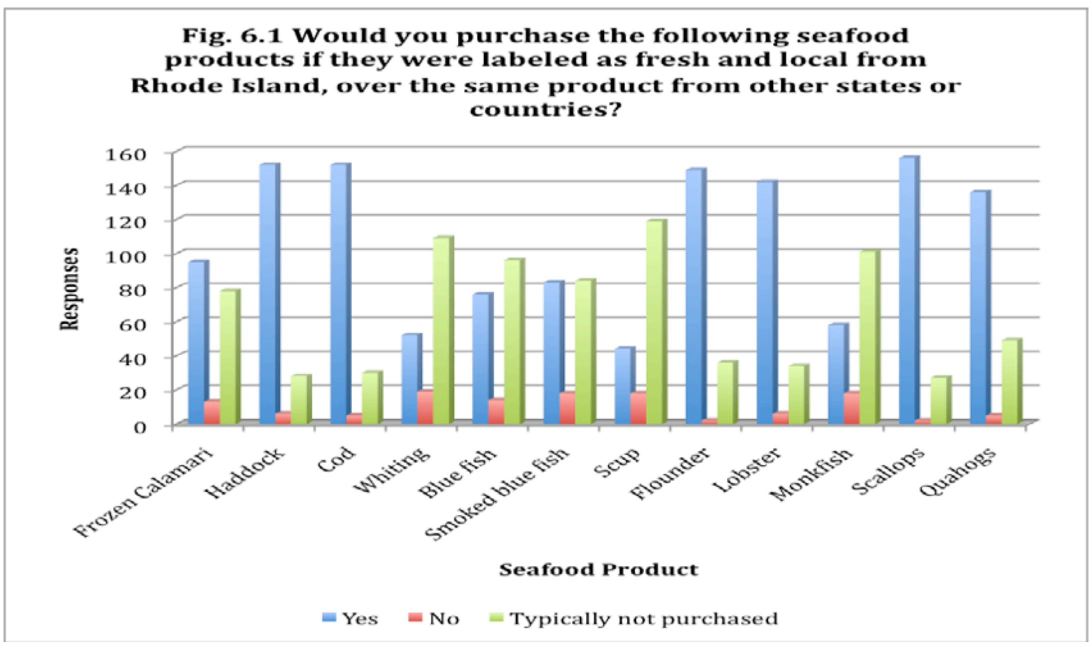
Survey participants were given a selection of statements and asked to select the statement which they believed best defines local seafood. The results are found in Table 5.1. The greatest number of responses maintained that distance played a role in defining "local" Rhode Island seafood, as 80 respondents (40%) solely selected the statement "Seafood caught within 30 miles of Rhode Island's coast", indicating that location and distance were important attributes in defining local seafood. After the geographical characteristic, 43 consumers (21.50%) indicated that "local" seafood could be defined as "Seafood landed in Rhode Island ports". Other consumers felt distance to RI was a factor in defining "local", but also selected additional definitions in their responses.

Table 5.1 Percent of respondents that selected each statement best believed to define "local" RI Seafood (n=200)

Statement	% of responses
1. Seafood landed in Rhode Island ports.	21.5%
2. Seafood caught by commercial fishing vessels registered in Rhode Island.	18%
3. Seafood caught within 30 miles of Rhode Island's coast	40%
All of the above.	8.5%
Definitions 2 and 3.	2%
Definitions 1 and 3.	3%
Definitions 1 and 2.	0.5%

VI. Consumer preferences for seafood at RI farmers' markets: While not as prevalent as agriculture products, some seafood products are sold at farmers' markets in Rhode Island. Currently in the state, there are only two vendors who have the required state and federal licenses, permits, and Hazard Analysis and Critical Control Point (HAACP) certification needed to sell fish products[1]. While there are a limited number of vendors who offer fish, there are 15 RI-based and 30 out-of-state vendors who are approved to sell shellfish, crabs, and lobsters at Rhode Island farmers' markets (Farm Fresh RI 2010).

Despite the limited number of vendors offering seafood at farmers' markets, 61% (n=200) of the respondents indicated they had previously purchased seafood at a Rhode Island farmers' market. Clams (37%) were the most popular product, followed by fish (24.5%), lobster (23.5%), and oysters (23%). Consumers who purchased seafood at farmers' markets were also asked to state their level of satisfaction with the *variety* of seafood sold at the markets. As fish sales are limited



at farmers' markets, it was hypothesized that consumer satisfaction with the *variety*

[1] This information is according www.farmfreshri.org. This is a non-profit, state funded organization that works to promote RI farmers' markets and "local" food vendors. A request was submitted to the RI Dept. of Health for an official list of certified seafood dealers, but was denied, as the state could not provide the list.

of seafood offered would be low. Despite the limited selection of seafood vendors, the mean response of the 122 consumers who had previously purchased seafood from farmers' markets fell between "Satisfied" and "Very Satisfied". This question was directed only toward consumers who purchased seafood at farmers' markets.

Respondents were also asked if they would purchase seafood products from Rhode Island over the same product from other locations, in order to assess consumer preferences for local seafood (Fig. 6.1). A greater number of consumers indicated they would purchase the Rhode Island product for each product offered, but some species that have a high commercial importance in Rhode Island were not typically purchased by consumers. Of the top ten commercially landed species (by weight), whiting (5), scup (7), and monkfish (8)(RI DEM 2007) were not typically purchased by consumers. While scup and monkfish are considered overfished based on the recent stock assessments, whiting (silver hake), is not overfished (RIDEM 2007).

To assess whether or not consumers would be agreeable to purchasing RI seafood at farmers' markets, respondents were asked about their interest in purchases of specific species and product forms. It was hypothesized that some consumers might have concerns about purchasing seafood from farmers' markets, as markets may be perceived to have certain food safety issues related to clean running water, electricity, or other sanitary systems. Survey results indicated that respondents were predisposed to purchasing several of the offered seafood products at farmers' markets.

Respondents indicated that they were most likely to purchase scallops (87.35%) if they were offered for sale at farmers' markets, followed by lobster (84.40%), haddock (83.78%), cod (82.00%), and flounder (81.56%). Again, three of the most commercially important species (whiting, scup and monkfish) caught in Rhode Island received the smallest number of consumers willing to purchase those products at farmers' markets. This is likely because whiting and scup are not commonly consumed as food fish for home consumption – in other words, a market needs to be developed for these fish. In the case of monkfish, this fish is less appreciated here than it is in Europe, where it gets high market prices. A large portion of monkfish caught in the region is exported to Europe (NMFS 2010).

In all cases, there were a greater number of consumers who responded "I don't know" than those consumers who stated "No" for each product, indicating that there is some capacity for an increase in both consumer groups willing or not willing to purchase seafood at farmers' markets.

VII. Consumers' willingness to pay for "local" seafood: In order to gauge what effect, a local seafood branding program would have on Rhode Island farmers' market consumers willingness to pay for RI seafood products, survey participants were asked questions regarding their willingness to pay for certain RI seafood products. Consumers were asked if they would pay a higher price for a certain certified or RI produced seafood product, compared the same product that was not certified or RI harvested. If consumers agreed to pay the initial premium price, then the subsequent question asked the consumer if they were willing to pay an even greater premium price for the product. If the consumer refused to pay the premium price, the following question asked the consumer if they would be willing to pay a slightly lower premium price. While these questions do not account for consumers taste seafood preferences, the questions were presented as a hypothetical scenario to determine the consumer's stated preference to purchase the product presented.

The first question asked consumers if they would pay more for haddock fillets that were certified by RI Dept. of Environmental Management as "caught by a RI fisherman". Haddock was selected for this question because some RI fishermen target haddock, and the haddock stock status is considered healthy (NMFS 2010). While the RI DEM certification program used in the question is only hypothetical, RI DEM, through the Div. of Agriculture, has established successful certification

Fig. 7.1 Consumers' WTP for haddock fillets certified as caught by a RI fisherman. (n=191, total responses to this WTP question. Base price $7.99/lb.)

programs for organic agricultural products (RI DEM 2010).

For the certified RI caught haddock product, the greatest number of consumers (20.42%) indicated they would be willing to pay an 18.77% price increase from the $7.99/lb base price, followed by 18.49% of respondents indicating they would be willing to pay a premium price increase of 12.52% (Fig. 7.1). Only 3.66% of participants indicated they would not pay price increase for the RI-caught certified haddock.

The second willingness to pay question (Fig. 7.2) asked consumers if they were willing to pay a premium price for flounder fillets that were certified by RI DEM as caught by RI dayboats. Dayboats are small-scale vessels that typically fish closer to their homeports, compared to larger trip vessels, and consumers were provided a description of dayboats within the question.

Agricultural studies exploring motivations for why consumers joining community supported agriculture (CSA), showed that factors such as the support for small-scale farmers, and the food quality of local produce were strong influences on consumer participation (Goland 2002; Perez et al 2003).

Fig. 7.2 Consumers' WTP for flounder fillets caught by a RI dayboat. (n=186 total responses to flounder WTP question. Base price of flounder $9.49/lb.)

In order to see if similar reasons for support could be applied to fishermen and seafood, dayboats was used as a variable in this question. Because dayboats typically fish shorter trips and closer to their homeports, there is potential for dayboat seafood to reach consumers faster. There is no guarantee that dayboats would provide a higher quality seafood, as quality can be correlated with multiple factors including handling, processing, or even fishing method, but portions of the RI commercial fleet is made up of dayboats that use a variety of gears and target species such as flounder (NEFSC 2010).

The largest number of consumers (21.16%) were willing to pay an increased premium price of 5.2% from a base price of \$9.49/lb for flounder caught by a RI dayboat, followed by 19.35% of consumers willing to pay a 10.54% increased price (Fig. 7.2). Only 4.83% of the 186 responses to the question indicated they would not be willing to pay any increased priced for flounder fillets certified as caught by a RI dayboat.

VIII. Consumer perceptions regarding "local" food product purchases: To explore the potential of expanded seafood sales at farmers' markets, consumers were asked their level of agreement to statements regarding factors that affect seafood purchases, as well as purchasing seafood at farmers' markets (Table 8.1). The greatest portion of respondents (73.33%) 'Strongly Agreed' that "knowing when" their seafood was caught or harvested was important factor in determining seafood purchases. This result is a positive finding for small-scale fishermen who could potentially deliver recently caught seafood to consumers.

Addressing food safety and health concerns is essential in selling seafood, given previous research studies which showed that seafood safety is a primary concern in consumers' seafood purchasing decisions (Wessells, Anderson and Kline, 1996; Hicks et al. 2008; Perishables Group 2010). This consumer apprehension would be especially true at an outdoor market where temperature of the product is critical. Thus, consumers were asked if they would be deterred from purchasing seafood at farmers' markets. However, 23.5% of respondents 'Disagreed", followed by 21% who 'Strongly Disagreed' with the statement, showing a remarkable trust in farmers' markets ability to protect food safety.

Respondents were also asked if they would only purchase "filleted or prepared fish" at farmers' markets. Initially, neighboring states, such as Massachusetts, only allowed seafood vendors to sell whole fish, rather than cleaned or filleted fish (Cape Ann Fresh Catch 2010). While this policy has changed in Massachusetts, it was important to assess whether or not consumers would be agreeable to purchasing whole fish from vendors at farmers' markets. The

Table 8.1 Consumers' level of agreement with statements regarding purchasing preferences (n=200).

Statement	Level of agreement:				
	Strongly Agree	**Agree**	**Neutral**	**Disagree**	**Strongly Disagree**
Knowing **when** seafood was caught or harvested is an important factor in determining my seafood purchases.	71.50%	20%	4%	1%	1%
Food health and safety concerns would deter me from purchasing fish at a farmers' market.	19%	16%	17.50%	23.50%	21%
Assuming availability, I would only purchase **prepared or filleted** fish from a farmers' market.	19%	18%	24%	20.50%	14.50%
A wide **variety** of seafood choices is an important factor in determining **where** I purchase seafood.	18%	21.50%	26%	22%	8%
I prefer to buy local products because they are environmentally responsible.	46.50%	33.50%	14.50%	1.50%	1%
I prefer to buy local food products because my purchases support local business.	75.50%	20%	1%	0%	0.50%

findings showed the greatest percentage (24%) of consumers felt 'Neutral" to the notion of only purchasing prepared or filleted fish at farmers' markets. This was followed by 20% of consumers who 'Disagreed', while 14.5% of consumers 'Strongly Disagreed' with the idea of only purchasing filleted fish. Nineteen percent of consumers 'Strongly Agreed' and 18% of consumers 'Agreed' that they would only purchase prepared fish from farmers' markets. Aside from the 14.5% of consumers who 'Strongly Disagreed', responses to levels of agreement regarding purchasing filleted fish were relatively comparable, thus suggesting that consumers were divided over only purchasing cleaned fish from farmers' markets.

The largest percentage of consumers (26%) indicated they were 'Neutral' regarding the role variety played in where they purchased seafood. This was followed by 22% of respondents who 'Disagreed' with the statement, while 8% 'Strongly Disagreed' that variety influenced where they purchased seafood. This may help to explain the previous results that found consumers were 'Satisfied to Very Satisfied' with variety of seafood at farmers' markets. One possible scenario is that, as consumers feel indifferent towards variety, then consumers may pay little attention to the actual variety of products offered at purchase locations. While consumers may approve of the variety of seafood at farmers' markets, it is difficult to assess the importance the actual variety plays in their purchasing decisions.

Research in the agriculture sector has also found "environmental considerations play a major role in explaining households' participation in CSA (community supported agriculture) arrangements" (Bougherara et al. 2008), thus displaying a correlation between consumer preferences for local food and environmental concerns. Corresponding to the results of the agriculture study, almost 100% of the respondents either 'Strongly Agreed' or 'Agreed' that they purchase "local" products because they considered these products as environmentally responsible. Despite the lack of sustainability standards for locally produced food, consumers in this study perceive local food products as being environmentally responsible. This result was also supported by a separate study which found that farmers' market consumers in Rhode Island felt that diminished environmental impacts was an important reason for purchasing locally produced food (Roheim et al. 2006).

As previously mentioned, research has shown that a strong motivation for consumer participation in local food programs is the notion that consumers are supporting local, small-scale food producers (Allen et al. 2007). The survey produced similar results, as virtually 100% of respondents indicated they either 'Strongly Agreed' or 'Agreed' that their preferences for purchasing local food was based on support for local businesses.

IX. Consumer factors influencing farmers' market attendance: In order to gain a better understanding of consumers' reasons for attending farmers' markets, respondents were asked how they perceived statements regarding farmers' market attendance (Table 9.1)

Nearly 90% of the respondents perceived the reason for shopping at farmers' markets was to purchase local products as 'Very True'. Approximately 90% of consumers also felt 'Very True' regarding the statement that farmers' markets purchases were made because they supported the local economy and small-scale vendors. Other statements that received large percentages of 'Very True' responses were that purchasing at farmers' markets include offering of environmentally friend products (64.5%) and availability of higher quality, fresh products (77.5%).

Table 9.1 Consumer perceptions on statements regarding reasons for attending farmers' markets (n=200).

Statement	Level of Truth:			
	Very True	Sometimes True	Rarely True	Never True
I attend farmers' markets to purchase local products.	88%	8%	1.50%	0.50%
I attend farmers' markets to purchase environmentally friendly products.	64.50%	28.50%	5%	0%
I attend farmers' markets because they are enjoyable family events.	57.50%	24.50%	11%	3.50%
I attend farmers' markets because my purchases support the local economy and small famers, artists, fishermen, etc.	89%	7.50%	0.50%	0%
Farmers' markets offer products that are difficult to find elsewhere.	27%	51.50%	16.5%	2%
Products at farmers' markets offer higher quality and freshness.	77.50%	19.50%	0.50%	0%
I get a better price on products at farmers' markets.	8%	49.50%	34.5%	6%

While eight percent of respondents indicated that they believe it is 'Very True' that they receive better prices at farmers' markets, 49.5% believed it is only 'Sometimes True'. More than 30% of respondents felt it was 'Rarely True' that they receive better prices. This result may suggest that price is not a strong motivating factor for farmers' market attendance. Participants believe that it is true that products at farmers' markets are difficult to find elsewhere as 27.5% of consumers responded 'Very True' and 51.5% responded 'Sometimes True' to this statement.

The responses of the participants show that better prices or hard-to-find products are not necessarily catalysts for farmers' market attendance. Rather, consumers are motivated to attend farmers' markets because the markets are perceived as pleasant family events, offering local, high quality, and environmentally friendly products, where consumers' purchases support local businesses.

Implications:

Creation of a 'local' Rhode Island marketing campaign, or a 'local' Rhode Island seafood label requires a substantial understanding of the potential market for these differentiated products. Rhode Island lags behind its neighboring states in promoting seafood harvested by its fishermen or raised by its aquaculturists. To better understand the potential market, a survey was conducted to answer several questions. What attributes are represented by such a 'local' label to the Rhode Island consumer? What might pre-dispose a Rhode Island consumer to purchase such products? The survey results presented in this study are an initial attempt to illuminate possible answers to these questions.

Respondents indicated they frequently purchase seafood products that are regularly produced by Rhode Island fishermen and neighboring New England states, such as whitefish (e.g. haddock, flounder) and shellfish. Furthermore, respondents indicated that factors such as freshness, quality, environmental concerns, and place of origin were important considerations when purchasing seafood, and therefore should be considered in any local seafood marketing strategy.

In other states, local seafood initiatives have implemented branding and labeling programs in attempt to promote local and sustainable seafood. Carteret Catch, a collaborative initiative started by Carteret Community College between fishermen and restaurants in North Carolina, seeks to promote locally harvested seafood (Carteret Catch 2010). According to their marketing literature, their brand "guarantees that you (the consumer) are getting seafood direct from Carteret County fishermen" (Carteret Catch 2010). Recently, Carteret Catch partnered with Walking Fish, a North Carolina community supported fishery program. Walking Fish has gained popularity with consumers and currently has 400 members who pay for weekly shares of seafood caught by North Carolina fishermen (Duchene 2010).

Another branding program can be found in New Hampshire. Collaboration between New Hampshire Sea Grant, the City of Portsmouth, and commercial fishermen has lead to the development of the "New Hampshire Fresh & Local" brand. Retailers, restaurants, currently use the brand and a community supported fishery to promote seafood caught by New Hampshire fishermen (NH Sea Grant 2009).

Comparable branding and labeling programs may be successfully implemented in Rhode Island, as indicated by survey respondents who agreed to pay premium prices for certain labeled seafood products. Branding programs with similar attributes to those used in the survey have recently been implemented New Hampshire and North Carolina. Also, branding programs that focus on distinguishing Rhode Island seafood products may have promise, as consumers indicated they would prefer Rhode Island seafood products to products from other locations. A collaborative state and fishing industry seafood-branding program could lead to similar success of RI's "Get Fresh. Get Local." agriculture product campaign.

Along with local seafood branding programs, another strategy to promote local seafood in Rhode Island would be the establishment of a community supported fishery (CSF). CSFs are a relatively new concept and are based on the community supported agriculture (CSA) model. A CSA is a direct marketing approach of local produce that is popular among small-scale farmers (Andreatta 2007). In the CSF model, consumers purchase shares of seafood products in advance of harvest from fishermen, thus directly connecting consumers with their seafood producers (NAMA 2010; Andreatta 2007). Survey results showed that consumers purchase local products to support small business and local economies, and CSFs may provide an avenue for consumers to support small-scale fishermen. Survey participants also indicated that they perceived local seafood as seafood products caught within close proximity to Rhode Island, and this should be considered if RI fishermen are to develop a CSF. Community supported fisheries are gaining popularity in coastal communities and are successfully operating Maine, New Hampshire, and Massachusetts, but one has yet to be established in Rhode Island.

Conclusions:

The results of this survey showed that consumers frequently attend farmers' markets and consumers indicated they would be pre-disposed to purchase additional Rhode Island seafood products at farmers' markets for a variety of reasons. Based on the survey's results, there are a variety of attributes upon which Rhode Island seafood may be marketed to Rhode Island consumers: freshness, origin, possible environmental attributes, and support of local businesses. While these preferences may indicate that local seafood sales have the potential to expand in Rhode Island, results also showed some limited concerns over food safety when purchasing seafood. While Federal and State regulations are extensive and at times expensive for new seafood dealers, consumer health depends on these guidelines. Farmers' markets are not typically designed for seafood sales. However, these logistical concerns can be overcome. Finfish and other seafood products are sold at farmers' markets in other New England states, including Massachusetts and New Hampshire. It is unclear if these states' food safety regulations differ from Rhode Island's, or if there are simply a greater number of licensed dealers who have obtained the proper permits. Additional in-depth analysis of these issues is recommended.

The results from this survey provide an insight into consumers' preferences for and perceptions of local Rhode Island seafood, and provide an initial foundation for the development of a local Rhode Island seafood initiative. Further research and analysis of the Rhode Island commercial fishing industry, state and federal food safety regulations, and other successful seafood marketing strategies must be conducted in advance of establishing an effective local Rhode Island seafood market approach.

References

Allen, P. and Hinrichs, C. 2007. Buying into "Buy Local": Engagements of the United States Local Food Initiatives. In Maye, D. Holloway, L., Kneafsey, M. (Eds.) *Alternative Food Geographies: Representation and Practice.* United Kingdom: Elvsevier.

Andreatta, S. 2007. Harnessing consumer preferences to create new markets for North Carolina seafood. Report submitted to the North Carolina Fishery Resource Program 2006.

Batte, M., Hooker, N., Haab, T., Beaverson, J. 2006. Putting Their Money Where Their Mouths Are: Consumer Willingness to Pay for Multi-Ingredient, Processed Organic Food Products. *Food Policy*. 32(2):145-159.

Bougherara, D., Grolleau, G., Mzoughi, N. 2008. Buy local, pollute less: What drives households to join a community supported farm? *Ecological Economics.* 68: 1488-1495.

Carteret Catch. (2010) Select North Carolina Seafood from Fishermen of Carteret County. Retrieved Nov. 23, 2010. http://www.carteretcatch.org/about-us-1

Cape Ann Fresh Catch Community Support Fishery. (2010). Cape Ann Fresh Catch CSF About Us. Retrieved Nov. 23., 2010. http://www.capeannfreshcatch.org/

Duchene, L. (March 1, 2010) Local gets fresh look: Community supported fisheries model expands to the East Coast. *Seafood Business.* Retrieved from: http://www.seafoodbusiness.com/articledetail.aspx?id=4294994369

Farm Fresh Road Island. Information obtained at: http://www.farmfreshri.org/

Goland, C. 2002. Community Supported Agriculture, Food Consumption Patterns, and Member Commitment. *Culture and Agriculture*. Vol. 24, No. 1.

Helfman, G. 2007. *Fish Conservation: A Guide to Understanding and Restoring Global Aquatic Biodiversity and Fishery Resources.*

Hicks, D., Pivarnik, L., McDermott, R. 2008. Consumer Perceptions about Seafood – an Internet Survey. *Journal of Foodservice.* 19:213-226.

Jaffry, S., Pickering, H., Ghulam, Y., Whitmarsh, D., Wattage, P. 2004. Consumer Choices for Quality and Sustainability Labeled Seafood Products in the UK. *Food Policy*. 2004:215-226.

Johnston, R. J., Wessells, C.R., Donath, H., Asche, F. 2001. Measuring Consumer Preferences for Ecolabeled Seafood: An International Comparison. *Journal of Agricultural and Resource Economics*, 26(1):20-39

Lord, P. (November 13, 2010). After century-long decline, Rhode Island farms are experiencing a growth spurt. *The Providence Journal.* Retrieved from: http://www.projo.com/news/content/Farms_rebounding_11-13-10_IEKSLPD_v37.3a48a5e.html

Loureiro, L., Hine, S. 2001. Discovering Niche Markets: A Comparison of Consumer Willingness to Pay for a Local, Organic, and GMO-free Product. *American Agriculture Economics Association Meeting*.

Loureiro, L. and Umberger, W. 2005. Assessing consumer preferences for country-of-origin labeling. *Journal of Agricultural and Applied Economics.* 37(1):49-63.

National Marine Fisheries Service. 2010. "FishWatch-United States Seafood Facts-Haddock". Text found: http://www.nmfs.noaa.gov/fishwatch/species/haddock.htm

National Marine Fisheries Service. 2010. "FishWatch-United States Seafood Facts-Monkfish". Text found: http://www.nmfs.noaa.gov/fishwatch/species/monkfish.htm

National Marine Fisheries Service: Office of Science and Technology. 2010. "US Foreign Trade by Seafood Product". Text found: http://www.st.nmfs.noaa.gov/st1/trade/index.html

National Oceanic and Atmospheric Administration. 2009. *Draft NOAA catch share policy.*

North East Fisheries Science Center. 2008. "Community Profile of *Pt. Judith, RI*." Prepared under the auspices of the National Marine Fisheries Service, Northeast Fisheries Science Center. Text found: http://www.nefsc.noaa.gov/read/socialsci/community_profiles/RI/point%20judith-naragannsett-ri.pd

New Hampshire Sea Grant. New Hampshire Fresh and Local Seafood branding program. 2009. http://extension.unh.edu/Marine/NHSeafood.htm

Northwest Atlantic Marine Alliance. 2010. *Community-Supported Fishery*. Text found:www.namanet.org

Nurse, G., Onozaka, Y., McFadden, D., 2010. Understanding the Connections between Consumer Motivations and Buying Behavior: The Case of the Local Food System Movement. Selected Paper prepared for presentation at the Southern Agricultural Economics Association Annual Meeting. February 6-9, 2010.

Rhode Island Department of Environmental Management, Division of Agriculture. Organic Certification and Quahog Certification program http://www.dem.ri.gov/programs/bnatres/agricult/orgcert.htm

Perishable Group. 2010. "Consumers and Sustainability: What Consumers Really Know and Think about Sustainable Seafood". Report presented at 2010 Food Marketing Institute. Text found: http://www.perishablesgroup.com/dnn/

Perez, J., Allen, P., Brown, M. 2003. "Community Supported Agriculture on the Central Coast: The CSA Member Experience". The Center for Agroecology & Sustainable Food Systems. Winter 2003.

Rhode Island Department of Environmental Management, Division of Marine Fisheries. 2008. *Rhode Island Marine Fisheries Stock Status and Management.*

Rhode Island Department of Environmental Management/Department of Agriculture, Directory of Farmers Markets. Revised September 2010. http://www.dem.ri.gov/programs/bnatres/agricult/markets.htm

Rhode Island Division of Agriculture. Rhode Island Get Fresh. Buy Local. program. Information found at: http://www.getfreshbuylocal.org/

Roheim, C., Durham, C., King, R., Johnson, A., McCluskey, J., Pardoe I., Flores, J., Zhao, H. 2006. Rhode Island Consumers' Preferences for Locally-Produced Food: Report on Results from a 2006 Survey. A joint project by the University of Rhode Island, Oregon State University, University of Minnesota, and Washington State University.

Seafood Choices Alliance. 2003. The Marketplace for Sustainable Seafood: Growing appetites and shrinking seas.

Thilmany, D., Bond, C., Bond, J. 2008. Going Local: Exploring Consumer Motivations for Direct Food Purchases. *American Journal of Agricultural Economics.* 90(5): 1303-1309.

Thompson, M., Sylvia, G., and Morrissey, M. 2005. Seafood Traceability in the United States: Current Trends, System Design, and Potential Applications. *Comprehensive Reviews in Food Science and Food Safety.* 4(1):1-7.

United States Department of Agriculture. 2009. 2007 Census of Agriculture. Text found: http://www.agcensus.usda.gov/

Wessells, C.R., Kline, J., Anderson, J.G., 1996. Seafood Safety Perception and Their Effects on Anticipated Consumption under Varying Information Treatment. *Agricultural and Resource Economics Review.* 25 (1): 12-21

Wessells, C. R., S. Morse, A. Manalo and C. Gempesaw. Consumer Preferences for Northeastern Aquaculture Products: Report on the Results of a Survey of Northeastern and Mid-Atlantic Consumers. Northeast Regional Aquaculture Center and Rhode Island Cooperative Extension Publication No. 3, Department of Resource Economics, URI, URI/OSU Special Grant Paper Series, RI-94-105

Vermeir, I. and Verbeke, W. 2006. Sustainable Consumption: Exploring the Consumer Attitude-Behavioral Intention Gap. *Journal of Agricultural and Environmental Ethics.* 19:169-194.

Verbeke, W. and Ward, R. 2006. Consumer Interest in Information Cues Denoting Quality, Traceability and Origin: An Application of Ordered Probit Models to Beef Labels. *Food Quality and Preference.* 17(6):453-467

Yankee Fisherman's Cooperative. 2010. "New Hampshire Native Shrimp Community Supported Fishery". Text found: http://www.yankeefish.com/shrimp-csf

Rhode Island Local Seafood Survey
Department of Marine Affairs
Environmental and Natural Resource Economics
University of Rhode Island

Questions regarding overall seafood purchases and consumption:

1. Where do you primarily purchase seafood for home consumption?
   - ❑ Conventional Supermarket (e.g. Shaw's, Stop & Shop)
   - ❑ Natural Foods Supermarket (e.g. Whole Foods, Trader Joes)
   - ❑ Independent Seafood Market
   - ❑ Food Co-op
   - ❑ Dockside Sales
   - ❑ Farmers' Markets
   - ❑ Other________________________

2. Do you tend to purchase more seafood in a certain season?
   - ❑ Yes
   - ❑ No
   - ❑ I do not know.

   A. If yes, what season do you buy the most seafood?
      - ❑ Summer
      - ❑ Spring
      - ❑ Fall
      - ❑ Winter

3. How often does your household purchase the following **finfish/squid** seafood products?

	White Fish (e.g. cod, haddock, flounder)	**Steaks** (e.g. tuna, swordfish)	**Salmon**	**Squid**	**Other:** ____________ (Please write in)
Weekly or More	________	________	________	________	________
Once every 2 weeks	________	________	________	________	________
Once per month	________	________	________	________	________
Every 3 months	________	________	________	________	________
Every 6 months	________	________	________	________	________
Once per year	________	________	________	________	________
Rarely	________	________	________	________	________
Never	________	________	________	________	________

4. How often does your household purchase the following **shellfish/crustacean** products?

	Shrimp	**Lobsters**	**Shellfish**	**Oysters**	**Scallops**	**Other:** ______________
Weekly or More	______	______	______	______	______	______
Once every 2 weeks	______	______	______	______	______	______
Once per month	______	______	______	______	______	______
Every 3 months	______	______	______	______	______	______
Every 6 months	______	______	______	______	______	______
Once per year	______	______	______	______	______	______
Rarely	______	______	______	______	______	______
Never	______	______	______	______	______	______

5. For any seafood products purchased rarely (less than once every 6 months), please check off the primary reasons why:

	Cost	**Taste Preference**	**Availability**	**Health Concerns**	**Environmental Concerns**	**Quality**	**Other (Please write in)**
White Fish (e.g. cod, haddock, flounder)	______	______	______	______	______	______	__________
Steaks (e.g. tuna, swordfish)	______	______	______	______	______	______	__________
Salmon	______	______	______	______	______	______	__________
Squid	______	______	______	______	______	______	__________
Lobster	______	______	______	______	______	______	__________
Shrimp	______	______	______	______	______	______	__________
Shellfish (Clams, oysters, mussels)	______	______	______	______	______	______	__________
Scallops	______	______	______	______	______	______	__________
Other: ________ ________ ________	______	______	______	______	______	______	__________

6. Do you recall the country of origin, when you last purchased these products? If **YES**, please list the country. (If you have not purchased the product, then please select Not Applicable)

	Yes	**No**	**If YES, what was the country?**	**Not applicable.**
Cod/Haddock	________	________	____________________________________	________
Salmon	________	________	____________________________________	________
Shrimp	________	________	____________________________________	________
Tuna	________	________	____________________________________	________
Shellfish (e.g. oysters, clams, etc.)	________	________	____________________________________	________
Flat fish (flounder, sole, etc.)	________	________	____________________________________	________
Striped Bass	________	________	____________________________________	________
Sea Bass	________	________	____________________________________	________
Snapper	________	________	____________________________________	________
Swordfish/Marlin/Wahoo	________	________	____________________________________	________
Herring/Sardines	________	________	____________________________________	________
Tilapia	________	________	____________________________________	________
Crab	________	________	____________________________________	________
Lobster	________	________	____________________________________	________
Other__________________	________	________	____________________________________	________

7. Would your consumption of the following seafood increase if you knew the following seafood products were caught or raised in the United States?

	Yes	**No**	**Stay the same**	**I normally do not purchase this product.**
Cod/Haddock	________	________	________	________
Salmon	________	________	________	________
Shrimp	________	________	________	________
Tuna	________	________	________	________
Shellfish (e.g. steamers, mussels, oysters)	________	________	________	________
Flat fish (flounder, sole, fluke, etc.)	________	________	________	________
Striped Bass	________	________	________	________
Sea Bass	________	________	________	________
Snapper				
Swordfish/Marlin/Wahoo	________	________	________	________
Herring/Sardines	________	________	________	________
Tilapia				
Crab	________	________	________	________
Lobster	________	________	________	________
Whiting/mullet/hake	________	________	________	________
Monkfish	________	________	________	________
Squid	________	________	________	________
Other:______________________________	________	________	________	________

8. Please indicate how important each attribute is to you when purchasing seafood. Circle the number that corresponds with the level of importance, and please only circle one number for each attribute:

	Very Important	Important	Moderately Important	Not Important
Taste	1	2	3	4
Freshness	1	2	3	4
Health/Safety Concerns	1	2	3	4
Texture	1	2	3	4
Visual Quality	1	2	3	4
Health Benefits	1	2	3	4
Country of origin	1	2	3	4
Environmental Concerns	1	2	3	4
Price	1	2	3	4
Ease of meal preparation.	1	2	3	4
Knowing when the fish was caught or landed.	1	2	3	4
Other: ______________________________	1	2	3	4

Questions regarding local seafood in Rhode Island:

9. Do you prefer to purchase "local" seafood products?
   - ❑ Yes
   - ❑ No
   - ❑ I do not know/care.

10. In Rhode Island, what statement do you believe best defines "local" Rhode Island seafood?
    - ❑ Seafood landed in Rhode Island ports.
    - ❑ Seafood caught by commercial fishing vessels registered in Rhode Island.
    - ❑ Seafood caught within thirty miles of Rhode Island's coast.
    - ❑Other____

11. Do you ever purchase seafood at Rhode Island farmers' markets?
    - ❑ Yes
    - ❑ No

    A. If yes, what type of seafood do you purchase?
       - ❑ Oysters
       - ❑ Lobsters
       - ❑ Clams
       - ❑ Mussels
       - ❑ Fish
       - ❑ Other______________

B. If yes, how satisfied are you with the variety of Rhode Island seafood sold at Rhode Island farmers' markets?
   - ❑ Totally satisfied
   - ❑ Very satisfied
   - ❑ Satisfied
   - ❑ Very unsatisfied
   - ❑ Totally unsatisfied
   - ❑ I do not know.

12. Provided availability, would you purchase the following seafood products if they were labeled as **fresh and local from Rhode Island**, over the same seafood products from other states or countries?

Frozen Calamari:
❑ Yes ❑ No ❑ Typically, I do not purchase this product.
a) If **Yes**, would you purchase this product at a Rhode Island farmers' market?
❑ Yes ❑ No ❑ I do not know.

Haddock Filets:
❑ Yes ❑ No ❑ Typically, I do not purchase this product.
a) If **Yes**, would you purchase this product at a Rhode Island farmers' market?
❑ Yes ❑ No ❑ I do not know.

Cod Filets:
❑ Yes ❑ No ❑ Typically, I do not purchase this product.
a) If **Yes**, would you purchase this product at a Rhode Island farmers' market?
❑ Yes ❑ No ❑ I do not know.

Whiting (Silver Hake) Filets:
❑ Yes ❑ No ❑ Typically, I do not purchase this product.
a) If **Yes**, would you purchase this product at a Rhode Island farmers' market?
❑ Yes ❑ No ❑ I do not know.

Bluefish Filets:
❑ Yes ❑ No ❑ Typically, I do not purchase this product.
a) If **Yes**, would you purchase this product at a Rhode Island farmers' market?
❑ Yes ❑ No ❑ I do not know.

Smoked Bluefish:
❑ Yes ❑ No ❑ Typically, I do not purchase this product.
a) If **Yes**, would you purchase this product at a Rhode Island farmers' market?
❑ Yes ❑ No ❑ I do not know.

Scup Filets (for fish chowder):
❑ Yes ❑ No ❑ Typically, I do not purchase this product.
a) If **Yes**, would you purchase this product at a Rhode Island farmers' market?
❑ Yes ❑ No ❑ I do not know.

Striped Bass Filets:

❑ Yes ❑ No ❑ Typically, I do not purchase this product.

a) If **Yes**, would you purchase this product at a Rhode Island farmers' market?

❑ Yes ❑ No ❑ I do not know.

Flounder, Sole, Fluke, etc. Filets:

❑ Yes ❑ No ❑ Typically, I do not purchase this product.

a) If **Yes**, would you purchase this product at a Rhode Island farmers' market?

❑ Yes ❑ No ❑ I do not know.

Salted Herring:

❑ Yes ❑ No ❑ Typically, I do not purchase this product.

a) If **Yes**, would you purchase this product at a Rhode Island farmers' market?

❑ Yes ❑ No ❑ I do not know.

Monkfish Filets (tail meat):

❑ Yes ❑ No ❑ Typically, I do not purchase this product.

a) If **Yes**, would you purchase this product at a Rhode Island farmers' market?

❑ Yes ❑ No ❑ I do not know.

Quahogs:

❑ Yes ❑ No ❑ Typically, I do not purchase this product.

a) If **Yes**, would you purchase this product at a Rhode Island farmers' market?

❑ Yes ❑ No ❑ I do not know.

13. Suppose that you are planning to purchase haddock filets today. One selection of haddock costs **$8.99/lb** and has been certified by the Rhode Island Department of Environmental Management (RI DEM) as caught by a Rhode Island fisherman. The other selection of haddock costs **$7.99/lb** and is listed as caught in the United States. Would you buy the RI DEM-certified haddock filets?
❑Yes **(If YES, then continue to Question 14)**
❑No **(If NO, then skip to Question 15)**

14. Now suppose the RI DEM Certified haddock costs **$9.49/lb**, while the other selection of haddock costs **$7.99** and is listed as caught in the United States. Would you buy the RI DEM-certified haddock?
❑Yes **(If YES, then skip to Question 16)**
❑No **(If NO, then skip to Question 16)**

15. Now suppose the RI DEM-certified haddock filets costs **$8.49/lb**, while the other selection of haddock costs **$7.99/lb** and is listed as caught in the United States. Would you buy the RI DEM-certified haddock?
❑ Yes
❑No

16. Suppose you that you are planning to purchase flounder filets. Flounder filets that have been certified by RI DEM as caught by a Rhode Island “day boat” and the filets costs **$11.49/lb**. “Day boats” are small commercial fishing vessels that typically fish and return to off-load their catch all in the same day. Other flounder filets listed as caught in the United States are available for **$9.49/lb**. Would you buy the Rhode Island “day boat” flounder?
    ❑ Yes **(If YES, then continue to Question 17)**
    ❑ No **(If NO, then skip to Question 18)**

17. Now suppose the Rhode Island “day boat” flounder costs **$11.99/lb**, while the other selection of flounder costs **$9.49/lb**. Would you buy the RI “day boat” flounder?
    ❑ Yes **(Skip to Question 19)**
    ❑ No **(Skip to Question 19)**

18. Suppose the Rhode Island “day boat” flounder costs **$10.99/lb**, while the other selection of flounder costs **$9.49/lb**. Would you buy the Rhode Island “day boat” flounder?
    ❑ Yes
    ❑ No

19. For any of the flounder or haddock filets that you **elected to** purchase from the above questions, would you purchase these same items at a Rhode Island farmers’ market?
    ❑ Yes
    ❑ No
    ❑ I do not know

Consumer Preference Statements:

20. Please read each statement carefully and circle the number that corresponds with your level of agreement.

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Knowing **when** seafood was caught or harvested is an important factor in determining my seafood purchases.	1	2	3	4	5
Food health or safety concerns would deter me from purchasing fish at a farmers' market.	1	2	3	4	5
Assuming availability, I would only purchase **prepared or filleted** fish from a farmers' market.	1	2	3	4	5
A wide variety of seafood choices is an important factor in determining **where** I purchase seafood.	1	2	3	4	5
I prefer to buy local products because they are environmentally responsible.	1	2	3	4	5
I prefer to buy local food products because my purchases support local business	1	2	3	4	5

21. Please read each statement carefully and circle the number that corresponds with how true you believe each statement to be.

	Very True	Sometimes True	Rarely True	Never True
I attend farmers' markets to purchase local products.	1	2	3	4
I attend farmers' markets to purchase environmentally friendly products.	1	2	3	4
I attend farmers' markets because they are enjoyable family event.	1	2	3	4
I attend farmers markets because my purchases support the local economy and small farmers, artists, fishermen, etc.	1	2	3	4
Farmers' markets offer products that are difficult to find elsewhere.	1	2	3	4
Products at farmers' markets offer higher quality and freshness.	1	2	3	4
I get a better price on products at farmers' markets.	1	2	3	4

22. How often do you attend farmers' markets in Rhode Island?
    - ❑ Once per week or more
    - ❑ Once every 2 weeks
    - ❑ Once per month
    - ❑ Once every 6 months
    - ❑ Once per year or less

23. Seasonally, when do you attend farmers' markets?
    - ❑ Only in summers
    - ❑ Only in the winter
    - ❑Year-round

Background Information:

24. What is your gender? Male_____ Female_____

25. Age:
    C. 18-25 (_____)
    D. 26-35 (_____)
    E. 35-45 (_____)
    F. 45-55 (_____)
    G. 55-65 (_____)
    H. 65+ (_____)

26. What is your level of education?
    1. Some high school education (_____)
    2. High-school degree or equivalent (_____)
    3. Associate or trade school degree (_____)
    4. College degree (_____)
    5. Graduate or post-graduate degree (_____)

27. What is your household's total annual pre-tax income?
    6. Less than $34,999 (_____)
    7. $35,000 to $70,000 (_____)
    8. $70,001 to $100,000 (_____)
    9. $100,001 and above (_____)

28. How many members in your household?_______

29. Hometown:____