

Examining the foundation for stronger fisheries-tourism synergies and increased local seafood consumption in the Bonne Bay region of Newfoundland

Prepared for the CURRA, Memorial University of Newfoundland

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The Community University
Research for Recovery Alliance



EXECUTIVE SUMMARY

The Bonne Bay area on Newfoundland's west coast is surrounded by Gros Morne National Park. The area has six communities within it and a relatively small year-round population of 2948 people. Both tourism and fishing are important to the local economy of the region. Approximately 187,000 tourists visited Gros Morne National Park during the 2010-2011 tourism season (Parks Canada, 2011). Fishing is also an important industry, employing approximately 17% of the workforce in the area in 2005 (Newfoundland and Labrador Statistics Agency, 2009). This research project looked at the foundations for improved economic opportunities for fish harvesters and tourism operators, based on enhanced collaboration among the fisheries and tourism sectors, as well as on increased regional consumption of seafood including among local people. It was funded by the Mitacs-Accelerate program, and the Rural Secretariat, Government of Newfoundland and Labrador with support from the CURRA at Memorial University.

There is a high demand for local seafood among tourists to the region as well as among local residents. For tourists, seafood is a key culinary attraction. Many restaurants in the Bonne Bay area specialize in seafood products and try to source fresh and local seafood as much as possible. Local fish processing plants are the main source of seafood for restaurants. However, some restaurant operators said it is a challenge to get a consistent supply of fresh and local seafood with the quality and traceability they would like. At the same time, fish harvesters are mainly selling their catches to local fish processing plants and face challenges related to low prices and declining catches for some species. The number of fish harvesters in the region is also declining and those still fishing are getting older. This report outlines some new marketing ideas and forms of collaboration among harvesters, processors, and tourism businesses that could help improve the availability of fresh, local seafood to the tourism sector and local people while providing new economic opportunities for both industries.

Local fishing culture and heritage is an important part of what attracts tourists to the Bonne Bay area. Experiences are becoming more of a focus in tourism efforts in Canada and beyond. A 2004 study commissioned by the Newfoundland and Labrador Department of Tourism, Culture and Recreation emphasized the need for the tourism industry in the province to "focus on experiences first" (Economic Planning Group of Canada, p.89). Experiential activities related to the fishery, such as boat tours led by fish harvesters that take visitors on the water to demonstrate how they fish and catch some

seafood, offer another option for fish harvesters to diversify their fishing enterprises while providing memorable experiences for visitors. The report outlines some of the opportunities and challenges for implementing experiential fisheries-tourism activities in the Bonne Bay area, and provides some examples from other places of experiential tourism activities involving fisheries.

In addition to the important role fisheries play in the tourism sector in Bonne Bay, and the capacity for enhanced collaboration that could strengthen both sectors, fisheries are also an important part of the local food system for people living in the region. Increased consumption of local seafood among residents has the potential to improve local nutrition and to also help support the fishery by helping to diversify the markets for locally produced seafood. An anonymous seafood survey was distributed to households in the Bonne Bay area to look at trends and patterns in local seafood consumption. These results show that local people strongly prefer eating seafood from Newfoundland and Labrador over imported seafood, and that local seafood is eaten most often in the summer. Local fish plants and networks of family and friends are the main ways households are accessing local seafood. However, results also show a decline in consumption of most major fish and shellfish species over the past five years.

Based on the findings from the project we propose the following recommendations for increasing fisheries-tourism synergies in the Bonne Bay area and for strengthening fisheries contribution to local food security:

Seafood and culinary tourism

- There is a need to develop a more consistent supply of fresh, local, and traceable seafood for restaurants.
- Emerging initiatives, such as the ThisFish pilot project, may improve traceability of seafood to the tourism sector while providing branding advantages to harvesters and other seafood business.
- There is a large fish plant in the area that has in place strong working relationships with restaurants and fish harvesters. These connections could be built upon to try out new types of marketing arrangements among harvesters, processors, and restaurant buyers.
- As catches for some commercial species decline there is an opportunity to develop specialty seafood products that can be harvested or processed in small

quantities and sold to the tourism sector. Fish harvesters, processors, and tourism operators should be brought together to discuss currently underutilized species, the capacity for value-added processing, and what products may sell well to restaurants and tourists.

- Direct marketing to restaurants, as well as local people, could allow harvesters to capture more value for a portion of their catch. Direct marketing should be seen as one additional strategy, in combination with other initiatives such as value-added products and experiential tourism, to diversify economic options for fish harvesters.
- There is a need for more research to look at the supply and demand for seafood in local markets (including what types of seafood tourists and residents prefer and how much they would pay) along with types and volumes of species being harvested. This could be used to inform the development of any new local seafood markets or products.

Fisheries and experiential tourism

- The province needs to develop a set of programs and policies designed to promote fisheries/tourism synergies.
- Experiential tourism activities need to be developed in a form that achieves the best fit between the tourism and fishing seasons. Experiential tourism activities should be seen as an additional strategy for diversifying economic opportunities for fishing enterprises but their success may require changing some fisheries regulations.
- There are examples of experiential fisheries-tourism activities from other places that can be used as starting points for developing pilot projects in this region. Some examples are provided in Chapter Three of this report.
- In developing experiential activities, identifying and working with relevant regulatory authorities, such as the Department of Fisheries and Oceans and Transport Canada, will be key to addressing challenges related to infrastructure, insurance, safety, and fishing seasons.
- A starting point for identifying experiential attractions could be to develop an inventory of existing fishing infrastructure in the region. For example, many harvesters already maintain fishing stores, stages and cabins which could serve as sites for experiential activities such as fishing tours or demonstrations without a lot of added capital investment.

- Skills training opportunities for fish harvesters in the areas of communications and product promotion could provide new knowledge to work with their professional fishing know-how.
- Organisational capacity to undertake culinary tourism and experiential tourism initiatives could be strengthened through the establishment of a body such as a cooperative that brings together interested stakeholders including fish harvesters and tourism operators and links them with interested consumers.

Fisheries contributions to food security

- The enhanced integration of fisheries into local food systems may help sustain fishing enterprises by diversifying economic opportunities and lessening dependence on distant export markets.
- Marketing ideas outlined in this report to improve the availability of fresh and local seafood to the tourism sector should similarly be considered in the context of strengthening the role of fisheries in the local food system and improving availability of seafood for people living in the Bonne Bay area.
- To inform the development of any new local markets more specific research should look at the supply and demand for seafood in local markets, including how much residents are able and willing to pay for seafood, along with the types and volumes of species being harvested in the area.
- There is a need for further research to look into the factors contributing to the decline in seafood consumption over the past five years that this survey has indicated along with recommendations for addressing this decline.
- There is a need for more cross-sectoral policy making in which health, nutrition, and food security considerations can be integrated into fisheries management and tourism development decisions.

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INTRODUCTION

This report has been completed as part of a Mitacs-Accelerate internship. A core part of the internship was a research project in the Bonne Bay area on Newfoundland's west coast looking at the foundations for improved economic opportunities for fish harvesters and tourism operators based on enhanced collaboration among the fisheries and tourism sectors, as well as on increased regional consumption of seafood including among local people. The project was led by Kristen Lowitt, a PhD Student in Interdisciplinary Studies at Memorial University, and funded by the Mitacs-Accelerate program and the Rural Secretariat, Government of Newfoundland and Labrador with support from the CURRA program at Memorial University. The project was overseen by a community steering committee including Ken Thomas, Roxanne Decker, Joseph Reid, Walter Nicolle, Joanie Cranston, Carolyn Lavers, Colleen Kennedy, Marion McCahon, Barb Neis and Anita Best. Dr. Barb Neis, Memorial University and Marion McCahon, Rural Secretariat supervised the project.

This project is the second step in a series of initiatives to look at fisheries-tourism synergies in the Bonne Bay area. The first step involved community workshops hosted by the CURRA, including *Bonne Bay: A Treasure and a Resource* in October 2009 and a *Fisheries-Tourism Forum* in June 2010. This project examined the potential for increased collaboration among the fisheries and tourism sectors that was raised at these earlier events¹.

Building on this project, future steps in fisheries and tourism work will include production of a report on regulatory challenges associated with promoting fisheries-tourism synergies to be funded by the Department of Tourism, Culture and Recreation and a pilot experiential fisheries-tourism project to be supported by the same department and developed by the Red Ochre Regional Economic Development Board. Results from this project will also be incorporated into Kristen's PhD research about food security and fisheries in the Bonne Bay area. The thesis will look in more detail at some of the findings from this project.

¹ See: Bonne Bay Fishery-Tourism Forum, June 13 2010: Meeting Report. Prepared by Joanie Cranston. Available at http://www.curra.ca/documents/Bonne_Bay_Fishery-Tourism_Final_Report-2010-for_Web.pdf

Bonne Bay a Treasure and a Resource. Prepared by Joan Cranston, Barb Neis, and Anita Best. Available at <http://www.curra.ca/documents/Bonne%20Bay%20Meetings%20FINAL%20Report%20Jan%2013%202010.pdf>

The main forms of data collection for this project included observations and discussions during internships with four fish harvester enterprises and four tourism operators in the Bonne Bay area who agreed to be partners on this project, as well as an anonymous survey distributed to local households about seafood consumption. The host enterprises for this project included: Darrell Burden & Greg Kennedy, fish harvesters, Norris Point; Glenn Samms, fish harvester, Norris Point; Ernie Decker and Lynn Halfyard, fish harvesters, Rocky Harbour; John and Roxanne Decker, fish harvesters, Rocky Harbour; Todd Wight, Ocean View Hotel and Restaurant, Rocky Harbour; Vince McCarthy, Sugar Hill Inn, Norris Point; Tom and Doris Sheppard, Sheppard's Bed and Breakfast, Trout River; and Ken Thomas, Lighthouse Restaurant, Woody Point. A profile of each partner and their business is provided in Chapter One.

Several days spent with each partner allowed Kristen to better understand the fishing and tourism sectors, including how seafood moves between them, and to identify potential opportunities and challenges for these sectors to work more closely together in order to maximize benefits to both sectors and the local economy. To broaden out the findings from the internship, six interviews with key informants from the fisheries and tourism sectors in the area were completed. The seafood survey provides information about the importance of seafood to the diets of people living in the Bonne Bay area.

This report is organized into three chapters. Chapter One is co-authored by Kristen and the project partners and shares the results of Kristen's observations and discussions with people in these enterprises and the results of the key informant interviews. Chapter Two presents the findings from the seafood survey distributed to local households in the Bonne Bay area. Chapter Three discusses examples of successful initiatives from other places that have integrated fisheries and seafood into local food systems and tourism.

Context

The Bonne Bay area is located on Newfoundland's west coast and surrounded by Gros Morne National Park. The region has six communities and a relatively small year-round population of 2948 people.



Bonne Bay.

Both tourism and fishing are important to the local economy of the region.

Approximately 187,000 visitors came to

Gros Morne National Park in the 2010-2011 tourism season (Parks Canada, 2011). The tourism sector provides a substantial share of seasonal employment in the region. Fishing also remains an important seasonal industry, employing approximately 17% of the workforce in 2005, including 195 people in fish harvesting and 70 in fish processing (Newfoundland & Labrador Statistics Agency, 2009). The Bonne Bay area is located in NAFO Fishing Division 4R, and has commercial fisheries for crab, lobster, cod, mackerel, halibut, herring, capelin, and turbot as well as recreational fisheries for cod, trout, and salmon. There are three seafood processing facilities and one seafood retail outlet in the area.

Both the fisheries and tourism sectors have experienced many changes over the last two decades. In the early 1990s, almost all cod fisheries in Newfoundland and Labrador were placed under moratoria because of severe resource declines. The 1994 moratorium on cod fishing in area 4R, along with the 1992 moratorium on the commercial Atlantic Salmon fishery, had a substantial impact on local fishing enterprises. It put many fish harvesters, processing workers and other local businesses in jeopardy while additional conservation measures, including substantial limits on subsistence fishing for cod were also eventually imposed. A multi-generational crisis, the cod stock collapse also affected young people who would have entered the fishery and ended some fishing traditions while changing others. Thousands of women across the province who worked in fish harvesting and processing also lost their jobs (Neis & Williams, 1996). Women fishers in particular struggled to qualify for government adjustment programs, while in their family roles they also bore much of the stress of the fishery closures (Neis & Williams, 1996).

Nearly all part-time fish harvesters left the industry after the moratorium (Schrank, 2005). Since the moratorium, there has been a shift to more shellfish harvesting and processing, which accounted for 84% of the total landed value of capture fisheries in the province in 2009 (Newfoundland and Labrador Department of Fisheries and Aquaculture, 2011). In recent years, numbers of full time fish harvesters have also started to decline. In the Bonne Bay area, there was a 7% decline in the number of fish harvesters between 2000 and 2005 (Newfoundland and Labrador Statistics Agency, 2009). Increased high school completion rates and investment in postsecondary education along with increased outmigration have contributed to changing community demographics including the age profile of fish harvesters and dwindling recruitment of young people to the fishery (Dolan et al., 2005). Over 50% of the core licence holders in the province were over the age of 50, and nearly 40% are over the age of 55 (Professional Fish Harvesters Certification Board, 2008). In comparison, only 12% of Level II fish harvesters, who are eligible to receive the transfer of a core licence, were under the age of 40 (Professional Fish Harvesters Certification Board, 2008). The retention and recruitment of a skilled labour force is one of the key challenges facing the fishery over the coming decade.

At the same time, many existing fishing enterprises are dealing with low prices as well as declining catches and short fishing seasons. These three challenges were identified by all the harvesters consulted during this project, as was the fourth challenge of uncertainty about the state of various fish stocks. For example, the total allowable catch (TAC) for Northern Gulf Cod has not been caught for the last several years in the Northern Gulf of St Lawrence region (NAFO Regions 3Pn, 4RS). In 2009 a TAC of 7000 metric tonnes was assigned which was reduced to 4000 metric tonnes for 2010 and 2011. The abundance of spawning Northern Gulf Cod remains low (Fisheries and Oceans Canada, 2010). There is also uncertainty about the crab stock within Bonne Bay and strong evidence of over-fishing. The crab fishery within Bonne Bay was opened again for the 2011 season following a two year voluntary closure due to concerns about the stock. While there have been some signs of initial recovery since the closure, a study based out of the Bonne Bay Marine Station found the recovery that has taken place has not been extensive enough to allow the majority of the population to reach harvestable size (Neville, 2011). There is some evidence that these changes in the fishery are affecting the consumption of local seafood among Bonne Bay households. Results from a seafood

survey completed as part of this project indicate a downward trend in consumption of most major fish and shellfish species over the past five years.

Alongside the changes taking place in the fishery, the tourism sector has changed substantially in this region over the past two decades. Visitors to Gros Morne National Park increased by 20% between 2006 and 2011 (Parks Canada, 2011). Across the province, tourism generated direct employment for 12,730 people in 2006 (Newfoundland and Labrador Department of Tourism, Culture and Recreation, 2011). Specific statistics on tourism-related employment in the Bonne Bay area are not available. Employment figures for retail sales and in food and beverage taken from the Community Accounts were used to estimate tourism-related employment. Approximately 16% of the population was employed in these occupations in 2005 (Newfoundland and Labrador Statistics Agency, 2009). There was an increase of approximately 35% between 2000 and 2005. Employment in these jobs is highly seasonal; approximately 50% of people employed in retail sales and nearly 60% of those employed in food and beverage worked between twelve and twenty weeks in those jobs in 2005 in the province as a whole (Newfoundland and Labrador Statistics Agency, 2009). Although the tourism sector is an important source of employment, like the fishing industry changing demographics and a related dwindling supply of labour is a challenge in the tourism sector across the province (Newfoundland and Labrador Department of Tourism, Culture and Recreation, 2010).

While the fishery and tourism sectors continue to change, they depend on each other. Some fishery family members work in the tourism sector. Many restaurants feature local seafood as a main culinary attraction and this helps generate local jobs in seafood processing and retail. Further, the fishery is a vital part of the culture and heritage that tourists visiting the region want to experience. Local residents are important customers for local restaurants, particularly those that stay open year-round. Nearly 40% of the households that participated in the seafood survey said they eat out once a month or more, and approximately 70% of households said it was likely or very likely that a member of their household would order seafood when eating out. The mutual dependence of these two sectors means a substantial decline in the local inshore fishery could potentially generate problems for the tourism sector. In addition, potential synergies between the two sectors have not been the focus of explicit policies and

programs so it is likely that these are under-developed resulting in missed economic opportunities in the province and the Bonne Bay region in particular.

In the remainder of this report, we use the Bonne Bay area as a case study for documenting the mutual dependencies between the two sectors and to look at ways to promote stronger synergies in the future. We examine how the fisheries and tourism sectors are currently working in the Bonne Bay region and put forward recommendations for ways in which they could work more closely together to support each other and the region. Specifically, we look at the opportunities and challenges for developing culinary tourism, based on the provision of local seafood to restaurants, and experiential tourism activities related to the fishery. While looking at the foundations for increased collaboration among the fisheries and tourism sectors, we also recognize that fisheries are a key part of the local food system in the Bonne Bay area and that increased consumption of seafood by local people also has the potential to support the fishing sector and the tourism sector, particularly during the off-seasons. Therefore, as part of this project a seafood survey was distributed to local households to document seafood consumption trends and patterns (what seafood they eat, where they get their seafood and how they prepare it) and to develop recommendations to protect and enhance the contribution of local seafood to food security in this area. While this work is focused in the Bonne Bay area, the findings from this project are also relevant to other regions of the province experiencing changes to the fisheries and tourism sectors and looking for opportunities to diversify rural economies.

CHAPTER ONE: INTEGRATING FISHERIES AND TOURISM IN THE BONNE BAY AREA

Introduction

With partners from the fisheries and tourism sector, this project looks at how these sectors are currently working together in the Bonne Bay region and identifies ways in which they could work more closely together to support each other and the region. Eight partners from the fisheries and tourism sectors in the Bonne Bay area collaborated on this project including: Darrell Burden & Greg Kennedy, fish harvesters, Norris Point; Glenn Samms, fish harvester, Norris Point; Ernie Decker and Lynn Halfyard, fish harvesters, Rocky Harbour; John and Roxanne Decker, fish harvesters, Rocky Harbour; Todd Wight, Ocean View Hotel and Restaurant, Rocky Harbour; Vince McCarthy, Sugar Hill Inn, Norris Point; Tom and Doris Sheppard, Sheppard's Bed and Breakfast, Trout River; and Ken Thomas, Lighthouse Suites and Restaurant, Woody Point. A profile of each partner and their business is provided below. Kristen spent several days with each partner between April and June 2011. To broaden out the findings from these internships, Kristen also carried out six key informant interviews with an eighth fish harvester, four additional tourism operators, and one fish processor in the Bonne Bay area.

This chapter, co-authored by Kristen and the project partners, presents the main results from the internships and interviews. The results are organized according to several core themes including seafood as a culinary attraction among tourists; the buying and selling of seafood between the fisheries and tourism sectors; perspectives and ideas about seafood marketing; and experiential fisheries-tourism activities. At the end of the chapter, a summary of the recommendations for fisheries and tourism development is provided.

Partner profiles

Following is a profile of each partner who collaborated on this project.

Fish Harvesters

Darrell Burden and Greg Kennedy, Norris Point

Darrell lives in Norris Point with his wife Dianne, son David, and dog Cassie. He has been fishing all his life. He comes from a family with a long history in fishing. As he said, "that's all everybody in my family has ever done." Darrell grew up fishing with his uncle.

In later years, a fishing license was transferred to him from a relative who fished in Martin's Point.



Darrell begins the fishing season in Bonne Bay, fishing for crab out of the wharf in Norris Point. His cousin Greg Kennedy joined him crab fishing this year. He then heads up the shore to Martin's Point, just north of Sally's Cove, to fish for lobster. Darrell has a fish store in Martin's Point that has been in his family for as long as he can remember. Greg also has a lobster license and sets his traps in Bonne Bay.

After the crab and lobster seasons are over, Darrell joins other enterprises to fish further up the coast for capelin, turbot, cod, mackerel and herring. During this time he can be away for two weeks to a month at a time. During the summer food fishery, Darrell and his wife Dianne go out in their boat together to catch cod and put some away for the winter.

Ernest Decker and Lynn Halfyard, Rocky Harbour

Ernie has been fishing for over forty years. He grew up fishing in Baker's Brook, and returns there each season to fish. Lynn Halfyard also began fishing when she was young and has been fishing with Ernie for fifteen years. Lynn refers to Baker's Brook as Ernie's "home port" and said "when you're fishing so long in a certain area you know your ground."

Lynn is a shareman in Ernie's business with a Level One helper's license. They begin the season fishing for crab departing from the wharf in Rocky Harbour. When the crab fishery ends they go up the shore to Baker's Brook to fish lobster, herring, halibut,



lumpfish, mackerel, and cod. Ernie has a fishing cabin in Baker's Brook along with a fish store. In summers past Lynn has maintained a small garden at Baker's Brook where she grows onions, carrots, cabbage, turnips, and beets. They enjoy a diet with plenty of fresh seafood in season. Lynn jokes that Ernie has "expensive tastes" because he loves crab and lobster.

John and Roxanne Decker, Rocky Harbour



Baker's Brook has been John's home fishing port for 30 years. John's father also fished out of Baker's Brooks and his enterprise was transferred to John. John is Ernie Decker's younger brother. Since 1991, John and his wife Roxanne have been fishing together. They fish for crab, lobster, cod, mackerel, halibut, herring, and lumpfish. They maintain a fish

store in Baker's Brook. In recent years lobster has become their main fishery. Two years ago, when the price of lobster started to drop, Roxanne started working at a local restaurant after finishing up lobster fishing with John in early July. She works at the restaurant until the end of September. John and Roxanne have two children, including a ten year old son who loves it in the boat and would like to fish like his father.

Glenn Samms, Norris Point

Glenn started fishing with his father in Bonne Bay when he was twelve years old. Later on, his father's fishing enterprise was transferred to him and Glenn now fishes for groundfish, crab and lobster departing from the wharf in Norris Point. Glenn's younger brother Dennis is also a fish harvester, and they have fished for crab together for three seasons.



Glenn's family is from the Norris Point area, including relatives who grew up in Gadd's Harbour before Gros Morne National Park was established. Glenn remembers the many meals of fresh and salt cod that were a main part of his grandfather's diet. Glenn continues to enjoy meals of fresh fish in

season and puts away some fish for his family for the winter. He lives in Norris Point with his family, including a son and young daughter.

Tourism operators

Todd Wight, Ocean View Hotel and Restaurant, Rocky Harbour



This is Todd Wight's fifth season as Managing Partner of the Ocean View Hotel and Restaurant in Rocky Harbour. The Ocean View was originally established in 1972. Todd came to the Ocean View with a background in business and marketing.

The Ocean View Restaurant is a fine dining establishment specializing in seafood. It is the largest restaurant in the Bonne Bay area serving around 10,000 guests a season. The restaurant is open for breakfast and dinner from Mothers Day until early October and the Anchor Pub downstairs in the hotel is open for Pub style dining from 3pm daily. The restaurant offers many different types of seafood including halibut, cod, salmon, mussels, lobster, crab, and scallops. The restaurant's Head Chef is Red Seal certified and has six other cooks to assist her in the kitchen. Seafood is prepared in the traditional Newfoundland way combined with some new flavours and tastes. The restaurant also offers samples of items that guests may never have tried before, such as cod tongues and scrunchions.

The dining room is decorated with items from the sea and boasts a beautiful ocean view overlooking the harbour. A wine cellar is a recent addition to the dining room, allowing guests to go into the cellar and select their own bottle of wine.

Tom and Doris Sheppard, Sheppard's Bed and Breakfast, Trout River

Doris said it has always been her dream to have her own Bed & Breakfast. In 2009, with the official opening of Sheppard's Bed and Breakfast, Doris' dream came true. Doris and her husband Tom operate the Bed and Breakfast, which they built themselves on land that belonged to Tom's family.

Doris has been involved in tourism for many years. She first started working in the tourism sector in 1967 in Deer Lake. Thirteen years ago, she returned to school and completed a program in Hotel Management in Ottawa after which time she became Dining Room Manager of a hotel there. Tom has a background in teaching. He spent his first year teaching in a one-room schoolhouse in Lance aux Meadows and subsequently taught high school for twenty five years in Newfoundland.



The Bed & Breakfast features four guest bedrooms upstairs and one room on the first floor. Their busy season starts in early May and continues until October although they are open for bookings year-round. They had 600 guests stay with them last summer from as far away as New Zealand, the Netherlands, and Iceland. Doris and Tom offer a wide variety of choices for breakfast including pancakes, french toast, bacon and eggs, and fish cakes.

Vince McCarthy, Sugar Hill Inn, Norris Point



The Sugar Hill Inn opened in 1992. Vince McCarthy, the owner and operator of the Inn came to Norris Point in 1985. The Inn was originally built as a family home and dental clinic. However, after spending time in the area, the potential for a tourist establishment became evident to him. He began to develop a high-end inn and

restaurant, a type of tourist establishment that was not common in the Gros Morne area at the time.

The Inn now features eleven guest rooms and a formal fifty person dining room that has been open since 2007. The dining room is opening seasonally for dinner from May to October and also provides breakfast for guests in the Inn, as well as boxed-lunches. Seafood is a feature in the restaurant, with cod, halibut, salmon, scallops, shrimp, and mussels among some of the regular menu items.

Vince does a lot of the food preparation himself with the support of another cook. He explained that he “always had a passion for cooking.” He has also gone on numerous wine tours throughout France and Italy and the restaurant features an extensive list of wines that he has personally selected. The Inn also has several small gardens in which fresh herbs, leeks, shallots, and lettuce are grown for the restaurant.

Ken Thomas, Lighthouse Suites and Restaurant

The Lighthouse in Woody Point consists of suites overlooking the waterfront, a gift shop, as well as the Lighthouse Restaurant. The Lighthouse Restaurant was established thirty years ago and Ken Thomas took over the business four years ago.



The restaurant features an eat-in dining room which is open from late May to early October, along with a take-out that is open year-round. The restaurant employs six women full-time from May to October. The Lighthouse has always been known as a family-style restaurant. Since Ken took over the business, he has made a few changes to the interior decoration, added a few new menu items, and has tried some different ways of preparing seafood. The restaurant specializes in seafood, including cod, halibut, salmon, and scallops and features an extensive wine list. The take-out is especially popular among local residents and offers items such as chicken and chips, chicken burgers, and fish and chips.

The Lighthouse has a small greenhouse and garden which guests enjoy. By the middle of August, most of the vegetables in the restaurant are coming from the garden and greenhouse including lettuce, carrots, beets, peas, beans, broccoli, celery, zucchini, and tomatoes.

Seafood as a culinary tourism attraction

In recent years food has become an important part of the tourism experience. ‘Culinary tourism’ is the name given to this type of tourism which is based around locally-produced foods and food products prepared in both traditional and new ways (Everett, 2009). Culinary tourism involves people exploring foods new to them, and using food to explore new cultures (Long, 2004).

“That’s [seafood] what people expect, they’re coming to Newfoundland.”
Tourism operator,
Bonne Bay.

Canada is made up many distinct food regions that are important in terms of regional identity and local food product availability (Hashimoto & Telfer, 2006). For example, Quebec is known for its maple sugar. The Prairies are often associated with fields of wheat or Alberta Beef. In Newfoundland and Labrador, one of the most well-known culinary attractions is seafood which is featured prominently in provincial tourism marketing. The official Newfoundland and Labrador Tourism website emphasizes seafood as the main culinary attraction in the province, saying “known for our seafood and traditional dishes, this place offers an exciting world of dining options...” (Newfoundland and Labrador Tourism, 2011,). Ties to a long-standing fishing culture are used as a way of setting the province’s seafood apart from other regions.

The Bonne Bay region is in a good position to benefit from culinary tourism. A report done for the Canadian Tourism Commission found that the typical culinary tourist is highly educated and generally earns upwards of \$80,000 annually (Deneault, 2003 as cited in Everett, 2009). This target demographic for culinary tourism is similar to that of the typical tourist who comes to Gros Morne National Park as nearly 50% of visitors in 2009 had a household income of over \$90,000 (Parks Canada, 2010).

“Cod, that’s what we want, it’s unique to you here.”
Tourist,
Bonne Bay area.

In the Bonne Bay area, the tourism operators consulted as a part of this project agree that tourists are looking for seafood when they come to the region. A tourism operator who provides accommodations in the area said, "Seafood's really important, one of the first things people ask when they come in is, 'Is there any fresh seafood around?'"

Tourists that come to the Bonne Bay area place special value on eating local seafood. As one tourist said, "Really to have lobster, it's part of what attracted me." She went on to explain that she eats seafood in Ontario where she lives but that it has to be imported. A woman working in a local restaurant remarked that "cod is king" among the tourists. Another restaurant said that halibut is their biggest seller.



Doris Sheppard with vegetables she grew in her garden. She sells some of her produce to local restaurants.

Restaurants recognize the importance of serving the most fresh and local seafood available. The three partner restaurants on this project all emphasize fresh seafood, and it is advertised as such on their menus. At Sheppards' Bed & Breakfast Doris sometimes makes her own fish cakes, and they are an especially popular breakfast item with guests. Many tourists ask questions about the seafood being served, and in particular they want to know where it is coming from. One restaurateur described people as increasingly concerned about where their food is coming from.

Eating seafood also serves as a way for tourists to learn more about local cuisine and food traditions.

For example, many tourists haven't heard of scrunchions before, a local term for pork fat often used for cooking fish and as a garnish for dishes such as fish and brewis. One restaurant will bring small servings of scrunchions to tables so people can sample them. The restaurant also offers a single cod tongue as a tasting to people interested in trying this local delicacy. In the event that a guest has never eaten a lobster, servers will help them tableside in

"We want authentic Newfoundland seafood and we want to cook it the authentic Newfoundland way...with a bit of fine dining."

Chef, Bonne Bay.

opening their lobster. Another restaurant offers a sample serving of fish and brewis.



Raised beds provide the Sugar Hill Inn with fresh herbs and greens later in the summer

Restaurants have different ways of preparing seafood although many feature traditional ways of preparation in some form. Some restaurants are family-style, featuring mostly pan-fried fish along with the traditional root vegetables such as potatoes, carrots, and turnips. One family-style restaurant has made a few changes in recent years, with the owner introducing some new vegetables and a few modifications to food preparation.

Other restaurants focus more on fine dining, often blending traditional ways of preparing seafood with new tastes. For example, one restaurant serves mussels with a spicy marinara sauce, while another will offer salmon grilled, poached, or pan-fried with a citrus ginger or sweet bourbon glaze.

In addition to eating seafood out at restaurants, tourists can also buy and cook their own seafood. Harbour Seafoods, a fish processing plant in Rocky Harbour, has a retail storefront where they sell seafood sourced from the west coast of the Island. It is very popular with tourists and locals alike in the summer. Tourists staying in local cabins purchase seafood to take back and cook, and some buy it to take home with them. Tourists of many different backgrounds and ethnicities come to the store, resulting in a variety of seafood tastes and preferences.

As well as seafood, many restaurants feature other local foods that enhance the culinary tourism experience. Several restaurants in the area feature wild moose and caribou and one restaurant serves lamb from Cow Head.



The kitchen at the Ocean View Restaurant, Rocky Harbour.

Another restaurateur mentioned an interest in creating a sampler tray of locally-harvested wild mushrooms.

The Sugar Hill Inn and the Lighthouse Restaurant have small gardens that supply the restaurants with fresh produce. At the Lighthouse Restaurant, nearly all the vegetables used in the restaurant later in the summer and fall are coming from the garden including lettuce, carrots, beets, peas, beans, broccoli, celery, and zucchini, and tomatoes. At the Sugar Hill Inn, fresh herbs are grown in a garden on the back of the property, along with leeks, shallots, and lettuce.

While individual restaurants are working towards creating culinary tourism experiences, at a provincial level there is no food marketing body dedicated to culinary tourism. Such a body could lend support to more local initiatives. For example, the province of Nova Scotia has the provincial Taste of Nova Scotia food marketing association which develops and promotes culinary tourism destinations across different regions of the province. A resource in the province that can assist in culinary tourism development is the Bonavista Institute for Cultural Tourism, which offers training for local tourism suppliers to enhance the cuisine experiences for tourists.

The buying and selling of seafood between the fisheries and tourism sectors

Because of the importance of seafood to the tourism sector, one of the aims of this project was to look at how seafood is being distributed between the fisheries and tourism sectors. This included looking at where restaurants are sourcing their seafood, what types of seafood they are buying, as well as where fish harvesters are selling their catches.

We found that restaurants focus on buying fresh and local seafood as much as possible. However, many said it is a challenge to get a consistent supply of fresh and local seafood with the quality and traceability they would like. Local fish processing plants are the main source of seafood for restaurants in the area.

Fish harvesters are mainly selling their catches to local fish processing plants. The fish harvesters described similar challenges facing their businesses, mainly declining catch rates and low prices. Because of provincial regulations under the Fish Inspection Act fish

harvesters have to sell to a licensed buyer or fish processor and are not allowed to sell directly to customers, such as restaurants.

Restaurants and buying seafood

The most common types of seafood purchased by the restaurants consulted as a part of this project are cod, halibut, salmon, mackerel, scallops, shrimp, mussels, lobster, and crab.

Restaurants are mainly sourcing seafood from fish processing plants in the Bonne Bay area. In particular, Harbour Seafoods in Rocky Harbour is the largest plant in the area and supplies restaurants up and down the coast. 3Ts fish plant in Woody Point also sells some seafood to restaurants. Other sources for seafood include resellers who come into the area with seafood harvested elsewhere on the coast, such as Port aux Port scallops, as well as Allen's Fisheries and Dominion in Corner Brook. Early in the tourism season in May and June before most local fisheries are open restaurants purchase seafood products from larger distributors such as Sysco and Atlantic Grocers.



Lobsters stored at a local fish processing plant.

Restaurant operators expressed a clear preference to buy seafood that is local and fresh.

Buying seafood from large food distributors is not a preferred way of sourcing seafood because it is usually frozen and imported from other places as in the case of Icelandic cod. To get around this challenge, one restaurant buys flash-frozen cod from Harbour Seafoods before the plant closes and keeps the cod in their freezer to have available for the winter and spring.

For the most part, seafood that is being bought in season from local fish processing plants is fresh. However, even in this case, some types of seafood are bought frozen. For example, one restaurant operator explained that because the season for halibut is very short (20 hours in 2011), the local fish plant purchases a large quantity at one time and has to freeze some of it. The same restaurant operator noted they have difficulty getting

fresh cod tongues, and most often have to purchase them frozen. A different restaurant operator said that North Atlantic shrimp can only be purchased frozen from the fish plant. Many restaurant operators said that freezing seafood takes the value out of it and that getting fresh local product for the entire tourism season would be ideal.

Purchasing seafood from the local fish processing plants was important to restaurant operators because the seafood is being sourced locally from the west coast of the island. However, more specific details such as when, where, and how the seafood was caught are not necessarily available. Many restaurant operators said they would like greater traceability of seafood they are serving so that they can tell their guests about when the seafood was caught, along with who caught it and how it was handled. Traceability was also a concern raised by some fish harvesters as many do not know where their catch goes after it leaves the processing plant. One harvester said he would like to see a lobster tracked from harvesters through to the final market, including the price it is sold for along the way.



A lobster being tracked with a ThisFish tag. Photo Credit: www.thisfish.info

In the Burgeo and Harbour Breton regions of the province, this is starting to happen through the ThisFish pilot project run by the FFAW in collaboration with the Canadian Council of Professional Fish Harvesters and EcoTrust Canada (www.thisfish.ca). Harvesters are provided with orange tags that track the lobster from ocean to plate. Along the way, others in the supply chain can upload details about the lobster's handling and price. When the customer buys the lobster, they can look up the tag's unique code online to find out when, where, and how the lobster was caught and by whom. Fish harvesters can also log on to track their lobster's journey. While providing customers with more information, the project can also provide harvesters and other seafood businesses with customer feedback and open up new opportunities for seafood branding.

While restaurants showed a strong preference for sourcing most types of seafood locally, one exception is shrimp. Many restaurants purchase jumbo Pacific shrimp from a food distributor because they believe that these shrimp can be presented better on a plate than the smaller North Atlantic shrimp. They will sometimes buy some North Atlantic shrimp for dishes such as salads and chowders. One restaurant in the area that uses only North Atlantic shrimp describes them on the menu as “tiny, North Atlantic shrimp,” recognizing that most people are used to eating large Pacific shrimp.

In terms of quality, restaurant operators’ opinions varied about the extent to which they are satisfied with the quality of the seafood they purchase. Some said they are generally satisfied, explaining that cod was a fairly consistent quality product from the local fish plant. However, others were less satisfied, describing the quality as “variable” or not as fresh as they would like. At least one restaurant has worked out a way of getting seafood in the quality and form they want. For a small discount in price one local processing plant will let the restaurant operator carve up halibut and salmon steaks in the plant so that they can be done to the restaurant’s preference.

Some restaurants have also developed ways to work with the fishing seasons and local product availability. For example, many restaurants have a catch of the day or seafood special on their menu that changes with local availability. Salmon is more regularly on menus because it is a farmed product and consistently available. A local fish plant has also worked with at least one restaurant in the area to extend the availability of fresh lobster. The processing plant will keep a small number of lobster in the plant in salt-water pens after the lobster fishery has closed, allowing the restaurant to continue to access fresh lobsters for several weeks beyond the regular lobster season.

Fish harvesters, processors and selling seafood

Restaurants are primarily sourcing seafood from local fish processing plants. Conversely, fish harvesters are mainly selling their catches to fish plants in the local area. Three of the fish harvesters involved in this project are fishing for lobster, crab and groundfish. One of the harvesters only fishes for lobster and crab. Harvesters referred to selling to buyers “up and down the shore” depending



Greg Kennedy fishing for crab with Darrell Burden.

upon who was offering the better price. However, prices are usually fairly close between licensed buyers.

Many harvesters sell to Harbour Seafoods in Rocky Harbour, the largest fish processing plant in the region which buys from over 260 individual fish harvesters along the west coast. The plant purchases capelin, cod, halibut, mackerel, lumpfish, crab, lobster, turbot, scallops, whelks, and farmed salmon. The plant processes most of these species, except for lobster which they sell live and crab which they send to another plant for processing. However, the plant is required to clean and sort everything they buy, including bait, before it can be sold.

All the fish harvesters consulted as a part of this project said that declining catch rates and short seasons combined with low prices are the three main challenges facing their businesses. For example, harvesters are allowed to catch three thousand pounds of cod each week during the season which is open in July and starts up again in September. Most noted that they haven't been able to land that much in several years. Some expressed concern about the state of the cod stocks in the Gulf, with one harvester describing a "downturn" in recent years and noting "they're not big fish we're catching."

For halibut, small catches are mostly related to the length of the fishing season which was very short this year at only twenty hours long. One harvester explained that much of the total quota for halibut has been allocated to Quebec, which has multiple openings for the fishery. While the quota here is small, some harvesters described a relative abundance of halibut compared to other species. Another harvester also described a decline in the number of lumpfish, getting only approximately 40-50 pounds of lump roe last year.



Ernie Decker and Lynn Halfyard fishing for lobster.

With the collapse of the groundfish stocks in the 1990s and closure of the commercial salmon fishery, lobster and crab have become the main fisheries for many harvesters in the area. A fish plant in the area usually purchases around 400,000 pounds of lobster and 80,000 pounds of crab from the west coast each

season. This season was the first time in two years that harvesters have caught crab in the Bonne Bay area because of a voluntary moratorium in place for the last two seasons. Some harvesters were concerned that the closure wasn't long enough to allow the crab to recover.

Unlike crab, lobster is a competitive fishery with no individual quota. Harvesters were allowed to put out 250 pots this season, which ran from early May to early July. The beginning of this season's lobster fishery was marked by a price dispute between some processing companies and an independent price-setting panel. It was resolved when the union and the Seafood Producers of Newfoundland and Labrador (SPONL) agreed on a price of \$3.65/lb. The price was reviewed every week until the end of the season. During this price dispute, fish harvesters continued to catch lobsters and keep them in the water in crates. However, one harvester explained that this wasn't ideal because bad weather conditions could potentially damage the crates.

All the harvesters described a drop in the price of lobster over the last several years, reaching a low about two years ago around \$3/lb. Prior to the last two years, harvesters said they received between \$5 and \$6/lb. One harvester described the present lobster price as "terrible," noting that other costs, such as gas, have been going up. Some harvesters expressed concern about the prices for other species as well, such as cod and mackerel, for which they are paid approximately fifty cents and twenty cents per pound respectively. At these prices, one harvester explained "you have to catch a lot to make money." Harvesters also described increasing costs related to gas, monitoring and license fees, and bait.



Glenn Samms with a lobster he caught.

Crab and halibut were two fisheries for which some harvesters were more satisfied with the price. Harvesters were paid around \$2.50/lb for crab this season, an increase from last year's prices. Harvesters were paid around \$6/lb this year for halibut, a fairly substantial increase over last year's price of approximately \$3.50/lb. However, harvesters sometimes don't know the price they will be paid when they start fishing.

One harvester explained, “it’s hard, sometimes you don’t know [price] until you get ashore”.

Nonetheless, while low prices are a challenge for fish harvesters, they appreciate having a reliable local market where they can sell their catches from year to year. Further, it is convenient for them to be able to sell all their catches to one, or very few, buyers. Selling to a fish processing plant also gives them access to workers compensation and eligibility for Employment Insurance.

Although harvesters are mainly selling their catches to fish processing plants, they are allowed to keep some of their catch for personal use after it has been monitored dockside. For many types of seafood, and especially cod, harvesters put aside enough for themselves for the winter. However, for the more commercially valuable crab and lobster, some harvesters described eating fewer meals of these in order to sell more to the processing plant to earn an income and qualify for Employment Insurance.

In terms of seafood pricing, a fish processor in the region offered a different perspective. They explained that the price for which they sell their seafood is set by the market and described a “limit” to how much seafood can be sold for. From this perspective, they described paying a “high price for harvesting now.” Approximately 40% of the

“If you’re taking care, taking time to bring in a good product, you want to see a good price for it.”

Fish harvester, Bonne Bay.

seafood from this processing plant is sold within Canada, including much of this within the Bonne Bay area, and the remaining 60% is exported outside the country. The processing plant incurs costs for employee wages, workers’ compensation, processing license fees, machinery, and electricity. Lower quotas for many fisheries are impacting both harvesters and processors. A fish processing plant explained that they don’t have large volumes of any species to sell because the quotas have been cut.

Lastly, ensuring quality is an important part of selling seafood for both harvesters and processors. Some harvesters emphasized taking care to bring in a quality product. Fish processing plants grade fish when it arrives at the plant based upon size, texture, and freshness and fish harvesters are paid according to the grade of the fish. However, one

harvester believed they are not always rewarded sufficiently in terms of price for the quality of product they bring in.

Another harvester explained how the type of gear used can affect seafood quality. Since the cod moratorium, hook and line or gillnets are used to fish for cod instead of traps. However, he said cod caught in a trap is “100% fresher” because the fish is still alive when the trap is brought in.

In terms of ensuring quality, a local fish processing plant explained that “everything has a process.” Fish usually arrives at the plant on ice, and the plant tries to make sure the fish is processed as quickly as possible so that it can be packed and stored again between the proper temperature of zero and four degrees Celsius.

Perspectives and ideas for seafood marketing

In addition to looking at how the tourism and fisheries sectors are presently buying and selling seafood, as described above, a related aim of the project was to understand fish harvesters’, fish processors’, and tourism operators’ perspectives and ideas about other ways of marketing seafood that could promote synergies between the two sectors. This section considers direct marketing; new collaborative arrangements among harvesters, processors, and buyers; and specialty seafood products.

Direct marketing of seafood

Presently, due to provincial regulations under the Fish Inspection Act, restaurants have to source their seafood from licensed buyers and fish processing plants and are not able to purchase directly from harvesters. Nonetheless, most of the tourism operators that were consulted expressed a desire to buy seafood in a different way. Most often, this focused on being able to buy directly from fish harvesters.

“Each product you put on your menu has a story to tell behind it.”
Tourism operator,
Bonne Bay.

In direct marketing the attention is focused on allowing harvesters to sell further up the supply chain, to customers such as restaurants or individuals, rather than to a buyer or processor. This allows producers to capture more economic value while allowing customers a direct connection with food producers. Alternative direct markets for seafood are not meant to replace existing

markets that harvesters already have for their catch (such as fish processing plants), but are one additional strategy that may let fish harvesters capture more value for a portion of their catch. A study about seafood direct marketing funded by the Department of Fisheries in Nova Scotia found that direct marketing may provide benefits for fish harvesters and customers (Anchor Consulting, 2010). For harvesters, this included greater control over the marketing of seafood and higher prices, and for customers, better access to quality, local seafood.

Tourism operators gave several reasons for wanting to be able to buy directly from fish harvesters. These included getting a fresher and better quality product in more consistent supply, a better price for both harvesters and restaurant buyers, and knowing more about where the seafood is coming from and how it was harvested.

In terms of quality, many restaurant operators thought that a product purchased directly from harvesters would be fresher and thus better quality. As one restaurant operator said, ideally we would “get it [fish] on the day it’s caught.” While some restaurants are very satisfied with the quality of the product from the plant, other suggested it was “variable” and they aren’t always able to get the fish in the form they prefer. Some restaurant owners have found that quality varies across different species. One restaurateur believes that filleting machines in local plants do not do as nice a job as hand filleting.

A better price for both harvesters and tourism operators came up several times as a potential advantage to direct marketing. Because of the high tourist demand for seafood, some restaurants are able to ask a high price for a seafood dinner and said they would be able to pay a high price to harvesters directly. Others noted that buying seafood directly would likely cost them less than buying at a fish plant, while still resulting in a price benefit to harvesters.

Lastly, many tourism operators spoke about wanting to attach a story to the seafood they serve. This requires knowing where it's coming from all the way from ocean to plate. As one tourism operator said, “Each product you put on your menu has a story to tell behind it.” Providing this traceability and telling a story from ocean to plate can work well with direct marketing which directly connects fish harvesters with restaurant buyers.

Like tourism operators, some fish harvesters saw potential for direct marketing to provide restaurants with a fresher quality product while allowing them to capture more value for a part of their catch. However, fish harvesters also described some challenges to direct marketing.

Some of these challenges may be considered logistical in nature. For example, having to sell to more than one buyer can be more difficult. Having a central location (e.g. one fish plant) at which to sell can be more convenient and cut down on expenses and time for fish harvesters. There may also be a risk for some fish harvesters in pursuing new markets in case existing markets for their catch are jeopardized. Some harvesters also said it would likely take a lot of time and effort to get the changes in place that would be needed to make direct marketing possible. Eligibility for Employment Insurance is based on harvesters selling to a licensed buyer or fish processing plant. One harvester explained “quotas have been cut so much, we need all we can get to processors” in order to qualify for Employment Insurance.



Crab being weighed at the wharf in Norris Point.

In addition to these logistical challenges, some expressed concern about supply and demand for seafood in local markets. One restaurant operator suggested that there are not enough fish harvesters in the area in order to make direct marketing successful. For this restaurant, which requires large volumes of fish, sourcing from a central location that brings in fish from up and down the coast may be more reliable. On the other hand, one fish harvester was concerned that the volume of fish being brought in by boats in the area would be too much for local demand. He was uncertain about how much of the catch could be sold locally. Researching the market demand for local seafood as well as understanding the volumes of different species being caught would be an important step before establishing any direct local markets. One fish harvester also suggested that many residents living in the area are used to buying from the fish plants. Consumer education and awareness about new markets for seafood should go along with any direct marketing efforts.

Another consideration with direct marketing relates to health and safety. A Chef described how buying seafood at the fish plant provides assurance that the products they are serving have met current health and safety regulations. She explained, “I know it’s clean, inspected, and the food is fresh.”

Lastly, there are regulatory barriers within the province to the direct marketing of seafood. Presently, provincial regulations (under the Fish Inspection Act) do not allow fish harvesters to sell directly to anyone except a licensed buyer or processor (Newfoundland and Labrador Department of Fisheries and Aquaculture, 2008). This means that harvesters are not allowed to sell directly to restaurants, retail stores or individual customers.

New types of arrangements among harvesters, processors, and buyers

While many tourism operators spoke about wanting to be able buy seafood directly from harvesters, many also have a positive working relationship with the main fish plant in the area that serves as their primary seafood supplier. Similarly, harvesters appreciate having a fish processing plant as a reliable market for their catches each year. Harbour Seafoods in Rocky Harbour has in place strong working connections with fish harvesters and restaurants along the west coast. Accordingly there are other potential ways of marketing seafood that are not direct *per se* but rather would be based on new arrangements among harvesters, fish processors, and buyers.

One restaurant operator proposed a situation whereby a fish plant could stay open longer to act as a buyer for a limited number of fish harvesters in order to extend the season for some species. They suggested that a select number of harvesters could fish later in the season, take their catches to the plant, which could sell to the restaurants. The quantity wouldn’t be enough to keep the plant fully open, but could allow for longer availability of fresh product to restaurants. In this case, the fishing seasons as set federally by the Department of Fisheries and Oceans would have to be considered.

Another restaurant operator suggested that restaurants should work with fish processing plants to tell them what types of seafood they want to buy and in what form. However, if the desired seafood product(s) is not available or is not available in the quality desired, restaurant operators could have the option of sourcing directly from a fish harvester. They suggested this sort of approach would place responsibility on the

fish processing plant to maintain a consistent supply of quality and fresh seafood products.

Lastly, there may be an opportunity for a fish processing plant to facilitate a more direct connection between fish harvesters and restaurant operators. A processing plant could work with a group of fish harvesters to provide seafood to select restaurants. By working with a small group of harvesters and a small quantity of product, a fish processing plant may be able to tell a restaurant who caught the fish as well as when it was caught and how it was handled. The product could potentially be sold for a higher price to restaurants that are looking for improved freshness and traceability. There are some fine dining restaurants in the area that can pay a premium price for seafood. One restaurant operator involved in fine dining noted that whatever price they pay for seafood they can sell it for twice the price in the restaurant.



Darrell Burden's dog Cassie with the lobster traps at Martin's Point.

Specialty seafood products

Restaurant operators were asked about any seafood products they would like to sell but presently cannot access. They listed a number of specialty products they would like to get, including types of seafood that aren't harvested in large quantities or products that require some value-added processing.

For example, one restaurant operator expressed an interest in sea urchins, explaining that at one time people used to dive for them in the area. This restaurant operator also would like to get certain parts of the cod, such as the sacks and roe, which he described as a delicacy but which he has never found commercially available. One Chef said she would like to get fresh calamari as presently she can only get it in frozen form. Another restaurant operator said he would be potentially interested in doing something with pickled herring, similar to Solomon Gundy in Nova Scotia, pickled herring served with slices of onion and crackers.

Many restaurants already buy salt cod from the local fish processing plant to use in items such as fish cakes. A local processing plant also smokes salmon, capelin, mackerel, and kippers as well as processing lump roe. However, in terms of value-added products, a processor in the area pointed out that a fresh seafood product often has the most value. They suggested that value-added, in terms of additional processing or adding preservatives like salt, is not necessarily a better quality product.



John Decker's and Ernie's Decker's boats moored at Baker's Brook.

Fish harvesters were similarly asked to describe any species they thought are presently underutilized for which there could be a market. Two species listed by harvesters were whelks (sea snails) and blackback, or winter flounder, which one harvester said is around in abundance but is not caught commercially. Some harvesters also use squid as bait. However, it could be sold fresh to restaurants for a better price, as one restaurant operator noted they would like to get fresh squid but have had difficulty sourcing it.

Any specialty products would not be needed in large quantities and could be specially harvested or processed in small numbers and sold to restaurants and tourists for a price premium that could be passed back to the fish processor and harvesters. Developing specialty products that may capture a premium price makes sense at a time when catches for some main fisheries are getting smaller and both harvesters and processors are dealing with smaller volumes of seafood. Bringing together fish harvesters, processors, and tourism operators to discuss the potential for specialty products, such as what underutilized species could be harvested, what the capacity is for value-added processing, and what tourism operators think would sell well, would be a first step in developing specialty seafood products.

Experiential fisheries-tourism activities

The culinary attraction of seafood is linked to tourists' interest in the fishing culture of the region. Fishing culture is an important part of what attracts tourists to the region. For example, a Bed and Breakfast operator explained that while the fishery isn't directly important to their business in the way of seafood products, "people who come here, they love going down to the wharf and chatting with the fishermen when they come in."

"People who come here they love going down to the wharf and chatting with the fishermen when they come in."

Tourism operator, Bonne Bay.

Fish harvesters similarly described the interest that tourists have in their work, often stopping to ask questions and take pictures. One fish harvester said that tourists stop and watch him from the wharf when he is hauling lobster, "Just to see the lobster trap coming in, and the way it's done."

Experiential tourism may allow tourists to "not just take pictures, but be actively engaged with the community."

Tourism operator, Bonne Bay.

Experiences, such as these, are becoming more and more of a focus in tourism efforts in Canada and beyond. For example, the Canadian Tourism Commission is becoming more and more interested in experiential tourism. In 2008, they developed a toolkit for small and medium-sized tourism businesses to help them turn their products into memorable experiences for tourists.

The importance of experiential tourism is also being recognized in Newfoundland and Labrador. A 2004 study commissioned by the Department of Tourism, Culture and Recreation to come up with a tourism product development strategy emphasized the need for the tourism industry to "focus on experiences first" (Economic Planning Group of Canada, 2004, p.89). It noted that converting tourism products into experiences may be a main challenge for tourism operators, but that by adding value to what they already have, tourism operators may be able to create meaningful experiences without having to put in a lot more capital investment (Davar, 2010). Locally, one tourism operator in the Bonne Bay region referred to experiences as "talking points" about their trip. In 2010, the Gros Morne Cooperating Association organized an experiential

fisheries tourism product for a party of European visitors. It was a very successful initiative and the tour operators would like to access it on an ongoing basis, but it doesn't currently exist as a market-ready product (Colleen Kennedy, personal communication, 2010).

Experiential fisheries-tourism activities may allow tourists to the Bonne Bay area to experience the fishing culture and heritage of the region. At the same time, such activities may provide fish harvesters with alternative economic opportunities for ensuring the viability of their fishing enterprises. Boat tours, fresh fish markets, and fishing demonstrations were identified during the internship and interviews as potential experiential activities.

“It would be ideal to have a boat tour. People can catch it, bring it back and we can prepare it.”
Tourism operator,
Bonne Bay.

Boat tours led by fish harvesters were mentioned most often as a potential experiential tourism activity. Tourism operators and fish harvesters agreed that it would be a memorable experience for tourists to participate in a boat tour led by a fish harvester that could take them on the water, demonstrate how they fish, and potentially bring back some seafood. One harvester expressed an interest in taking tourists out to catch and release fish.

There could also be a role for restaurants in the tour in terms of preparing fish caught on the tour.



Fishing demonstrations at local wharves, such as the wharf in Rocky Harbour shown here, were identified as a potential experiential tourism activity.

However, there are some challenges to developing boat tours, including insurance, boat size, and fishery openings and closures. Insurance was a frequent concern that was raised by fish harvesters, as most don't have the liability insurance to take tourists on their boat. Secondly, infrastructure in terms of boat capacity may also be a challenge. Most inshore harvesters have open motor boats that are around 20-26 feet in length. They cannot fit many people at one time on their boat and the

boats don't offer much protection from the weather. Lastly, if any fish were to be caught on the tour, the openings and closures for each species would have to correspond with the times at which tours are offered. One harvester suggested that depending on the season, there may not be any fish to catch. Tourists could also potentially be taken out as a part of the recreational cod fishery, although this season is relatively short at about three weeks in the summer.

As well as boat tours, a tour of local fish processing plants was raised by one tourism operator as a possible experiential attraction. A local fish processing plant wasn't sure if the processing for most species would be appealing for people to see. However, they did suggest that the processing of lump roe, which is laid out on a screen and then put into a barrel with brine, could make for an attractive tour and demonstration.

In addition to tours, fishing demonstrations were mentioned as a potential experiential attraction. One tourism operator suggested that harvesters could do demonstrations on local wharves about how to clean, fillet, and prepare fish so that people "can learn how it's done." Many harvesters maintain their own fishing infrastructure, such as fish stores and cabins that could be used as potential demonstration sites. Parks Canada maintains a fishing exhibit at Broom Point, featuring the old fishing premises used by the Mudge family. Local interpreters offer tours of the site.

Lastly, some tourism operators suggested that fresh fish markets at which customers could engage directly with harvesters could be important experiential attractions. One tourism operator noted that the aquarium at the Bonne Bay Marine Station is a good attraction and that a small fish market to accompany the aquarium could be a further draw.

An overall challenge to implementing experiential fisheries-tourism activities is developing activities to fit with the regular fishing season. Fish harvesters are already busy for most of the summer and fall with commercial fishing. A way around this problem was proposed by a pilot project in the Gaspé region of



Darrell Burden's fish store in Martin's Point.

Quebec that involves lobster harvesters taking tourists on a fishing boat to catch some seafood. Harvesters will place a certain number of lobsters in a pound during their regular season and release these when they begin the tourism project. They will then be allowed to catch the same number of lobsters in the tourism fishery as they release from the pound.²

To encourage further thinking about experiential fisheries-tourism activities that could be developed in the Bonne Bay area, some examples of such activities that have been implemented in other places are described in Chapter Three.

Recommendations for fisheries and tourism development

This chapter has identified potential opportunities and challenges for the fisheries and tourism sectors to work together more intensively to increase consumption of local seafood among tourists and to provide experiential fisheries activities as a way of promoting both sectors.

Based on the findings from the project a set of recommendations for fisheries and tourism development in the Bonne Bay area were identified. These recommendations, presented below, are organized around the following themes: seafood and culinary tourism and fisheries and experiential tourism.

Seafood and culinary tourism

- There is a need to develop a more consistent supply of fresh, local, and traceable seafood for restaurants.
- Emerging initiatives, such as the *ThisFish* pilot project, may improve traceability of seafood to the tourism sector while providing branding advantages to harvesters and other seafood business.
- There is a large fish plant in the area that has in place strong working relationships with restaurant owners and fish harvesters. These connections could be expanded through experiments with new types of marketing arrangements among harvesters, processors, and restaurant buyers.
- As catches for some commercial species decline there is an opportunity to develop specialty seafood products that can be harvested or processed in small

² For more details on this project see the CURRA website at:
http://www.curra.ca/documents/links_Gaspe_fisheries-tourism_pilot_project_presentation.pdf

quantities and sold to the tourism sector. Fish harvesters, processors, and tourism operators should be brought together to discuss currently underutilized species, the capacity for value-added processing, and what products may sell well to restaurants and tourists.

- Direct marketing to restaurants, as well as local people, could allow harvesters to capture more value for a portion of their catch and could have benefits for the restaurant sector. Direct marketing should be seen as one additional strategy, in combination with other initiatives such as value-added products and experiential tourism, to diversify economic options for fish harvesters.
- There is a need for more research to look at the supply and demand for seafood in local markets (including what types of seafood tourists and residents prefer and how much they would pay) along with types and volumes of species being harvested. This could be used to inform the development of any new local seafood markets or products.

Fisheries and experiential tourism:

- Experiential tourism activities need to be developed in a form that achieves the best fit between the tourism and fishing seasons. Experiential tourism activities should be seen as an additional strategy for diversifying economic opportunities for fishing enterprises but their success may require changing some fisheries regulations
- There are examples of experiential fisheries-tourism activities from other places that can be used as starting points for developing a pilot project in this region. Some examples are provided in Chapter Three of this report.
- In developing experiential activities, identifying and working with relevant regulatory authorities, such as the Department of Fisheries and Oceans, Transport Canada, and the provincial Department of Fisheries and Aquaculture, will be key to addressing challenges related to infrastructure, insurance, safety, fishing seasons and direct sale of fish.
- A starting point for identifying experiential attractions could be to develop an inventory of existing fishing infrastructure in the region. For example, many harvesters already maintain fishing stores, stages and cabins which could serve as sites for experiential activities such as fishing tours or fish preparation demonstrations and meals without a lot of added capital investment.

- Skills training opportunities for fish harvesters in areas such as communications and product promotion could provide new knowledge to work with their professional fishing know-how.
- Organisational capacity to undertake culinary tourism and experiential tourism initiatives could be strengthened through the establishment of a body such as a cooperative that would bring together interested stakeholders including fish harvesters and tourism operators.

CHAPTER TWO: FISHERIES AND FOOD SECURITY

Food security- an introduction

While seafood is an important culinary attraction for tourists, fisheries are also an important part of the local food system for people living in the Bonne Bay area. Fish, and in particular cod, is a traditional food source in Newfoundland and Labrador. By contributing to local diets and livelihoods, fisheries are an important part of the food security of communities in this region. This chapter presents the findings from a seafood survey distributed to households in the Bonne Bay area in the spring of 2011 along with some recommendations for strengthening the contribution of fisheries to food security and local food systems.

Food security is a complex concept that has been understood differently over time and can be looked at from the individual, household, community, and global levels. The United Nations Food and Agriculture Organization's definition of food security is the most commonly used definition. It describes food security as existing “when all people, at all times, have physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life” (FAO, 1996). More recent approaches to food security focus on local-level participation and a community's ability to make decisions about food policy and practice. Over the last decade the idea of community food security has gained momentum. Community food security emphasizes long-term, broad-based approaches and the development of local or community-based food systems to meet food security goals (Hamm & Bellows, 2003; McCullum, 2005; Dietitians of Canada, 2007; Winne, 2003). Community food security is generally understood as a “condition in which all community residents obtain a safe, culturally appropriate, nutritionally sound diet through an economically and environmentally sustainable food system that maximizes community self-reliance, social justice, and democratic decision making” (Hamm and Bellows, 2003, p. 37).

Newfoundland is an island in a remote province with a somewhat harsh climate. In this context, it can be challenging to ensure a secure and reliable supply of food. Studies show that rural and remote regions usually have higher food prices, poorer availability of fresh fruits and vegetables, and poorer accessibility to food stores especially for households without a vehicle (e.g. Lawn & Hill, 1998; Nova Scotia Participatory Food

Security Projects, 2009; Pouliot & Hamelin, 2009; Travers et al., 1997). A food costing study led by the Dietitians of Newfoundland and Labrador in 2003 found that many families with low incomes would be unable to buy sufficient, nutritious food (Ewtushik, 2003). Newfoundland and Labrador also has the highest per capita food bank use in the country (Food Banks Canada, 2009), along with the highest rates of some diet-related chronic diseases including diabetes and obesity (Statistics Canada, 2006; Tjepkema, 2008). At the same time many small food producers, including fishers and farmers, are struggling to maintain economically viable operations in the province.

The role of fisheries in food security

Fisheries can contribute directly to food security through the supply of fish itself for subsistence and they can contribute indirectly by generating earnings that allow for the purchase of food (FAO, 2005). Globally, fish is an important food source. It provides about 20% of the protein intake for over a billion people and is an important protein source for people in many other countries (FAO, 2009). About



Split and dried cod.

half of all the fish caught for human consumption comes from small-scale fisheries, underlying their importance for the world fish supply (FAO, 2005). Unlike catches from industrial fisheries which tend to be used more for animal feed and other products and not for direct human consumption, nearly all the fish from small-scale fisheries is used for food (FAO, 2005). Around the world, total employment in the fishing sector, including fishing dependents is close to half a billion people (FAO, 2009). Most research about food security and fisheries has focused on developing nations, which have the greatest number of the world's small-scale fishers. Many of these small-scale fishers live in communities characterized by poverty and food insecurity. Research in these countries has shown that small-scale fisheries play a vital role in food security and livelihoods.

Within Canada and other developed countries, relatively little food security research has focused on fisheries. Instead, most food security literature has emphasized the role of small-scale family farms in local economies and sustainable food systems (e.g. see Feenstra, 2002). In Canada's coastal regions, fisheries are directly important to food security as a local food source and as a source of employment in fish harvesting and



processing. Traditionally in this province, fisheries were a part of an annual round of activities in coastal communities that combined fishing for sale and subsistence with gardening, hunting, and woodcutting. Beyond coastal regions, seafood is an important part of the diet of Canadians. Fish and shellfish have received attention in recent years as an important part of a healthy diet because they provide high-quality protein, vitamins, and essential

fatty acids (Mahaffey, Clickner, & Jeffries, 2008). The Canada Food Guide encourages Canadians to eat two food guide servings of fish each week (Health Canada, 2008). Canadians are estimated to eat 23 kilograms of seafood per person each year (Fisheries and Oceans Canada, 2006). In comparison, Canadians eat only 16 kg of bovine meat each year although pork and chicken/turkey rank higher at 27 kilograms and 34 kilograms respectively (Fisheries and Oceans Canada, 2006). While per capita seafood consumption in Canada is not as high as in some other fish-eating nations such as Iceland, where per capita consumption of seafood is among the highest in the world at approximately 91kgs, it is still not insignificant. It is difficult to know if per capita seafood consumption in Newfoundland and Labrador differs from the national average because provincial data on per capita seafood consumption are not collected (Stephanie Lewis, personal communication, August 4, 2011).

Recently, fisheries have received some attention within the province and the country for the contributions they make to food security. The *Eating Healthier in Newfoundland and Labrador: Provincial food and nutrition framework and action plan* promotes the development and marketing of local products from fisheries and agriculture that support healthy eating practices. The plan recognizes that the availability of safe, quality food is imperative to healthy eating and food security and that this depends on developing sustainable food and fishing systems (Government of Newfoundland and Labrador, 2006). The development of sustainable fishing systems and the rebuilding of fish chains from ocean to plate is a critical part of maintaining fisheries contributions to food (Khan & Neis, 2010). At the national level, the recently released *Resetting the Table: A people's food policy for Canada* emphasizes the role of Canadian fisheries in providing healthy and sustainable seafood for Canadians and the importance of rebuilding local markets for seafood (People's Food Policy Project, 2011).

Seafood and food security in Bonne Bay



Trout River wharf.

To start looking at the potential impact of fisheries on food security and local diets in the Bonne Bay area, a seafood consumption survey was distributed to households as a part of this project. These results show that local seafood is an important part of the diet for households in this area. While this project is focused on local seafood consumption particularly in the context of food security, nearly 90% of seafood from Newfoundland and Labrador is exported to other countries and the remaining 10% of the seafood is sold within Canada (Stephanie Lewis, personal communication, August 04 2011).

The United States and China were the province's largest seafood markets in 2010 (Newfoundland and Labrador Department of Fisheries and Aquaculture, 2011). Long food supply chains such as these are known to decrease the proportion of value in food production captured by primary food producers (Marsden, Banks, & Bristow, 2000). One study from Nova Scotia found that direct marketing of local seafood may provide benefits for fish harvesters, including greater control over the marketing of seafood and higher prices (Anchor, 2010). According to the provincial Department of Fisheries and Aquaculture, of the approximately 10% of Newfoundland and Labrador seafood that is sold within Canada, there are no data about how much, or what types, of this seafood is sold within the province (Stephanie Lewis, personal communication, August 04 2011).

Chapter One of this report looked at some opportunities and challenges for new types of seafood marketing, including new forms of collaboration among harvesters, processors, and tourism businesses, that could improve the availability of fresh and local seafood to the tourism sector. These ideas should also be considered in the context of strengthening fisheries' role within local food systems and improving availability of seafood for people living in the Bonne Bay area.

A seafood survey in the Bonne Bay area

Methods

In April 2011, a seafood survey was placed in the postal station mailboxes of households in the Bonne Bay area, including the towns of St. Paul's, Rocky Harbour, Norris Point, Woody Point, Glenburnie/Birchy Head/Shoal Brook and Trout River. The survey consisted of five sections: frequency and types of seafood eaten; ways of eating seafood; sources of seafood; seafood in the community; and demographics. It was an anonymous survey to be completed on by the household member responsible for shopping and cooking. See Appendix A for a copy of the survey.

The response rate was 27% (307 surveys). Surveys were distributed by Canada Post into all post office boxes and were returned directly to the CURRA office in St John's in a self-addressed stamped envelope that was provided. Households that had asked Canada Post to not receive flyers in their mailboxes would not have received the survey.

A flyer advertising the survey was distributed to post office boxes approximately two weeks before the survey was sent out. The survey was also promoted in the *Western Shorefast* CURRA newsletter distributed electronically and in some hard copies by the CURRA Community Coordinator, Anita Best, from the Bonne Bay Marine Station.

Results

The following sections present the main results of the survey. An SPSS statistics program was used for data analysis. A summary of key findings and recommendations for increasing fisheries contributions to food security in the Bonne Bay area are provided at the end of the chapter. Unless otherwise noted, the percentages reported below represent valid percents, which are based on the number of valid responses to each question while excluding any households that didn't answer the question.

Who responded to the survey

Table 1 summarizes the characteristics of households that responded to the survey. These characteristics are compared to those of the larger population in the Bonne Bay area using 2005 census data accessed through Community Accounts.

Sex

More females responded on behalf of the household than men. In the region's population there are a nearly equal number of men and women. The higher number of female respondents is likely because the survey was supposed to be completed by the person in the household responsible for shopping and cooking, tasks that often are completed by women.

Age

Over 50% of the respondents who completed the survey on behalf of the household were of the age 55 or above, with fewer young respondents. This is consistent with census data which show more people in the 40-44, 45-49, and 50-54 age groups compared to other categories.

Education

Respondents who filled out the survey on behalf of the household were asked to indicate their highest level of education. 71% had a high school diploma or higher while the remaining 29% had less than high school. In comparison, in 2005 only 53% of people in the region had a high school education or more and 46% had less than a high school education. The greater number of survey respondents with a high school education or more may indicate that the survey was biased towards those with a higher level of education.

Income

The highest percentage of households (16%), had annual incomes ranging from \$30-39, 999 thousand. This is consistent with the median income across all family types in this region in 2005 of \$31, 900.

Occupation

The rate of employment in the fishing and tourism sectors among the surveyed households was similar to that seen in the larger population. There was 17% employment in the fishing sector in 2005 compared to 13% among the households surveyed. There is no tourism occupation category from the census, so sales and service was used as the closest category for comparison purposes. 27% of the population

worked in this sector in 2005, which is the same percentage observed in the households surveyed.

Household size

Over half (54%) of the households surveyed had two members. This is similar to the provincial average of 2.7 persons per household in 2001 (Statistics Canada, 2001). Specific census data on number of persons per household in the Bonne Bay are not available. 75% of surveyed households did not have children.

Table 1: Household characteristics

Household characteristics		Percentage
Sex*	Male	36
	Female	6
Age*	21 and under	0
	22-34	6
	35-44	16
	45-54	24
	55-64	30
	65 and over	24
Education*	Less than high school	10
	Some high school	19
	High school diploma	22
	Some college	3
	College diploma	7
	Trade certificate or diploma	16
	Some university	7
	Bachelor degree	12
Graduate degree	4	
Household gross annual income	Under \$10 000	6
	\$10 – 19 999	15

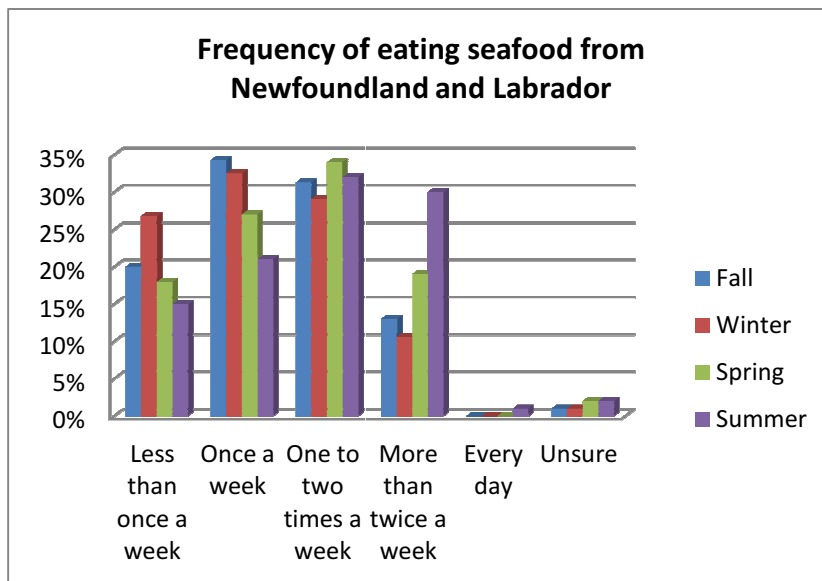
	\$ 20 – 29 999	15
	\$30 -39 999	16
	\$40 – 49 999	13
	\$50 - \$59 999	9
	\$60 - \$69 999	8
	Over \$75 000	8
	Over \$100 000	8
Household member employed in tourism industry	Yes	27
	No	73
Household member employed in fishing industry	Yes	13
	No	87
Children in household	Yes	25
	No	75
Household size	1	13
	2	54
	3	17
	4	11
	5 or 6	5

*These data were collected only for the person who responded on behalf of the household and not for all household members.

Frequency of eating local and non-local seafood

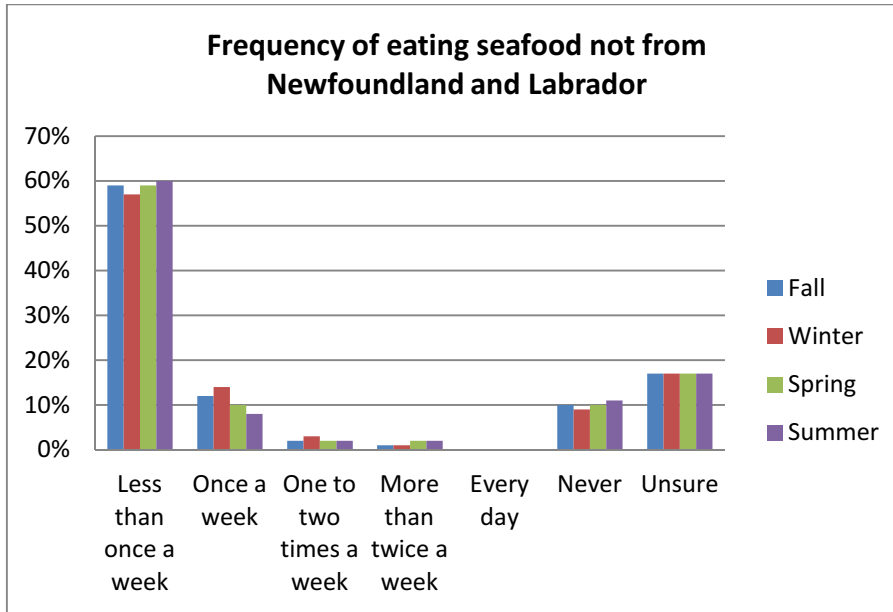
The survey asked households how frequently they eat seafood from Newfoundland and Labrador and how frequently they eat seafood not from Newfoundland and Labrador at different times of the year. Results indicate very different trends in the frequency of consumption of local (Newfoundland and Labrador seafood) and non-local (non-Newfoundland and Labrador) seafood. Overall, households reported eating seafood from Newfoundland and Labrador more often than seafood not from the province. Further, frequency of eating seafood from Newfoundland and Labrador varies across seasons, while the frequency of eating seafood not from Newfoundland and Labrador changes little across seasons.

Households reported eating local seafood most often in the summer, followed by the spring, fall and winter. In the summer, 31% of households said they ate seafood one to two times a week and a further 30% ate seafood more than twice a week. This compares to 35% of households that ate seafood one to two times a week in the spring and only 18% that ate it more than twice a week. Approximately 30% of households ate seafood one to two times a week during the fall and winter, but only 13% of households in the fall and 11% in the winter ate seafood more than twice a week. More households ate seafood once a week in the fall and winter (approximately 33%) compared to the spring (26%) and summer (21%). The higher frequency of seafood consumption in the summer corresponds with the season for most local commercial and recreational fisheries.



In comparison to local seafood, the frequency of eating non-local seafood changes little across seasons. 56% to 59% of households reported eating seafood not from Newfoundland and Labrador less than once a week during all seasons. The frequency of eating non-local seafood once a week ranges from only 8% of households in the summer to slightly higher at 14% in the winter. Some households also indicated that they never eat seafood from outside the province. 'Never' was not one of the original response categories on the survey, but approximately 10% of respondents wrote in 'never' on their survey when answering the question about eating non-local seafood.

The minimal change in frequency of consumption of non-local seafood at different times of the year suggests that households are not eating more imported seafood in the winter to make up for the lack of fresh local seafood. Eating the same amount of non-local seafood during all seasons may also reflect the year-round availability of imported seafood in supermarkets.³



Factors influencing frequency of local seafood consumption

We examined the influence of household characteristics (e.g. income, household size) as well as household participation in preserving seafood on the frequency of eating local seafood. Chi square tests were used to investigate these relationships.^{4 5}

³ The percentages for seafood consumption are based on the valid responses to each question, while excluding any missing data (e.g. respondents that didn't answer the question). There are more missing data for frequency of eating non-local seafood (approximately 14% missing data) than frequency of eating local seafood (approximately 2% missing data). This could be due to uncertainty on the part of respondents about whether or not some types of seafood they are eating are from outside the province. The percentages for consumption of non-local seafood are thus based on a smaller number of responses than the percentages for consumption of local seafood.

⁴ For the purposes of these tests, the response category "unsure" was excluded for frequency of local seafood consumption. There were very few respondents in that category so the removal likely had minimal impact on the outcome of the results.

⁵ Some analyses did not meet the assumptions of the chi square test, and thus less weight can be attributed to these results. These are marked with an asterick *.

For income, results show no significant relationship between gross annual household income and frequency of eating local seafood. In other words, income is not a good indicator of local seafood consumption. In the context of food security, this is a positive finding because it suggests equitable access to local seafood across income levels.

For other household characteristics, including household size and having a household member employed in the fishing industry*, results similarly indicate no significant association between these characteristics and how often a household eats seafood. However, data collected about sources of seafood (presented in more detail below) indicate that friends and family are very important. This suggests that networks of family and friends are important to accessing seafood, but having a family member in the immediate household who works in the fishing industry does not by itself influence how often seafood is eaten. Access to fish through family networks could be jeopardized if many local harvesters leave the industry.

Data about sex, age and educational level were only collected for the person who completed the survey on behalf of the household. We tested for the effect of the respondent's age, sex and educational level on the frequency of household seafood consumption, hypothesizing that the characteristics of the respondent, who was supposed to be the person responsible for household shopping and cooking, may influence household consumption patterns as a whole. Results show no consistent significant relationship among education*, sex, and age* of the respondent and frequency of household seafood consumption throughout the year. However, this does not mean that age, sex, and educational level do not have any influence on seafood consumption. Our analysis of the influence of these factors is limited by only having these demographic data for the household respondent and not all household members.

Lastly, we examined the interaction between household participation in preserving seafood (including salting, freezing, pickling, and other activities such as bottling) and frequency of eating local seafood. Results show that salting fish is significantly and positively associated with frequency of seafood consumption during all seasons: fall, $c^2(3, N = 295) = 8.17, p = .04$, winter, $c^2(3, N = 297) = 16.04, p = .04$, spring, $(3, N = 289) = 9.73, p = .02$, and summer, $c^2(4, N = 294) = 12.34, p = .02$. The positive relationship between salting fish and frequency of consumption may be because these households have more fish available to eat year-round. Alternatively, salting fish may be a positive

indicator of the importance a household places on eating seafood more generally, which could be comprised of various forms including salted. There is no consistent relationship between freezing*, pickling, and other types of activities such as bottling, and frequency of seafood consumption across all seasons.

Types of seafood being eaten and changes over time

In addition to overall frequency of seafood consumption, the survey asked about changes in how often different types of seafood are being eaten. For a list of 15 types of Newfoundland and Labrador seafood, households were asked to indicate if they are eating them 'often', 'now and then' or 'never' for the present day and five years ago. Table 2 shows the percentage of households that ate each type of seafood often, now and then, and never for the two time periods. The final column in this table shows the percent change in consumption for each species between now and five years ago. For all species, the change in consumption observed between now and five years ago is statistically significant (Chi2 significant at $p < 0.05$).

Three clear trends in seafood consumption emerge over this five year timeframe. First, households indicated eating nearly all types of seafood less often today than five years ago. For example, 86% of households reported eating cod often five years ago compared to 81% eating it often now. This is a 5% decline in the percentage of households that ate cod often between five years ago and now (denoted by a -5 in the percent change column of the chart). This trend holds for all the major fish and shellfish species including capelin, halibut, herring, mackerel, salmon, smelts, squid, trout, turbot as well as crab and lobster. Capelin consumption has the greatest change between now and five years ago. Only 8% of households said they eat it often now compared to 20% eating it often five years ago. The only species that do not follow this trend are scallops and shrimp, which households reported eating more often now than five years ago. Results from a separate question about how households' source seafood (see Table 3) show that shrimp and scallops are being sourced less from friends and family and more from the supermarket and fish plant in comparison to other types of seafood. The increase in consumption for shrimp and scallops may be related to how they are being sourced in comparison to other species.

Secondly, as households eat most types of seafood less often today, more reported eating seafood "now and then" in comparison to five years ago. For example, 19% of

households said they currently eat cod now and then compared to 14% eating it now and then five years ago. This upward trend in eating seafood now and then holds for all the major fish and shellfish species, again with the exception of scallops and shrimp and the addition of catfish. For salmon there is no change.

Lastly, the number of households never eating seafood is fairly consistent for most types of seafood between now and five years ago. Capelin shows the greatest change with 21% of households never eating capelin now compared to 13% of households five years ago.

Table 2: Types of seafood eaten over time *

Type of Seafood	I now use (%)			5 years ago I used (%)			Percent change from 5 years ago to now		
	Often	Now and then	Never	Often	Now and then	Never	Often	Now and then	Never
Capelin	7	72	21	22	65	13	-15	+7	+8
Catfish**	0	12	88	1	14	85	-1	-2	+3
Cod**	81	19	0	86	14	0	-5	+5	0
Crab	17	75	12	24	66	10	-7	+9	+2
Halibut	27	63	10	31	61	8	-4	+2	+2
Herring	7	57	35	14	55	31	-7	+2	+4
Lobster**	27	69	4	32	64	4	-5	+5	0
Mackerel**	9	45	45	11	44	44	-2	+1	+1
Salmon**	42	55	4	43	55	2	-1	0	+2
Shrimp	31	57	12	24	62	14	+7	-5	-2
Scallops	21	58	21	15	64	25	+6	-6	-4
Smelts**	6	36	58	8	35	56	-2	+1	+2
Squid**	3	43	54	7	41	52	-4	+2	+2
Trout	17	71	12	21	67	13	-4	+4	-1
Turbot	10	48	42	16	43	41	-6	+5	+1

* Data were only included for households that answered both parts of the question (i.e. now and five years ago). Percentages may not total 100% because of rounding to the nearest percentage point. For all species, the change in consumption observed between now and five years ago was chi2 significant at $p < 0.05$.

**For these species, assumptions for the chi square test were not met, thus reliability of outcomes is weakened.

Various factors could be contributing to the decline in consumption observed for most types of seafood. This includes lower quotas for some species, a decreasing number of commercial fish harvesters, and low catches in the recreational cod fishery. Households involved in commercial harvesting can access some fish for food from their landings. As

there are fewer commercial fish harvesters fewer families will be able to directly access fish for subsistence. Further, the West Coast/Northern Peninsula region had the lowest rate of participation in the recreational cod fishery in 2007 compared to other parts of the province along with the lowest number of cod caught on average (Fisheries and Oceans Canada, 2008).

Favourite types of seafood

Households reported eating many different types of seafood as shown in Table 2. The survey also asked households to list their five favourite types of Newfoundland and Labrador seafood. Cod was listed as a favourite type of seafood by 97% of households, followed by lobster (76.5%), salmon (74.2%), halibut (56.5%), and crab (49.7%). The three types of seafood ranked most highly- cod, lobster, and salmon- are also eaten the most often compared to other types of seafood (see Table 2).

Sources of local seafood

In addition to the frequency and types of seafood being eaten, the survey collected information about how households are sourcing local seafood. The survey had a chart listing 15 different types of Newfoundland and Labrador seafood alongside six sources for getting seafood. Households were asked to indicate for each type of seafood they eat all the sources from which they get it. Table 3 shows the percentage of households using each of these sources for 15 different types of seafood. The results show that friends/family and local fish plants are the most common sources of seafood. For all types of seafood with the exception of shrimp, either friends/family or the local fish plant is the most frequent source. The supermarket is the most common source for shrimp and also is an important source for salmon and scallops. The recreational fishery is important for some fish species, particularly capelin, cod, mackerel, salmon, smelts and trout.

Table 3: Sources of local seafood*

Type of Seafood	Sources of Seafood (%)					
	Friends/ family members	Local fish plant	Local grocery store	Super-market (e.g. Dominion)	Super-store (e.g. Walmart)	Other/own catch/ recreational fishery
Capelin	53	14	3	3	0	28
Catfish	5	7	1	1	0	4
Cod	58	56	15	17	1	44
Crab	41	53	4	5	0	11
Halibut	36	50	4	10	0	9
Herring	46	18	3	3	0	10
Lobster	41	70	5	5	0	13
Mackerel	29	7	1	3	1	22
Salmon	21	49	20	38	2	18
Shrimp	15	32	16	37	7	3
Scallops	17	42	11	24	2	4
Smelts	31	4	1	1	0	16
Squid	26	7	1	6	0	10
Trout	46	7	2	8	1	39
Turbot	26	24	8	7	1	6
Other	4	2	0	1	0	3

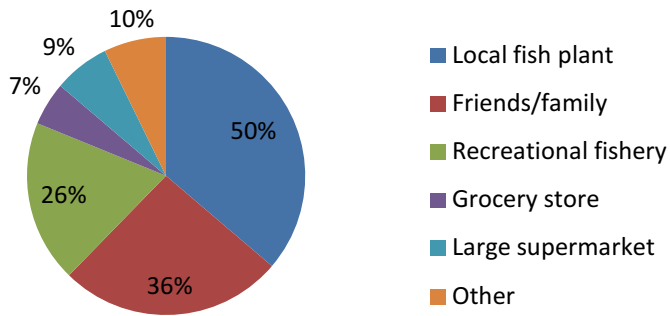
*The numbers shown are actual percents (including missing data) based on a total of 307 respondents for each type of seafood. Percentages may total greater than 100% for some types of seafood because respondents could select multiple sources.

Main and preferred sources

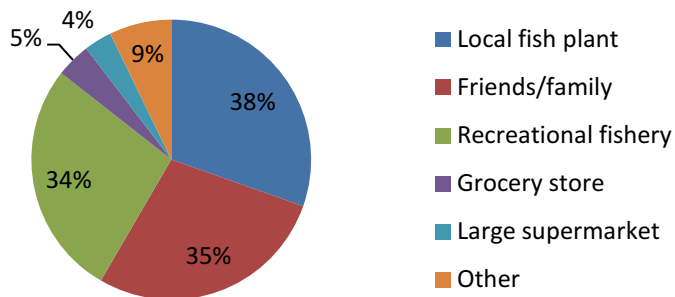
Households were also asked to choose their overall main source and their preferred source of Newfoundland and Labrador seafood. The results add up to more than 100% because many households selected more than one option for each.

The main sources of Newfoundland and Labrador seafood are local fish plants (50%), followed by friends/family (36%), recreational fishery (26%), other (10%), large supermarkets (9%), and grocery stores (7%). The preferred sources for seafood follow a similar trend, with local fish plants as the most preferred source (38%), followed by friends/family (35%), recreational fishery (34%), grocery stores (5%), large supermarkets (4%), and other sources (9%).

Main sources for Newfoundland and Labrador Seafood



Preferred sources for Newfoundland and Labrador Seafood



There are two key differences between main and preferred sources for seafood. First, the recreational fishery was ranked higher as a preferred source as compared to a main source of seafood. Secondly, while grocery stores and supermarkets ranked low as a main source of seafood they ranked even lower as a preferred source.

Ways of eating seafood

Meals

The results show that seafood is most likely to be eaten for supper (90%) followed by lunch (35%) and breakfast (1%).

Children and eating seafood

Of the 25% of households that have children, 55% said their children eat the same amount of seafood as the adults in the household. This is followed by 35% of children who eat less seafood, and only 9% who eat more.

Forms of seafood being eaten

Nearly all households (98.4%) said fresh was the preferred form of fish to eat. This is followed by frozen (76%), salted (70%), pickled (33%), and canned (25%). Households were also asked about other parts of the fish they eat in addition to the fillets. Tongues are eaten most often (91%), followed by cheeks (77%), heads (45%), and britches (43%).

Cooking and preserving seafood

Nearly all households (98%) chose pan-fried as a preferred cooking method. This is followed by fish and brewis (73%), baked (63%), au gratin (43%), deep fried (47%), poached (24%), barbecued (39%), soup/chowder (33%), smoked (20%), and other (14%).

The most common method for preserving seafood is freezing (95%) followed by salting (70%), pickling (38%), and other methods such as bottling (20%). Traditionally, fish was salted to keep through the winter because refrigeration was not available. Despite the availability of refrigeration, 70% of households reported continuing this practice today. Salting fish is also positively and significantly associated with frequency of eating local seafood across all seasons.

Eating at restaurants

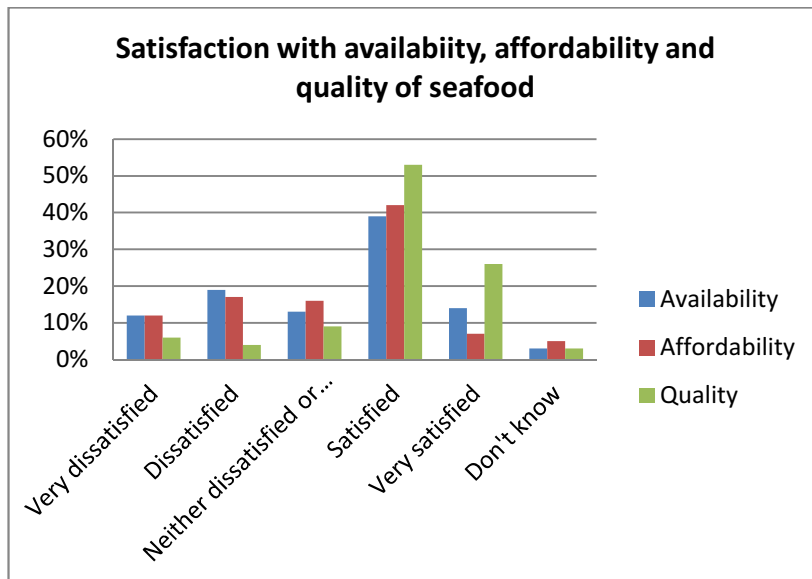
50% of the surveyed households said they eat at a restaurant less than once a month. This is followed by eating out two to three times a month (21%), once a month (20%), and fewer households eating out once a week (6%) or more than once a week (1%). The survey also asked how likely it would be for a member of the household to order seafood when eating out. 35% of households said this was very likely, followed by likely (32%), not likely (22%), and never (11%).

Seafood in the community

Households were asked to indicate how satisfied they are with the availability, affordability and quality of seafood in their community. Results are fairly similar for satisfaction with availability and affordability while satisfaction with seafood quality ranks higher.

Approximately 40% of households said they are satisfied in the areas of availability and affordability and a further 30% were dissatisfied or very dissatisfied. 13% of households are neither satisfied nor dissatisfied with the availability of seafood while 16% are neither satisfied nor dissatisfied with affordability. The very satisfied category ranks lower in both cases, with only 14% of households very satisfied with availability and even fewer at 7% very satisfied with affordability.

Quality of seafood rates higher than availability and affordability. 52% of households reported being satisfied and a further 26% are very satisfied with the quality of seafood in their community. Only 9% said they are dissatisfied or very dissatisfied.



Summary of key findings

- Households reported eating local seafood much more often than seafood from outside the province.
- Frequency of local seafood consumption varies across seasons, and it is eaten most often in the summer.
- Household characteristics including gross annual income, size, and having a member employed in the fishing sector are not significantly related to the frequency of eating local seafood.
- Households that salt fish are likely to eat more seafood throughout the year.
- The five favourite types of seafood reported by households are cod, lobster, salmon, halibut, and crab.
- Most types of seafood are being consumed less often today than five years ago, including capelin, cod, halibut, herring, mackerel, salmon, smelts, trout, turbot, crab and lobster. Various factors could be contributing to this downward trend in consumption, such as lower quotas for some species, decreasing number of commercial fish harvesters, and low catches in the recreational cod fishery.
- Local fish plants and networks of friends and family are the two main sources for local seafood. These are also the two most preferred sources for local seafood.
- Nearly 70% of households are likely or very likely to order seafood when eating out at a restaurant.
- Seafood is mainly eaten at supper time.
- Pan-fried is the preferred method for cooking seafood (98%). This is followed by fish and brewis (73%), baked (63%), au gratin (43%), and deep fried (47%).
- Nearly all households (98%) indicated that fresh is their preferred form of fish to eat followed by frozen (76%) and salted (70%).
- Freezing is a very common method of preserving seafood (95%), followed by salting fish (70%).
- Most children (55%) eat the same amount of seafood as the adults in their household. 35% of children eat less seafood and only 9% of children eat more seafood than the adults in their household.
- Only 50% of households said they are satisfied or very satisfied with the availability and affordability of seafood in their community. Quality of seafood ranks more highly, with nearly 80% of households satisfied or very satisfied with the quality of seafood in their community.

Recommendations for strengthening fisheries contributions to food security in the Bonne Bay area

- The strong preference for local seafood suggests there may be opportunities to enhance local sales and markets for seafood in the region.
- The enhanced integration of fisheries into local food systems may help sustain fishing enterprises by diversifying economic opportunities and lessening dependence on distant export markets. Fish harvesters in other parts of Canada are experimenting with new ways of marketing seafood, some examples of which are provided in Chapter Three.
- Chapter One looked at some opportunities and challenges for new types of seafood marketing, and new forms of collaboration among harvesters, processors, and tourism businesses, to improve the availability of fresh and local seafood to the tourism sector. These marketing ideas should similarly be considered in the context of strengthening fisheries role within local food systems and improving availability of seafood for people living in the Bonne Bay area.
- To inform the development of any new local markets more specific research should look at the supply and demand for seafood in local markets, including how much residents are able and willing to pay for seafood, along with the types and volumes of species being harvested in the area.
- There is a need for further research to look into the factors contributing to the decline in seafood consumption over the past five years that this survey has indicated along with recommendations for addressing this decline.
- There is a need for more cross-sectoral policy making in which health, nutrition, and food security considerations can be integrated into fisheries management decisions.

The findings from this survey will be used in Kristen Lowitt's PhD thesis which will also lend more insights into the survey results. As part of her PhD research, Kristen is undertaking interviews with households in the Bonne Bay area about their food provisioning practices. This work will further contribute to an understanding about the importance of seafood in local diets both historically and in the present day. It will also examine in greater depth some of the factors influencing changes in seafood consumption in the region and look at household seafood consumption within a broader food provisioning context.

CHAPTER THREE: FISHERIES, TOURISM AND LOCAL FOOD SYSTEM INITIATIVES FROM OTHER PLACES

Seafood and fisheries play an important role in the tourism sector and in the food systems of local communities in the Bonne Bay area. This project has looked at both tourism and local food systems as ways of increasing consumption of local seafood in this region, enhancing the incomes of those in each sector and the longer term resiliency of both sectors. The enhanced integration of fisheries into the tourism sector and local food system may diversify seafood markets for the fishing sector and potentially provide a higher value for locally harvested seafood. The experiential aspect of fisheries may provide a further avenue for fish harvesters to diversify their fishing enterprises.

This chapter provides examples of projects from other places related to fisheries, tourism, and local food systems. For simplicity of organization, these examples have been divided into the categories of culinary tourism, alternative ways of marketing seafood, and experiential tourism. However, these categories can overlap. For example, a fresh fish market may serve as an alternative way for harvesters to market seafood at the same time it can be a venue for culinary tourism.

This section begins with examples of culinary tourism initiatives from other places that have successfully promoted local food attractions to tourists. Culinary tourism initiatives that involve seafood are highlighted. Following this is a look at some alternative models of marketing seafood that may provide harvesters with a higher price for a part of their catch while allowing customers, including local people, restaurants and tourists, access to fresh local seafood. Lastly, examples of experiential tourism activities involving fisheries are presented, including boat tours, seafood festivals, and heritage attractions.

Culinary tourism initiatives

Food is becoming an increasingly important part of the tourism experience. Many provinces have put effort into growing their culinary tourism industry based upon local and regional specialties available in their province. In this province, a Taste of Newfoundland and Labrador program was initiated in the past by the Newfoundland and Labrador Restaurant and Food Services Association and Hospitality Newfoundland and Labrador. Taste was designed to increase the use of fresh local food products in restaurants throughout the Province (J. Angelopolous, personal communication, May 10

2011). In 2004, a study commissioned by the Department of Tourism, Culture and Recreation to come up with a provincial tourism product development strategy recommended that reinstating the Taste of Newfoundland program should be a priority (Economic Planning Group of Canada, 2004).

Two examples of current culinary tourism initiatives from other provinces in Canada are provided to encourage ideas for similar culinary tourism efforts that could be undertaken in Newfoundland and Labrador.

Taste of Nova Scotia

In the province of Nova Scotia, Taste of Nova Scotia is a province-wide, food marketing association whose members are “committed to offering the very best culinary experience Nova Scotia has to offer” (Taste of Nova Scotia, 2010a, About Us).

Taste of Nova Scotia has two main membership categories: producers/processors and restaurants. All members are listed on the website and featured in the annual Taste of Nova Scotia Culinary Experience Guide. Members must meet various qualifications to join the association, including criteria around local product sourcing and local product selections (Taste of Nova Scotia, 2010b). Taste of Nova Scotia’s most recent culinary tourism program is called ‘Adventures in Taste,’ with adventures available in the categories of restaurants, wine and breweries, land and sea, farmers’ markets, specialty food shops, festival and events, tours, and culinary vacation packages. The program is designed to showcase “unique and memorable culinary and wine tourism experiences throughout the province” (Tastes of Nova Scotia, 2010c, Adventures).

The Adventures in Taste website (<http://adventuresintaste.ca>) features a searchable directory culinary adventures, some of which focus on seafood and fisheries including fishing tours, seafood retail outlets, and restaurants. Some the attractions listed on the website include tours of the Eel Lake Oyster Farm, where visitors can go on a boat ride and taste oysters; and the Aquaprime Mussel Ranch, where visitors can learn about how mussels are grown and purchase some to take home with them. Seafood retail and wholesale outlets are also listed on the site, such as the Fisherman’s International Market and Clearwater Seafoods in Halifax.

La Cuisine Regionale au Quebec

In Quebec, the association *La Cuisine Regionale au Quebec* was established to develop relationships between local food producers, chefs, restaurants, hoteliers and the Ministry of Agriculture. For a restaurant to qualify for membership to the association, 70 percent of the food they serve has to be produced in Quebec and 50 percent must be from the local region (Marcotte, 1995 as cited in Hashimoto & Telfer, 2006). Culinary tours are also being offered throughout the province. The province is separated into 20 tourist districts, and as a part of their marketing efforts, the provincial tourism organization *Bonjour Quebec* focuses on food specialties available in each region. For example, the Bas-Saint-Laurent region running along the St Lawrence River has become known for smoked fish, such as salmon, trout, sturgeon and eel (Hashimoto & Telfer, 2006).

Alternative models for marketing seafood

Over the past decade, food systems seen as 'alternative' to the conventional food system have received increasing attention. In the context of agriculture, this often focuses on farmers' markets, community-supported agriculture projects, and farmer cooperatives. Similarly, in recent years there has been more emphasis on developing alternative ways for fish harvesters to sell a portion of their catch. These alternatives to the conventional food system are often based on direct marketing in which the attention is focused on allowing harvesters to sell further up the supply chain, to customers such as retailers or individuals, rather than to a buyer or processor. This allows producers to capture more of the consumer dollar while allowing customers a more direct connection with food producers. With direct marketing, harvesters can set up individual businesses, or sell through organizations such as cooperatives or fisher associations (Temple, 2010).

Following are some examples of alternative seafood marketing models that may enhance the local availability of seafood for local people and tourism businesses, while providing economic benefits for fish harvesters. Many, although not all of these examples, are based on direct marketing. From a food security perspective price is particularly important. While fish harvesters should receive a fair price for their product, at the same time local seafood should be accessible to everyone and not only those who can pay a premium price for it. Meeting these two aims remains a challenge in many community-based food projects.

It is also important to note that these alternative models for seafood marketing are not meant to replace existing markets that harvesters already have in place for their catch, but may be seen as one strategy to enable fish harvesters to capture more value for a part of their catch.

Community supported fisheries

A community-supported fishery (CSF) is adapted from the idea of Community Supported Agriculture, in which a customer (a local restaurant, retailer, or individual) pays in advance for a share of the season's harvest. In a CSF, a customer signs up at the beginning of the season for a share of the season's catch. They pay at the beginning of the season and then receive weekly deliveries of seafood. Some CSFs have groundfish and shellfish available at different times of the year in separate subscription packages. The environmental sustainability of the fishery and an opportunity to get to know the fish harvester and where their seafood is coming from are key aspects of CSFs. CSFs are growing in number across North America. Two examples of Community Supported Fisheries include *Off the Hook* in Nova Scotia and *Port Clyde Fresh Catch*.

Off the Hook, Nova Scotia

<http://www.offthehookcsf.ca/>

Off the Hook is the first CSF in Atlantic Canada, which supports a small cooperative of ground fish fishing families in the Bay of Fundy in Nova Scotia. 'Off the Hook' Community connects a co-operative of small-scale, groundfish bottom hook and line fish harvesters from the Bay of Fundy to customers in and around Halifax. Customers subscribe at the beginning of the summer season for weekly shares of the cooperative's catch of fresh whole haddock and hake (Off the Hook Community Supported Fishery, n.d.). For the first time this season, Off the Hook is working with a local processor to provide fish fillets and not only the whole fish (Personal communication, June 26, 2011). The CSF is designed to provide fish harvesters with more income by selling further up the supply chain, more market choices, and increased ownership and livelihood control. Further, because subscribers sign on to share risks, CSFs can help protect harvester's safety by allowing them to decide when it is safe to leave the wharf. Customers gain access to fresh, high-quality, and fish that is traceable directly to the harvester (Off the Hook Community Supported Fishery, n.d.). For a more detailed description of Off the

Hook, see the CURRA report prepared by Katie Temple available at <http://www.curra.ca/reports.htm>

Midcoast Fisherman's Cooperative and Port Clyde Fresh Catch, Maine

<http://www.portclydefreshcatch.com>

Fishing has long been an important source of income for the small village of Port Clyde, Maine. The Muscongus and Penobscot bays meet at Port Clyde, providing the village with key access to many fishing grounds. Determined to preserve their heritage, community, and local resources, the village is home to the first community supported fishery in New England. Today, about a dozen groundfishing vessels make up Port Clyde's small fleet, fishing for shrimp as well as groundfish including haddock, flounder, cod, pollock, and hake (Port Clyde Fresh Catch, n.d.).

In 2006, the Midcoast Fishermen's Association was formed as a nonprofit advocacy group for area fishermen committed to restoring groundfish populations and sustaining fisheries along the coast of Maine. In 2007, the Midcoast Fisherman's Cooperative was also founded to give local fishers more control over the marketing of their seafood and they created the first community supported fishery in New England marketing their fish under the 'Port Clyde Fresh Catch' brand (Northwest Atlantic Marine Alliance, 2010). The Cooperative requires members to use lighter gear and more sustainable methods (Frazer, 2009).

Customers sign up and pay in advance for a weekly share of wild-caught fish harvested by the Cooperative, with shares running for twelve weeks from June to September. In the winter months, subscriptions for shrimp are available. The Coop also offers several Port Clyde Fresh Catch seafood products to wholesalers such as restaurateurs, caterers, and food retailers. The fish is filleted in their Port Clyde-based, HACCP-certified processing facility before it is delivered (Port Clyde Fresh Catch, n.d.). By selling fish through the community supported fishery and farmers' markets, Port Clyde fishermen can afford to harvest fewer fish because they are paid more for their harvest, thus helping the recovery of fish stocks while consumers also get a high-quality product (Frazer).

Fish buyers' clubs

Another innovative model of encouraging local sales is a buyers' club. Food buying clubs have been around for a long time, and are continuing to grow in number across Canada. A bulk buying club is a group of people with similar food preferences who come together to buy food in bulk (Food Security Network of Newfoundland and Labrador, 2011). The Food Security Network of Newfoundland and Labrador recently designed a toolkit to assist community organizations in starting a bulk buying club.

However, a buyer's club for seafood is a relatively new idea. The Fundy North Fishermen's Association in Nova Scotia is presently developing a seafood bulk buying club. In 2010, they had about 20 people but would like to expand in 2011 to have about 50 to 100 customers. The buyers club is a different from a Community Supported Fishery, in that the Fisherman's Association has a list of customers who, rather than getting a share of fish every week are sent instead a list of available fish for sale. The Fishermen's Association then delivers the fish to individual customers. They offer a variety of seafood including halibut, haddock and shad, as well as some shellfish including lobster, shrimp and scallops. Fishers receive a higher price than they would normally get from selling to a regular buyer (Temple, 2010).

Fish auctions

For decades, a fish auction in Hawaii has provided a means for independent fish harvesters to sell their catch at a fair price. As described on the Hawaii Seafood Council website (2010), United Fishing Agency Ltd., based in Hawaii, started the auction in 1952 and continues to operate it today. The United Fishing Agency was interested in coming up with a way for independent harvesters to sell their catch at a fair price rather than sell it for prices set by wholesalers. The auction uses open competitive bidding which rewards higher quality fish with higher prices. The auction helps generate fair prices for the range of fish species while in turn enabling buyers, from the wholesale, retail, and restaurant sectors, to get the freshest fish. The Honolulu Fish Auction is based on the famous Tokyo auction, where large fish are sold individually rather than by the boatload to a wholesaler. The auction also makes sure that fish harvesters are paid the same day for their catch.

Fish and farmers' markets

Farmers' markets have become common features in many communities across North America and Europe. They allow farmers to capture a higher price for their products by selling their goods directly to customers. The social interaction and relationships that form between farmers and customers is a central part of the market experience (Marsden, Banks, & Bristow, 2000; Venn et al., 2006). Fresh fish markets may provide a similar experience, such as the sea-fresh fish market launched in a small Netherlands fishing community during the 2004 tourist season. The market provides fish directly to customers, while also offering demonstrations such as how to fillet fish and mend fishing nets. The following description of this market is adapted from two short papers by Cornelia Quist (2008) of the Women in Fisheries Network of the Netherlands.

Wieringen is a fishing community in the Netherlands, with a long history of fishing. As a result of a variety of challenges- including decreasing fish stocks, limited fishing grounds, EU fishery management policies, and increasing investment costs combined with lower fish prices- the future of the local fishing community was uncertain. VinVis, the women in fisheries network made up of the wives of local fisherman, pioneered efforts to establish a local fresh fish market in which their best fresh fish could be sold for a fair price. The result was a pilot project of a Sea-Fresh Fish Market, launched in the summer of 2004. The market, run by the women volunteers, provided fish directly to customers. Various demonstrations such as how to peel shrimp, fillet and prepare fish, and mend nets were also held at the market. The success of the pilot project resulted in the Sea-Fresh Fish Market operating every Saturday throughout the year, and offering different types of fresh fish depending on the season and with prices in line with weather conditions and the size of the catch. The market has developed a permanent group of customers including exclusive restaurants, fish shops and consumers. The market has also expanded to include other local food producers offering different kinds of salt-water produce, shrimp croquettes, and organic and other regionally branded products.

Rather than establishing a separate fresh fish market, at least one fisher's cooperative has been selling at farmers' markets. The Yankee Fishermens' Cooperative in Seabrook, New Hampshire looked into establishing direct markets for their seafood in response to challenges facing the New Hampshire fishing industry, including decreasing quotas and declining incomes for commercial harvesters. In February 2009, the Co-operative attended its first farmers' market at which they sold shrimp, in five and ten pound bags,

and lobster. As a Cooperative, they already had the required federal permits to sell seafood directly. The University of New Hampshire Cooperative Extension assisted the Co-op in working with New Hampshire Fish and Game and the state Department of Health and Human Services to get any needed state permits (La Valley, 2009). Bob Campbell, General Manager of the Co-operative said the purpose of selling at the farmers' markets was "to build stronger links between the commercial fishermen and consumers, local fresh markets, and area restaurants" (cited in La Valley, 2009). The Cooperative's success in direct selling at farmers' markets lead them to establish its own website and a Community Supported Fishery for shrimp in 2010 (Chiaramida, 2010).

Fish co-operatives

With direct marketing, some fish harvesters sell through organizations such as cooperatives or fisher associations. Some examples of fish co-operatives involved in direct marketing have already been described, including the Off the Hook Community Supported Fishery in Nova Scotia and the Yankee Fishermen's Cooperative in New Hampshire. However, a good example of a fisher cooperative in Newfoundland and Labrador that is engaged in local sales is the Fogo Island Cooperative. The Fogo Island Cooperative harvests various species of seafood, and is made up of fish harvesters, plant workers and management employees. In 2008, they started a baited cod pot project in collaboration with the Shorefast Foundation, the provincial government, the Marine Institute, and the Canadian Centre for Fisheries Innovation.

The baited cod pot fishery allows harvesters from the Coop to sustainably harvest cod and receive a premium price for their catch. Cod is caught using baited pots, considered a sustainable method of harvesting because it does not damage the ocean bottom and bycatch, as well as small cod, can be released alive from the pot. It also results in a better quality product since the fish are caught alive in the pots. The cod is then locally processed into skin-on fillets, since these fillets retain their flavor better after freezing. The fillets are sold to restaurants by the Fogo Island Coop. Fish harvesters are receiving twice as much per pound for cod potted fish because the Co-op is able to get a premium price from restaurants.

Experiential fisheries-tourism projects

This final set of examples focuses on experiential fisheries-tourism activities. While seafood is an important regional food product for both tourists and local people in the

Bonne Bay area, seafood and fisheries may also contribute to experiential tourism. Examples of experiential tourism activities involving fisheries include boat tours, seafood festivals, and heritage attractions.

A focus on tourism experiences has been a prominent reoccurring theme in the tourism literature over the last several decades (Tung & Ritchie, 2011). Canada is seeing evidence of this shift towards more experiential tourism. For example, within Atlantic Canada, the province of Nova Scotia has built its tourism development and marketing around core experiences in the areas of seacoast, outdoor, culture, cuisine, heritage and urban. The province has developed a tourism brand based around old-time maritime culture, focusing on the attributes of old-world charm, new-world pulse, shaped by the sea, and the spirit of our people (Nova Scotia Department of Economic and Rural Development and Tourism, 2011). The province recently released an “Experience Nova Scotia” toolkit, a practical tool designed for tourism operators to craft new experiences for their visitors.

The government of New Brunswick has also made inroads into experiential tourism product development. In 2009, the Department of Tourism and Parks introduced the 2009-2012 Product Development Direction, which involved the development of experiential tourism products. Product Development Officers from the Department worked with tourism operators to help in the development of 110 experiential tourism experiences and get them ready for the 2010 marketing season (New Brunswick Department of Tourism and Parks, 2010). In 2010, the “Experience Collection” was launched on the official New Brunswick Tourism website maintained by the Department of Tourism and Parks. The Experience Collection features the many ways that tourists can experience New Brunswick. The Collection features experience in different categories, including celebration, call of the wild, cuisine, and culture and customs, among others (Government of New Brunswick, 2010).

Further beyond, New Zealand has been a leader in experiential tourism. The focus in New Zealand is on the quality of the visitor experience to fulfill the promise of their international marketing message which is “100% Pure New Zealand” (Economic Planning Group of Canada, 2004). Various organizations are involved in the country’s tourism efforts. This includes Tourism New Zealand, a crown corporation responsible for international marketing, and Qualmark, a quality assurance agency. Qualmark was

established in 1993, supported by leading tourism industry associations, and offers a fully integrated system for assessing all accommodation, transport, activities and services. The Qualmark website explains the quality assurance grading system to tourists, marketed as “100% Pure Assurance,” and also lists all Qualmark assured visitor service providers (Qualmark, n.d.). To assist with in-country and in-region marketing and destination management initiatives, New Zealand has also established Regional Tourism Organizations (Economic Planning Group of Canada, 2004).

While the experiential tourism sector generally has been growing in recent years, there are some specific examples of experiential tourism initiatives that involve fisheries. Some examples of such projects, both local and from around the world, are presented below. These include boat tours led by fish harvesters, seafood festivals, and heritage attractions.

Boat tours

Guided boat tours led by fisher harvesters are a type of experiential activity that allows tourists to learn about fishing directly from fish harvesters. Two boat tours are described below, including a pilot project in the Gaspé Region of Quebec in which lobster harvesters take tourists on sea outings, and an experiential artisanal fisheries tour in the Galapagos Marine Reserve. On each of these tours, visitors get to go on a fishing vessel, see various sea creatures, and learn about fish harvesting and the fishing heritage of a region.

Commercial fishing for tourism purposes in the Gaspé Region, Quebec

A new experiential fisheries tourism product is being developed with commercial fish harvesters in the Gaspé Region of Quebec (Laurin, 2010; D. Laurin, personal communication, 2011). The project entails “commercial fishing for tourism purposes,” as it is limited to fishers holding a lobster licence. The initiative is being led by the Department of Fisheries and Oceans (DFO) and Economic Development Canada (DEC) in partnership with the professional fish harvesters’ group of the Southern Gaspé Peninsula. The pilot project will offer tourists in the region a chance to go on a fishing boat with an accredited fish harvester to catch some seafood. The harvester will share with them the culture and heritage of the coastal fishery on the Gaspé Peninsula. By encouraging new collaboration with the tourism sector the project aims to provide new approaches to ensuring the viability of lobster fishing on the Gaspé Peninsula.

The project has been developed in response to problems facing the Canadian lobster industry and the need to come up with sustainable economic development solutions for coastal communities. The partner organization identified a variety of species they wanted to be part of the commercial fishery for tourism purposes project for the 2011 season. These species include: snow crab, rock crab, lobster, halibut, and scallop. For lobster and snow crab, the fishery will take place outside of the normal fishing periods and will therefore require an impact assessment by biologists before the fishery is authorized. The scallop fishery is a dive fishery and will not be part of the pilot project. For cod and mackerel, these activities will be “chartering” rather than commercial fisheries for tourism purposes, and they will take place within the context of the recreational fishery.

The project is currently being implemented, and was piloted for the first time this past summer, with lobster. To ensure that the new initiative has no net effect on the resources and in order to improve the fit between the fishery and the tourism season, it was proposed that harvesters should place a certain number of lobsters in a pound during their regular season and release these when they begin the tourism project. They will then be allowed to catch the same number of lobsters in the tourism fishery as they release from the pound. Harvesters have received some training in preparation for the pilot project. A partnership has been established with Groupe Collégia (adult education), which offers customized training. Their mission is to improve community development with quality training. The course offered to fishers included an introduction and overview of the tourism industry and communication techniques related to offering and promoting a product. The participants gained new knowledge that blended with their professional fishing know-how. Preliminary work with Transport Canada has allowed them to establish the terms and requirements for harvester engagement in this fishery, notably safety certification, required permits and equipment, and information on applicable regulations and standards. More information about this project is available on the CURRA website at http://www.curra.ca/documents/links_Gaspe_fisheries-tourism_pilot_project_presentation.pdf

Artisanal fisheries for tourism in the Galapagos Marine Reserve

Located off the coast of Ecuador, the Galapagos Marine Reserve is the second largest marine reserve in the world at 133 000 square kilometers. In 2001, the Galapagos Marine Reserve was named a World Heritage Site. The Directorate of the Galapagos National Park oversees the management of the Marine Reserve. The reserve is divided into different zones according to its different characteristics and permitted uses. The multiple use zone permits fishing, tourism, science, and conservation activities. An important part of the local population of the Galapagos is economically dependent on the Marine Reserve including for fishing. However, overfishing of some species threatens the long-term sustainability of the resource (Directorate of the Galapagos National Park, 2009a).

To provide an alternative livelihood opportunity for fishers and help offset fishing pressure, the Directorate of the Galapagos National Park has established experiential artisanal fishing. This is a demonstrative mode of fishing with a focus on tourism whereby artisanal fish harvesters, using their regular working infrastructure including boats and gear, offer visitors the opportunity to get to know their culture, lifestyle and traditional art of fishing. This alternative has the main objective of “providing a profitable alternative to the Galapagos fishing industry, with less impact to the ecosystems in that catch volumes are limited to the demonstration of the activity” (Directorate of the Galapagos National Park, 2009b, Monitoring). The Directorate notes that to date, over 50 local families depend on this alternative to fishing. There is also an experiential artisanal fishing for diving, which involves making dives to show visitors the techniques used in the capture of species. All specimens caught during the diving are released. To participate in the experiential artisanal fishing program, fish harvesters are required to attend trainings in the areas of passenger quality services, management of the Galapagos Marine Reserve, techniques for release of marine organisms, and species identification (Directorate of the Galapagos National Park, 2009b).

Fresh fish markets

A fresh fish market started in a small fishing community in the Netherlands was described in the section above about alternative seafood marketing. This fish market, while important to local fish harvesters and residents, was launched during the tourist season in 2004. It provided an important culinary tourism venue by letting tourists

purchase local fish and take in fishing demonstrations. As organiser Cornelie Quist said, “The visitor could experience the realities of fishing for a living” (Quist, 2008).

Seafood festivals

Festivals are also venues for promoting the food culture and products of a region. Newfoundland and Labrador has several food festivals, including the annual Blueberry Festival in the Town of Brigus and the Roots, Rants, and Roars Festival in the Town of Elliston. One example of a local seafood festival is the Cow Head Lobster Festival, which starts off the summer tourism season each July.

Two festivals from Canada, the Prince Edward Island International Shellfish Festival and the British Columbia Shellfish Festival, are described below. From further away, the Newquay Fish Festival in Cornwall, England is described. Other notable seafood festivals across Canada include the Pictou Lobster Carnival in Nova Scotia, the Summerside Lobster Carnival in PEI, the Shediac Lobster Festival in New Brunswick, the Oyster Festival in Maisonette, New Brunswick, and the Atlantic Seafood Festival in Moncton, New Brunswick.

Prince Edward Island International Shellfish Festival

<http://www.peishellfish.com/>

The Prince Edward Island International Shellfish Festival is entering its sixteenth season. It was first started as a one-day event in 1996 by a local restaurateur who wanted to better promote the island’s shellfish (T. Singleton, personal communication, May 10, 2011). Since then, it has grown into a four-day festival that showcases Prince Edward Island's shellfish industry. The festival features culinary demonstrations from world class chefs, a kitchen party with musical performances, a guided ‘Shellfish 101’ boat tour, and a range of shellfish competitions. The festival is now run as a joint effort of the PEI Aquaculture Alliance and the PEI Shellfish Association. It is a key attraction in the province’s Fall Flavours, a month-long celebration of food and culture in PEI (Prince Edward Island International Shellfish Festival, 2010).

The main aims of the festival are to educate customers, chefs, and buyers about the quality of the shellfish industry in PEI; to provide a venue for promoting shellfish products; and to connect shellfish growers, chefs, and buyers. The festival has an education tent, attended by growers, that showcases the industry’s different products

and explains how they are grown and harvested (T. Singleton, personal communication, May 10, 2011).

A number of cash prize competitions, including international competitions in oyster shucking and a chef's challenge, attract visitors and chefs from across North America to the festival. While the shellfish industry hopes to generate new markets and sales as a result of the festival, the festival itself also serves as a fundraiser for the Shellfish Association. Many of the growers donate their product to the Association as part of the festival fundraiser. This product is then sold directly to customers at the festival. The Culinary Institute of Canada is a sponsor of the festival, and cooking demonstrations teach customers about ways of preparing shellfish (T. Singleton, personal communication, May 10, 2011).

As a part of the festival, a shellfish boat cruise is also offered. Shellfish growers go on the boat with the visitors and talk about how shellfish is grown and harvested. Visitors also get to taste mussels on board. So far, the Festival has focused mainly on oysters and mussels, along with some clams and quahog. They are looking to introduce lobster for the first time this year (T. Singleton, personal communication, May 10, 2011).

British Columbia Shellfish Festival

<http://bcshellfishfestival.ca/>

The BC Shellfish Festival is a weekend-long celebration in the Comox Valley area on Vancouver Island. The 2011 festival is being presented by the BC Shellfish Growers Association. It features cooking demonstrations, shellfish competitions, local shellfish, and live entertainment. The Festival website features some favourite chef recipes for oysters, mussels, and clams as well as a list of restaurants in the area offering shellfish specials for the week leading up to the festival. The Festival is a non-profit society which is run by a volunteer board of directors. The society's main aims are to create a culinary destination for seafood lovers; to position the festival as a culinary event that highlights and markets British Columbia's shellfish, farmers and chefs; and to create a venue for BC shellfish farmers and chefs to connect and share their offerings with the public (British Columbia Shellfish Festival, n.d.).

Newquay fish festival, England

<http://www.newquayfishfestival.co.uk/>

The idea for a fish festival in Newquay, a small fishing town in Cornwall, England, came in part from local fish harvesters who were aware of similar festivals in other places and wanted to start one in their town. The first Newquay Fish Festival took place in September 2003 and it is now in its eighth year. The Newquay Fish Festival website describes Newquay Harbour as a place with a “thriving micro-economy” in which the “traditional fishing industry works comfortably alongside the ever changing face of tourism” (Newquay Fish Festival, n.d.a).

The Newquay Fish Festival is enjoyed by both residents and visitors alike. The Festival is designed to showcase the Harbour including the locally available fish and shellfish. Cooking demonstrations led by local chefs from hotels and restaurants are one of the highlights of the festival. There are also fish filleting demonstrations and a sample lobster hatchery. Other local foods, including desserts and local produce, are also featured. These food events are accompanied by musical entertainment and other activities at the waterfront (Newquay Fish Festival, n.d.b).

Museums and heritage attractions

Museums and heritage sites are another type of experiential opportunity. Experiences have been described as the main product of museums, which they try to facilitate through the use of various settings, presentations, and artifacts (Prentice, Witt & Hamer, 1998). Museums and heritage sites do not usually involve present-day fish harvesters in their operations to the same extent as some of the other activities described above. However, heritage sites may help increase overall interest among tourists in the fishing culture of a region and encourage them to visit other experiential fisheries attractions.

A well-known fisheries heritage attraction in the United States is the New Bedford Whaling National Historical Park. The Park celebrates the heritage of New Bedford, Massachusetts, described as the preeminent whaling port of the nineteenth century. The Park advertises for visitors to come “stroll down cobblestone streets, visit the world’s largest whaling museum, tour a whaling merchant’s home and whaleman’s chapel, and walk a 19th century schooner’s decks” (National Park Service, 2011).

In Nova Scotia, the Fisheries Museum of the Atlantic celebrates the fishing heritage of the Atlantic coast of Canada. The Museum encourages tourists to “experience life in a fishing community and discover, up close, life at sea” (Nova Scotia Museum, 2011a). It is open seasonally, and features vessels at the wharf, a theatre, an extensive aquarium and many exhibits. The Museum also involves in its operators retired fish harvesters who “accentuate the experience of visiting the Museum” (Nova Scotia Museum, 2011b).



Sign directing tourists to the Broom Point fishing exhibit maintained by Parks Canada.

In the Gros Morne area, Parks Canada maintains the Broom Point Fishing Exhibit. It features the old fishing premises used by the Mudge fudge. Tours by Parks Canada interpreters are offered throughout the summer.

CONCLUSION

This report has been completed as part of a research project in the Bonne Bay area on Newfoundland's west coast looking at the foundations for improved economic opportunities for fish harvesters and tourism operators, based on enhanced collaboration among the fisheries and tourism sectors, as well as on increased regional consumption of seafood including among local people.

The project steering committee is continuing to meet and is discussing the outcomes of this research and planning next steps for work in the area of fishery and tourism development in Bonne Bay. Those who have read this report and want to get involved or want more information are encouraged to contact Barbara Neis at bneis@mun.ca or phone at 709-864-7244 or Marion McCahon (Rural Secretariat) at MarionMcCahon@gov.nl.ca or phone at 709-637-2937. More information about the CURRA can be found at www.curra.ca or by contacting Anita Best at the Bonne Bay Marine Station at abest@mun.ca or by phone at 709-458-3014.

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APPENDIX A: HOUSEHOLD SEAFOOD CONSUMPTION SURVEY



Household Seafood Consumption Survey

This survey is being sent to households throughout the region to gather information about seafood consumption and access to Newfoundland and Labrador seafood for people living in the Bonne Bay area. It is part of a larger research project looking for ways to increase food security, fishery-tourism products and business opportunities, and the sustainability of local fisheries.

The survey is organized through the Community-University Research for Recovery Alliance (housed at the Bonne Bay Marine Station and in St. John's). It is funded by the federal government through the MITACS program and by the provincial government's Rural Secretariat.

This research is being led by Kristen Lowitt, a PhD Student at Memorial University. It is supervised by Dr. Barbara Neis of Memorial University and Marion McCahon of the provincial government's Rural Secretariat. A steering committee of local people has helped design the research and will review the results. The results of the research will be summarized in a plain language report which, upon completion, will be available on the Community-University Research for Recovery Alliance website at www.curra.ca. They will also be shared at an upcoming workshop in the area. The results will also be used in Kristen Lowitt's doctoral research about food security in the Bonne Bay area.

Completing this survey is voluntary. By completing it, you are indicating your consent to participate in the study. This is an anonymous survey and we ask that you please not include any identifying information on the survey.

When the survey is completed, please return it directly to the researcher using the self-addressed stamped envelope provided. We ask that you please return the survey no later than **May 15th, 2011**. **The proposal for this research has been approved by the Interdisciplinary Committee on Ethics in Human Research and found to be in compliance with Memorial University's ethics policy. If you have ethical concerns about the research (such as the way you have been treated or your rights as a participant), you may contact the Chairperson of the ICEHR at icehr@mun.ca or by telephone at (709) 864-2861.**

Introduction

This survey should be completed by the person in your household who is responsible for shopping and cooking. It is divided into five parts and should take approximately 20 minutes to complete. Some questions ask specifically about “Newfoundland seafood.” This is meant to include seafood from the island as well as mainland Labrador. If a question does not say “Newfoundland seafood” specifically, then we are asking about seafood from anywhere.

Part One: Frequency and types of seafood eaten

1. In the table below, please indicate how frequently your household eats **Newfoundland seafood** at different times of the year.

	Fall	Winter	Spring	Summer
Less than once a week				
Once a week				
1-2 times a week				
More than twice a week				
Every day				
Unsure				

Comments: _____

In the table below, please indicate how frequently your household eats **seafood not from Newfoundland** at different times of the year.

	Fall	Winter	Spring	Summer
Less than once a week				
Once a week				
1-2 times a week				
More than twice a week				
Every day				
Unsure				

Comments: _____

Are there any children in your household?

Yes No

If yes, how often do they eat seafood compared to adult members in your household?

Same

More

Less

During what meal is your household likely to eat seafood?

Breakfast

Lunch

Supper

None of the above

All of the above

Please rank your household's five favourite types of **Newfoundland seafood** from 1 (highest) to 5 (lowest).

For the following types of **Newfoundland seafood**, please indicate (to the best of your ability) their frequency of consumption in your household now and five years ago:

<i>Type of Seafood</i>	<i>I now use</i>			<i>5 years ago I used</i>		
	<i>Often</i>	<i>Now and then</i>	<i>Never</i>	<i>Often</i>	<i>Now and then</i>	<i>Never</i>
Capelin						
Catfish						
Cod						
Crab						
Halibut						
Herring						
Lobster						
Mackerel						

<i>Type of Seafood</i>	<i>I now use</i>			<i>5 years ago I used</i>		
	<i>Often</i>	<i>Now and then</i>	<i>Never</i>	<i>Often</i>	<i>Now and then</i>	<i>Never</i>
Salmon						
Shrimp						
Scallops						
Smelts						
Squid						
Trout						
Turbot						
Other						

In addition to the fillets, are there any other parts of the fish you eat?

- Tongues
- Cheeks
- Britches
- Heads

Other: please explain

Part Two: Ways of eating seafood

What are your household's preferred **forms** of seafood? (Please check all that apply).

- Fresh
- Frozen
- Canned
- Salted
- Pickled

In the list below, please indicate any ways your household may **preserve** seafood. (Please check all that apply).

- Make salted fish
- Make pickled fish
- Freeze for the winter
- Other: please explain _____

What are your household's preferred ways of **cooking** seafood? (Please check all that apply).

- Fish and brewis
- Pan fried
- Baked

- Au gratin
- Deep fried
- Poached
- Barbecued
- Smoked
- Chowder/soup
- Other: please explain _____

Part Three: Sources of seafood

For each of the following types of **Newfoundland seafood** your household consumes, please indicate where you get it (check all categories that apply):

Type of Seafood	Sources of Seafood					
	Friends/family members	Local fish plant	Local grocery store	Supermarket (e.g. Dominion)	Superstore (e.g. Walmart)	Other/own catch/recreational fishery
Capelin						
Catfish						
Cod						
Crab						
Halibut						
Herring						
Lobster						
Mackerel						
Salmon						
Shrimp						
Scallops						
Smelts						
Squid						
Trout						
Turbot						
Other						

Overall, what is your household's **main source** of **Newfoundland seafood**? (Please check one)

- Recreational fishery
- Friends/family members
- Fish plant
- Local grocery store
- Large supermarket (not local)
- Other: please explain _____

Overall, what is your household's **preferred source** of **Newfoundland seafood**? (Please check one)

- Recreational fishery
- Friends/family members
- Local fish plant
- Local grocery store
- Large supermarket (not local)
- Other: please explain _____

Why is this a preferred source for Newfoundland seafood?

On average, how often does your household eat out at restaurants?

- Less than once a month
- Once a month
- 2-3 times a month
- Once a week
- More than once a week

When your household eats at a restaurant, how likely is it for at least one member of your household to order seafood?

- Very likely
- Likely
- Not likely
- Never

Part Four: Seafood in your community

In general, how satisfied are you with the **availability of Newfoundland seafood** in your community?

- Very dissatisfied
- Dissatisfied
- Neither dissatisfied or satisfied
- Satisfied
- Very satisfied
- Don't know

Please explain:

In general, how satisfied are you with the **affordability of Newfoundland seafood** in your community?

- Very dissatisfied

- Dissatisfied
- Neither dissatisfied or satisfied
- Satisfied
- Very satisfied
- Don't know

Please explain:

In general, how satisfied are you with the **quality of Newfoundland seafood** in your community?

- Very dissatisfied
- Dissatisfied
- Neither dissatisfied or satisfied
- Satisfied
- Very satisfied
- Don't know

Please explain:

Part Five: About you and your household

We are including a few questions about you and your household to help us better understand the sample of households that responded to this survey.

Please indicate the highest level of education you have completed.

- Less than high school
- Some high school
- High school diploma
- Some college
- College diploma
- Trade certificate or diploma
- Some university
- Bachelor degree
- Graduate degree

Please indicate your age.

- 21 and under
- 22 to 34
- 35 to 44
- 45 to 54
- 55 to 64
- 65 and over

Please indicate your sex.

Male Female

Including yourself, how many people, presently live in your household? _____

Does any member of your household work:

In the fishing industry (i.e. in harvesting, processing, or retail)?

Yes No

In the tourism industry?

Yes No

What is your household's gross annual income?

Less than \$10 000

\$10 000 to \$19 999

\$20 000 to \$29 999

\$30 000 to \$39 999

\$40 000 to \$49 999

\$50 000 to \$59 999

\$60 000 to \$69 999

Greater than \$75 000

Greater than \$100 000



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