

**NEW BRUNSWICK  
OYSTER AQUACULTURE INDUSTRY  
MARKET STUDY**



**Presented to:  
Atlantic Canada  
Opportunities Agency  
570 Queen Street  
Fredericton, NB E3B 5A6**

**Presented by:  
Unic Marketing Group Ltd.  
795 Main Street  
Suite 303  
Moncton, NB E1C 1E9**

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## **EXECUTIVE SUMMARY**

The following marketing study depicts the existing status of the oyster industry as well as overall market conditions in North America while providing some insights on its potential growth in the future. Although it is very difficult to collect accurate oyster production statistics as well as reliable consumption data, we gathered sufficient information through personal interviews with industry members and marketers to provide a comprehensive understanding of the industry.

The study clearly demonstrates that the oyster industry has historically faced many challenges due to the seasonality of the fishery and the adverse weather conditions that has caused severe damages to oyster beds particularly in the United States. Canada has been very fortunate to be virtually disease free and absent of any major pollution problems until now. Although some signs of disease have struck in the northern parts of Nova Scotia, the area has been well identified and isolated. Oyster production may suffer a mild set back as a result but is expected to remain stable in the foreseeable future. Prince Edward Island on the other hand has led the oyster production in the Maritime Provinces for the past several years with volumes reaching close to six million pounds. The Island's production volumes are likely to stabilize at these levels for the next few years.

New Brunswick's newly emerging oyster-culturing industry is poised to take advantage of the increased demand for oysters. Timing could not have been any better for the industry to begin introducing their cultured products to the marketplace. In the last two years, consumers have really caught on to the trendy oyster bar concept and consumption of oysters, particularly in the United States, has dramatically increased. These popular bars are gradually making their way to Canada's major cities. Even retailers are starting to acknowledge a renewed consumer interest in oysters. New Brunswick is well positioned to become a major supplier to these markets in the future. In addition, the introduction of frozen half-shell oysters has opened the door to other huge markets such as casinos and cruise lines. These markets require tremendous volumes of food products and, in fact, oysters are becoming an increasingly popular menu item. Sales are currently exceeding expectations in its first year of introduction.

While oyster producers in the American Eastern States face disease and pollution problems, New Brunswick growers are well positioned to create market niches for their products. The projected volumes of oysters from growers are ideal to demonstrate the future growth of the industry and capture the interest of serious buyers. Nevertheless, New Brunswick oyster marketers need to develop sound marketing campaigns and promotional support material to create awareness and generate interest. They will have to seek opportunities in various areas that fit their ability to supply and develop good relationships with reliable distributors.



## **INTRODUCTION**

Unic Marketing Group Ltd was contracted by the Atlantic Canada Opportunities Agency (ACOA) to conduct a comprehensive market study of the emerging oyster culturing industry in New Brunswick. The oyster aquaculture industry has significantly evolved during the last decade to become an important economic generating activity along the Province's eastern shore. During this period, the provincial and federal government as well as the private sector have made important investments to develop the industry.

New Brunswick has managed to build strong research and technical development capabilities particularly in advanced culturing methods that will surely ensure the growth of the industry for the future. In fact, New Brunswick's oyster production is projected to increase dramatically from revenues of \$1.5 million to \$15 million over the next five years.

Obviously, such a rapid growth brings other challenges to the industry. Now that the culturing techniques are sufficiently understood and utilized to their full potential the focus of immediate concern is shifting to sales and marketing. Both government and industry now recognizes the need for a comprehensive market study and the development of sound market strategies to maximize economic returns. To formulate a strategic marketing plan, the industry requires an enhanced understanding of the various market segments, the competition, the opportunities and the challenges ahead.

This study is intended to provide an overview of the oyster culturing industry in Atlantic Canada and the United States. It focuses on the current production levels of oysters in each region, methods of culture, regulations, imports and exports, technology, disease control, handling and processing, market trends and future opportunities. It gives the reader a better understanding of the various facets of the industry and the realisation that the business of culturing oysters can be a very challenging task indeed.

The majority of the information provided throughout the study has been gathered by way of personal interviews with the majority of oyster farmers in New Brunswick, government agencies, processors, brokers, distributors, retailers and food services operators. Many of the chapters contain information on aquaculture statistics published by the Department of Fisheries and Oceans Canada (DFO), Statistics Canada as well as the National Marine Fisheries Services (NMFS) in the United States. While it is well known that the published statistics are not completely accurate we feel that this information combined with the data gathered throughout the interview process reflect the reality of the industry. Much of the information pertaining to new developments in disease control and market trends also relied upon specialized industry publications and various internet research. The source of the information has sometimes been acknowledged in the text but mostly it has been inserted at the end of the document as a reference list.





This document provides sufficient information to enable oyster farmers and government agencies in New Brunswick to move forward in the identification of the industry's strengths and weaknesses and the formulation of a strategic plan for future growth.



# 1 GENERAL MARKET OVERVIEW

## 1.1 Canada

### 1.1.1 Production /Landings

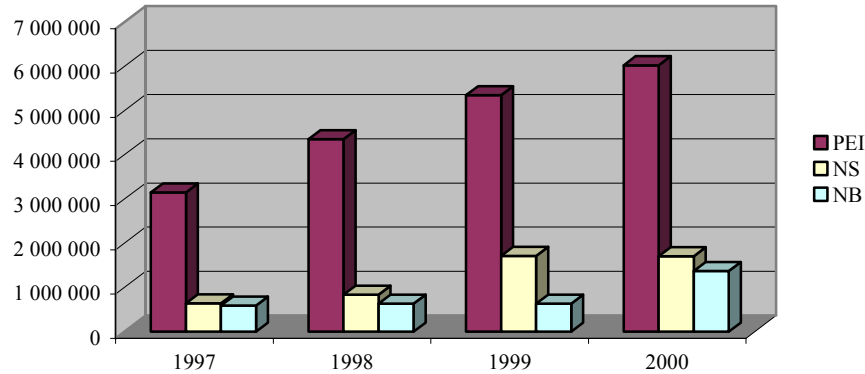
In Canada, the natural habitat for oysters is concentrated in New Brunswick, Prince Edward Island and Nova Scotia on the East Coast and British Columbia on the West Coast. This is primarily because of optimum water conditions and favourable temperatures.

Canada's oyster industry dates as far back as the early nineteen hundreds but has seen very little change from those days until recent years. Prior to 1990 the oyster fishery on the east coast was a seasonal activity harvested over a very short period of time, in October and November after the closure of the other more lucrative fisheries. Volumes were limited and quickly sold during this time without concern towards future market development.

The Eastern Oyster (*Crassostrea virginica*) is harvested mostly in the Maritimes Provinces while British Columbia produces primarily a Pacific Oyster (*Crassostrea gigas*) and smaller amounts of other native and non-native species. The Pacific Oyster is not native to the British Columbia area but originated around the northern Japanese island of Hokkaido. A few of these oysters were first brought to the province around 1913, but most of the seed was imported from Japan between 1930 and World War II. The species native to this area, the Olympia Oyster (*Ostrea lurida*) is a smaller, slower growing oyster and not as suitable for culture except for a limited specialty market. Although British Columbia has a sizeable oyster production of approximately 13 millions pounds, the value is considerably lower than the East Coast *C. virginica*. In fact, the market price for *C. gigas* oysters is roughly half the price of the Eastern Oyster.

For the purposes of this study, market information will be focus on the Eastern Oyster and the New Brunswick industry's ability to produce and compete against other producers in Canada and the United States.

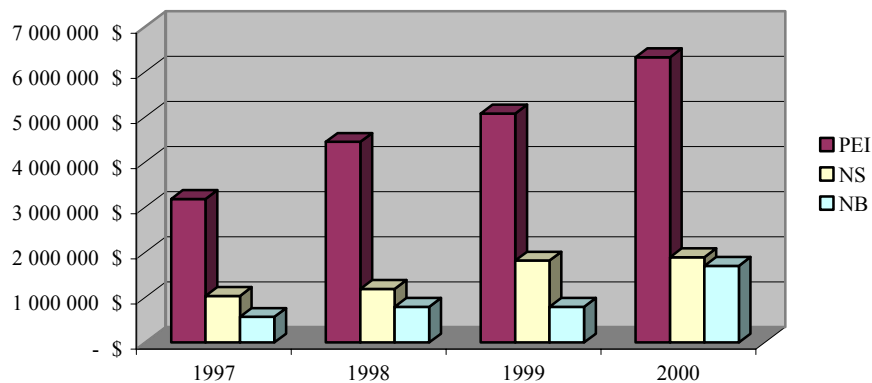
### Volume of Atlantic Canada Aquaculture Oyster Production



\*Source: Department of Fisheries and Oceans

As the tables demonstrate, New Brunswick is the smallest producer of the three Maritime Provinces. Prince Edward Island is, by far, the largest with slightly over six millions pounds valued at more than \$6.3 millions. In contrast, Nova Scotia produces approximately 1.7 million pounds valued at \$1.8 million while New Brunswick is reported to produce 1.36 millions pounds valued at \$1.7 million according to Statistics Canada and DFO statistics. The figures in these tables include both aquaculture and commercial harvesting. Since caution is advised regarding the accuracy of these statistics the study looks further into the specific numbers related to New Brunswick oyster aquaculture, which were gathered directly from the growers themselves during the interview process of this study.

### Value of Atlantic Canada Oyster Production



\*Source: Department of Fisheries and Oceans: including commercial landings

The oyster industry in PEI and Nova Scotia is structured as a commercial fishery while New Brunswick clearly differentiates aquaculture from traditional commercial activity.

1.1.1.1 New Brunswick Oyster Aquaculture Profile

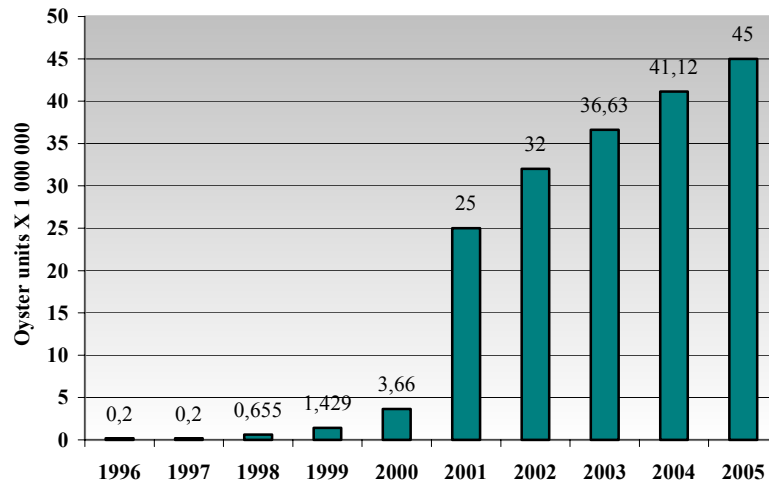
Prior to 2001, the commercial fishery still dominated the oyster industry in New Brunswick. Although the oyster culturing business had been gradually developing behind the scenes for almost ten years, actual sales derived from aquaculture have been minimal. In fact, the volume of cultured oysters changed very little between 1997 and 2001. The data provided in the chart below support these findings.

<b>Table 1</b>		
<b>Landings of NB Cultured Oysters 1997 to 2001</b>		
<b>Year</b>	<b>Units</b>	<b>Pounds (lbs)</b>
1997	1 840 500	306 750
1998	1 115 500	185 583
1999	1 211 300	201 883
2000	1 163 750	188 125
2001	2 234 000	312 000

\*Source: Personal interviews with Oyster Aquaculture Growers

Understandably, the majority of the efforts during the development stages of aquaculture were devoted to the discovery and implementation of appropriate culturing methods. Efforts were also focused on regulatory issues and solidifying the position of the industry. Nevertheless, a considerable amount of seed oysters were being introduced year after year to the various sites throughout the development period. In 2001, the industry started offering market-sized oysters on a more consistent basis. As indicated in the following projection chart, the many different year classes of seedlings introduced in the water will ensure a continuous flow of supply in the future.

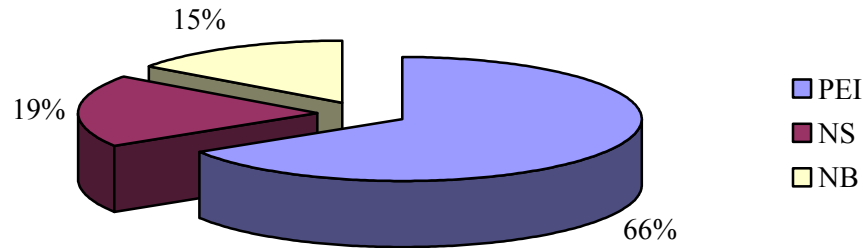
**Production / Projection Statistics  
of Oyster Seed in Floating Bags**



\*Source: Agriculture, Fisheries and Aquaculture NB Department



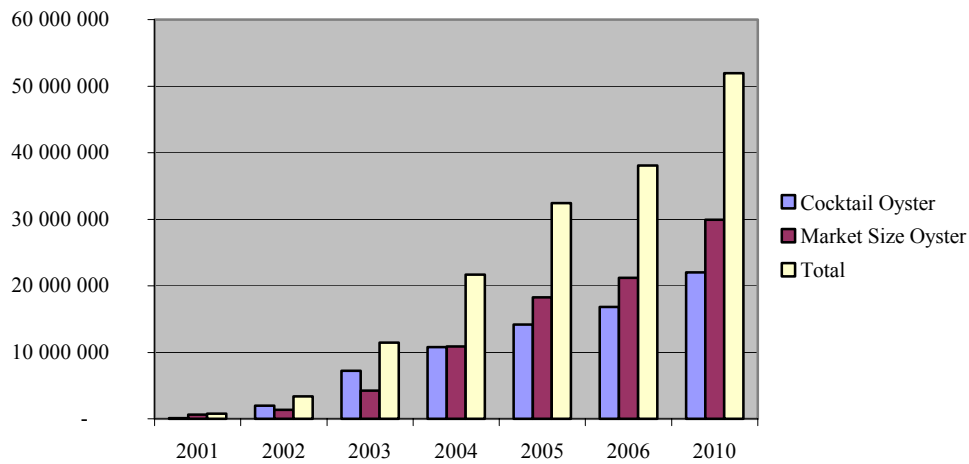
### Atlantic Oyster Production by Province



\*Source: Department of Fisheries and Oceans : including commercial landings

Although Prince Edward Island leads oyster production in Atlantic Canada followed by Nova Scotia and finally New Brunswick, the situation will most certainly change within the next three to four years as New Brunswick’s oyster culturing industry continues to emerge. In fact the data collected from the growers suggest that New Brunswick will probably become the leader of oyster culturing in Atlantic Canada by 2010 (refer to projection chart below). The volume of oysters harvested is projected to increase from approximately 312,000 pounds or 2 million pieces in 2001 to 8 million pounds or 50 million pieces by 2010 (refer to table below for detailed five-year projections). More details about the individual Maritime Provinces future growth are evaluated later in the study.

### New Brunswick Aquaculture Oyster Projection

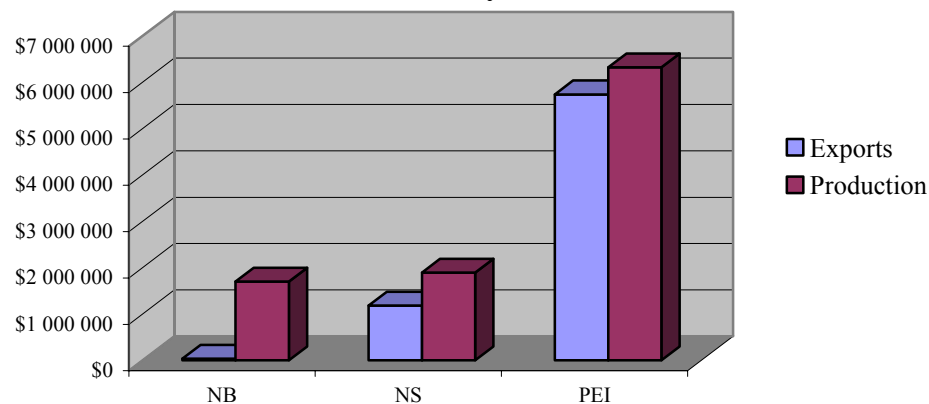


\*Source: Personal interviews with Oyster Aquaculture Growers

### 1.1.2 Imports and Exports

In terms of sales and marketing, New Brunswick traditionally sold the majority of its oyster production within Canada especially in Quebec. As the chart on exports from the Atlantic Provinces below demonstrates only \$22,861 worth of oysters from New Brunswick was exported out of the country in 2001 from a total production valued at approximately \$1.7 million. Meanwhile Prince Edward Island and Nova Scotia have exported in excess of 50 percent of the value of their industry. In fact, the Island exported over \$5 million worth of oysters primarily to the United States and only \$2 million worth was sold in Canada. Nova Scotia exported slightly over \$1 million worth from their industry valued at approximately \$1.9 million. New Brunswick's poor performance in exports is probably due to relatively low production volumes. Other reasons could be attributed to the lack of organisation and fragmentation within the commercial oyster industry. Very few sales and marketing organisations had interest in commercializing oysters because of this reality. Consequently the majority of New Brunswick oysters were sold to the nearest market in Quebec by peddlers.

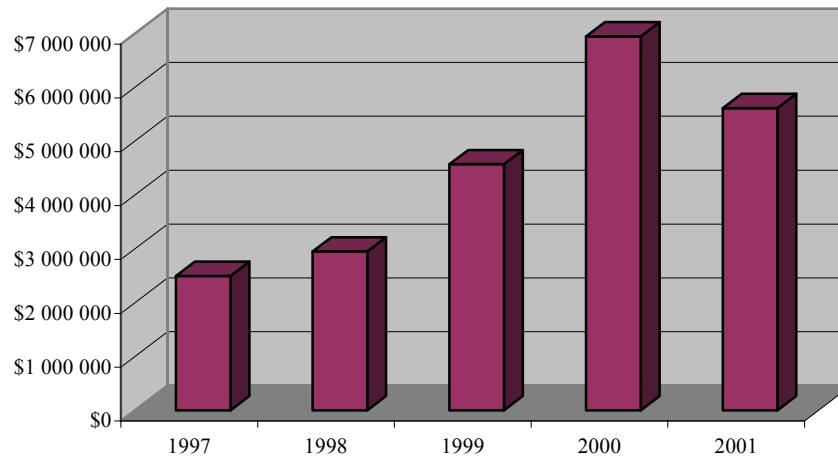
**Value of Oyster Exports and Production by Province**



\*Source: National Marine Fisheries Service: cultured and commercial combined

Nevertheless, Canada's export of oysters into the United States has continuously increased from 1997 until 2000 only to drop slightly in 2001 because of lack of supply (see table below). In July of 2002, according to the latest statistics, Canada's exports of oysters were already substantially higher than the previous year. Canada's exports are expected to increase, as the country becomes known as a more reliable source of supply. As the North Eastern and Atlantic regions of the U.S. continue to struggle against various disease problems and lack of adequate culturing sites, Canada, particularly New Brunswick, has a real opportunity to increase exports.

### Value of Canada's Oyster Exports to the United States



\*Source: National Marine Fisheries Service: cultured and commercial combined

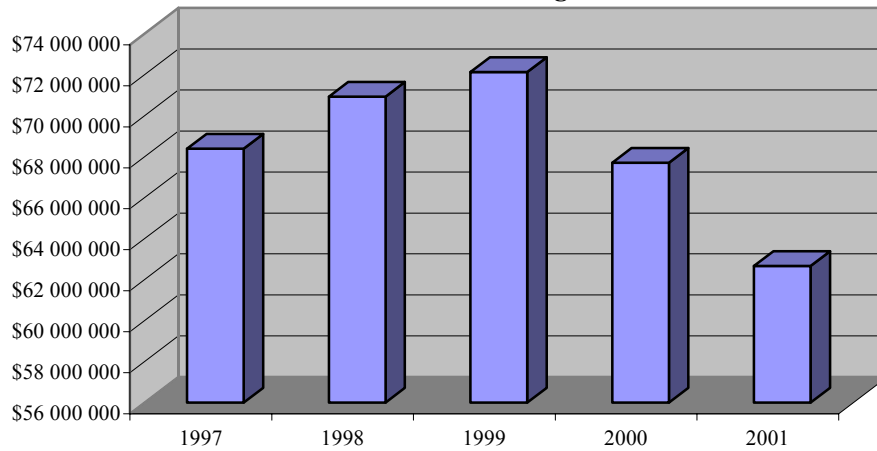
## 1.2 United States

### 1.2.1 Production/Landings

The United States is without doubt the largest producer of oysters in North America. As the statistics illustrate, the U.S. produces close to \$US 100 million (see appendix on U.S. production) worth of oysters annually of which 70 per cent is *C. virginica* oysters. The Eastern oyster production extends from the State of Maine to the Gulf of Mexico. The total production is worth approximately \$70 million of which \$50 million is cultured by Gulf states. However, the total production of *C. virginica* oysters has declined from 1998 due to diseases and adverse weather conditions. The industry has been continuously plagued with contamination problems that have limited their ability to grow additional volumes. It is interesting to note that United States national landings in 2000 declined from 41,146,000 pounds to 32,673,000 pounds in 2001. (U.S. Commercial Landings Statistics)

The West Coast produces the balance of oysters, primarily the Pacific Oyster (*C. gigas*) as well as smaller amounts of other species. For the purpose of this study the analysis is focused on the Eastern Oyster producing states and their future outlook as potential competitors in the market place.

**Value of United States Production of  
*Crassostrea Virginica***

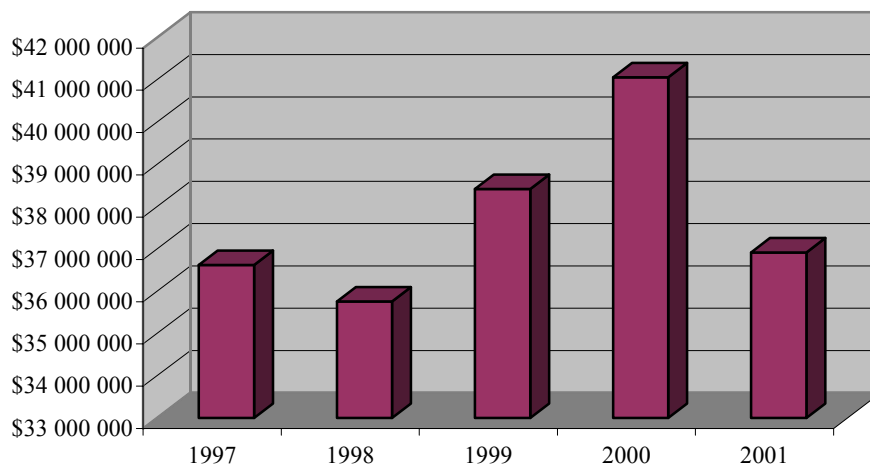


\*Source: National Marine Fisheries Service

### 1.2.2 Imports and Exports

In addition to their own production the United States imports some \$US 36 million dollars worth of oyster products from various countries of which Canada contributes approximately \$US 6 million. However, the bulk of the imports are shelf stable value-added commodities such as canned smoked oyster originating from Asian countries. The imports of these types of products have declined considerably since 2000 while Canada's exports of fresh oysters have increased during the same period. (see appendix on U.S. imports).

**Value of United States Oyster Imports**



\*Source: National Marine Fisheries Service



### 1.3 Methods of Culture

Historically, culturing oysters consisted of obtaining a site, preparing it, and laying the oyster on the bottom to allow for growth to an acceptable size before collection for commercial sale. The process of growth from seed to a commercial size oyster by way of bottom culture is approximately seven to eight years in the Maritime Provinces.

Recently, New Brunswick started to grow oysters utilizing off-bottom culture methods (suspension method and heightening) instead of depositing oysters on the bottom in sites approved for these techniques. The method consists in depositing the seed in suspended cages, bags or on long-lines, for faster growth. Currently, the vast majority of the producers are converting from the traditional method of gardening on the bottom to the suspension or heightening method.



For New Brunswick especially, this new method of suspension is of great importance. A seed, which could take up to eight years to reach commercial size with bottom culture, can now reach a commercial size after an average of three years. It is precisely why a large majority of producers are switching from the basic culture method to the suspension or heightening method. In addition to promoting faster growth, the suspension method also

permits the oyster to develop a consistent well-rounded shape, which is extremely important to the market place.

Before 2001, nearly every commercial oyster originated from bottom culture. In 2001, 50 per cent of the production was from suspension, which has now reached 85 per cent in 2002. New Brunswick oyster growers have now gained sufficient expertise in oyster culturing and are well organized to lead the province into a period of substantial growth over the next decade.



\*Source: all pictures were provided by the New Brunswick Department of Agriculture, Fisheries and Aquaculture

## 2 KEY FACTORS SHAPING MARKETING GROWTH

### 2.1 Quality Expectations

The word quality is by far the most often used adjective in the agro-food industry. Unfortunately, it is difficult to truly describe quality when the term can sometimes be used lightly depending on supply and demand. It is well known that quality can sometimes be compromised for certain products when demand exceeds supply. This is true for many products including poultry, beef, pork and others that normally require some additional preparation before being consumed. In other words, the quality of a product that needs to be cooked or pickled before consumption can sometimes be compromised because of high demand.

However, products that are destined to be consumed raw or with minimal alterations do not enjoy the same privilege. In this case quality is clearly defined by proven bacterial analysis, smell and taste. According to interviews conducted with key distributors in various provinces and states, the oyster market is very adamant about quality issues. Product safety is undoubtedly a major concern.

In Canada, the contamination issues are well governed by provincial and federal authorities as explained in section 15, which refers to the Canadian and American regulations. However, aside from all the regulatory issues the ultimate judge in the end is the consumer. Consumer preferences are what the industry needs to pay attention to. Wholesalers, distributors and retailers are simply catering to the consumer's demands and are basically voicing the opinions of their customers.

Key distributors have explained that freshness is crucial and it can easily be recognized by smell, taste and appearance. Consumers expect fresh product to project a nice ocean smell and look appealing to eat. They expect consistent plump meat yield and clean shells. Naturally, oysters that had recently spawned would not be considered as quality product. Size and uniformity were described more as a criterion for a specific market demand rather than quality issues.

### 2.2 Demand of Seafood – Oyster

The world demand for seafood including shellfish is steadily increasing at a time when traditional wild harvest is on the decline. Per capita consumption of all seafood products have been steadily increasing over the past two decades. Shellfish has accounted for more than the majority of the increase during the last 10 years according to Statistics Canada. Although there is no precise data available specifically on oyster consumption, distributors, foodservice operators and retailers interviewed both in Canada and the U.S. have reported increases in sales over the last two years. According to distributors in Quebec, Montreal and Toronto the consumption of oyster has increased in both the retail and foodservice levels. The U.S. distributors report similar findings in their respective areas. In fact, from the overall "top ten" list of best selling seafood species in the U.S. in

1999, oysters ranked number eight according to *Seafood Business Magazine*. In February of 2003, The Wave, an electronic news reporting system on seafood, reported that shellfish menus are up 33 per cent over the last four years. The oyster market on half-shells has considerably expanded particularly in the U.S.A through the restaurant trade and more specifically with the oyster bar phenomenon.

### **2.3 Consumption Analysis**

Over the past decade, seafood consumption has steadily increased around the globe according to the FAO report entitled "*The State of World Fisheries and Aquaculture, 2000*". Canada and the United States have seen their consumption ratio jump from 19.8 pounds per capita to 24.2 pounds and from 22 pounds to 30.8 pounds respectfully during the same period. Traditionally, the availability of oysters was seasonal, limited to the months of October and November. Consequently, consumption patterns were more directed towards the holiday season. However, since supplies of cultured products have gradually become more available on a regular basis, consumption has gradually increased. Distributors and retailers are of the opinion that oysters will become even more popular with steadier suppliers. New products such as frozen half-shells and whole frozen oysters have also triggered additional demand. The total production of oysters from the Maritime Provinces including the Eastern Seaboard of the United States, totals less than 6,000 metric tons and New Brunswick's contribution is less than 1 per cent of this amount.

The *National Oceanic and Atmospheric Administration's* (NOAA) "2001 Fisheries of the United States" report shows that seafood consumption in the U.S. decreased in 2001 by 2.1 percent with Americans consuming 4.2 billion pounds of domestic and imported fish and shellfish. Even so, the latest data from the International Food and Agriculture Organization show that the U.S. ranks as third largest consumer of seafood in the world, importing 76 percent of its seafood.

Officials from the *National Marine Fisheries Service* report that per capita, Americans consumed approximately 14.8 pounds of seafood last year. Of these, 10.3 pounds were fresh or frozen fish or shellfish, 4.2 pounds were canned seafood, and 0.3 pounds was cured.

Compared to 2000 figures, that represents a ten percent decrease in canned products, a one percent increase in fresh/frozen products and a three percent increase in fillets and steaks.

The decline in consumption is attributed to the sluggish economy. Growth in consumption will resume as seafood becomes recognized as a high quality protein food. Although overall there was a decline, it should be noted that there was an increase of one percent in the consumption of fresh and frozen products.

<http://www.eurocbc.org/page483.html>



## 2.4 Consumer Demographics

According to the various distributors and restaurant owners interviewed, oysters were traditionally consumed in great majority by consumers over 45 years of age with higher than average incomes. Today, oysters have become a fun seafood item that the younger generation also enjoys. In fact, Oyster Bar operators report that in reality there is no age, gender, race or religious belief that characterize today's oyster consumer. The younger crowd of 15 years of age to 44 enjoys the fun aspect of eating oysters and other raw clams. The traditional older and more sophisticated individuals still enjoy their favourite oysters while adventuring with others.

<b>Table 2.</b>			
<b>Average Annual Consumption (grams) of Uncooked Oyster</b>			
	Female	Male	Individuals
Age 15 to 44	27.0	109.5	68.3
Age 45 and over	32.0	72.8	50.7
All ages	24.5	74.9	49.1

\*Source: 2000 United States Census of American consumption

<b>Table 3.</b>			
<b>Average Annual Consumption (grams) of Prepared Oyster</b>			
	Female	Male	Individuals
Age 15 to 44	21.4	89.1	55.3
Age 45 and over	25.6	65.4	43.8
All ages	19.7	63.0	40.9

\*Source: 2000 United States Census of American consumption

Based on these per capita consumption figures and the 2000 census population figures for the fifty states (including Alaska and Hawaii), national consumption levels are estimated to be 30 million pounds of fresh oysters and 25 million pounds of prepared oysters. Assuming a growth rate of three million people per year, this would translate into annual increases in fresh consumption of 324,318 pounds and prepared oysters of 264,750 pounds.

This data also demonstrates that although safety is a concern, raw oysters continue to have a higher consumption rate than prepared oysters in the United States. It also suggests that the 15 to 44-year old age category are higher consumers of oysters and should be a primary target group when entering the market.

### 3 MARKET TRENDS

The oyster bar phenomenon has become very popular and consumption of oysters along with other shellfish is expected to continue to increase, barring any major health crisis developments in the shellfish industry.

(Refer to Appendix K)



The Chain Account Menu Survey (CAMS), published by *The Wave*, regularly surveys the top 200 restaurant chains in the U.S. for current top seafood listings and menu trends. The survey recently (February 9<sup>th</sup>, 2003) reported that shellfish menus are up 33 per cent over the last four years. In fact, the numbers of fish entrees shot up 21 per cent in the last six months of 2002 compared to the same period four years ago.

Many popular restaurant chains such as Elliotts Oyster House, McCormick & Schmick Seafood Restaurants, New York's Grand Central Oyster Bar & Restaurant, Grill 23 Restaurants and others are opening new establishments throughout the Midwest areas and across to the West Coast with the Oyster Bar phenomena being the driving force.

***Note the following quotes from the Seafood Business Magazine:***

- ❑ Considered one of the premier seafood restaurants in the country, New York's Grand Central Oyster Bar & Restaurant, commonly called "The Oyster Bar," is slated to open its first franchise in Kansas City, Mo., by late summer.
- ❑ Oyster bars and half-shell programs have been cropping up all across the country; several cities even have web sites devoted to favourite places to slurp oysters.
- ❑ Oyster sales really took off at Grill 23 & Bar in Boston with the addition of an exhibition oyster bar this past February. "It's really going gangbusters," says executive chef Jay Murray.
- ❑ Bill King, executive director of special services for McCormick & Schmick's in Portland, Ore., says it's difficult to keep up with oyster demand right now.
- ❑ At the 20-unit company's new restaurant in Houston, oysters are one of the hottest sellers. "They're just slurping those puppies down," marvels King, who figured that Houstonites used to Gulf oysters might not take kindly to out-of-town varieties like Yaquina Bay or Kumamoto. Not so. Most M&S restaurants feature six or eight different oysters a day. The menu helpfully lists each variety along with its characteristics. (Salutation Cove oysters are described as having a "firm texture with a salty finish"; Yaquina Bays are "plump and mild with a clean finish"). Collectively, the addition of more oyster varieties has pushed the overall species selection from about 25 to 30 varieties five or six years ago up to 35

species today. “We encourage our purveyors to find new and different species, so we have to be prepared to increase our program whenever something interesting crops up,” explains King.

Due to the health risk concerns associated with eating raw oysters, a number of oyster producers in the United States have adopted a new process of freezing and storing freshly harvested oysters at extremely low temperatures. This process lowers the danger for consumers and thereby bolsters sales for the oyster industry. In particular, the frozen half-shell oyster concept has become increasingly popular with casinos and major buffet restaurants. (Refer to Appendix I)

## **4 OPPORTUNITIES**

### **4.1 Penetrating the Fresh Market**

#### **4.1.1 Canada**

The Canadian oyster market has a long history and the Maritime Provinces have traditionally been its main supplier. Although the majority of consumers still perceive oysters as a seasonal product, consumption patterns are gradually changing as a year round availability of supply becomes known. Distributors and retailers are now beginning to promote oysters as a regular product listing. In fact, they report that sales have increased over the last three years because of availability of supply. Unfortunately, since the Canadian markets are at close proximity to all three major suppliers, competition can become a factor during the peak consumption periods of October through December.

New Brunswick, however, will have a distinct advantage for building customer relationships and brand recognition during the slower period as a result of volumes offered for a longer period of time. (See market segmentation section and details)

The marketing objectives should be to increase consumption by ensuring the product is readily available and by encouraging new consumers to try the product. Of course, quality and consistency of supply cannot be compromised in this endeavour. The distribution network must be well planned to avoid any defection from customers. For a better understanding of potential opportunities, each market segment is described in further detail later in the study.

The Canadian market is very familiar with the Maritime Oyster production. Most distributors and retailers are even knowledgeable on the location of production. Historically, all New Brunswick oysters were branded as “Caraquet” and PEI oysters as “Malpeques” regardless of the area of catch. For years, New Brunswick oysters were more popular in Quebec while PEI and Nova Scotia concentrated in Ontario.



Oysters were promoted during October through December when product was available and then disregarded until the following season. Consequently, the promotion of oysters was not a serious, nor consistent, marketing activity. Consumption was therefore limited by availability of supply. This is still the case though some cultured products are starting to emerge. Given the lack of consistent promotion and limited availability of oysters, it is difficult to accurately assess the market potential of oysters.

Nevertheless, New Brunswick is pursuing culturing innovations with the intention of gaining additional market share. Several factors are in New Brunswick's favour. First, Quebec still has very strong ties with New Brunswick and would welcome additional supplies from the province. In addition, consumption in Quebec and Ontario is on the rise and the increased demand is expected to extend throughout a longer period of the year when supplies are low. Distributors and retailers in both provinces have agreed that New Brunswick would be well positioned to take advantage of this opportunity and did express their keen interest in additional supplies.

#### **4.1.2 United States**

In the United States, the recently significant drop in domestic landings creates market opportunities for alternate sources of supply. The loss is the approximate size of the proposed New Brunswick production levels for 2010 at over eight million pounds. These findings combined with the yearly percentage of population growth in the U.S. leaves little doubt that there is an opportunity for New Brunswick to access new markets in the United States.

In the United States, the market returns for fresh oysters are relatively higher than those for frozen or canned products. The great majority of consumers still prefer eating raw oysters compared to prepared oysters. Interestingly, Northern *C. virginica* oysters are considered a better quality product than those cultured in more southern states and particularly the Gulf of Mexico. This would explain why the majority of Gulf oysters are sold as shucked meat or frozen half-shell. The colder water temperature and ideal salinity characteristics from the North Atlantic produces a unique tasting oyster that consumers seem to prefer. In addition, consumer confidence regarding safety is also heightened by the fact that these oysters are produced in colder environments.

Canada has a reputation of possessing a clean and pristine natural environment that inspires confidence in the American consumer. New Brunswick growers must leverage these attributes in the industry's marketing campaign. To aggressively penetrate the fresh market, New Brunswick growers also require a good consistent distribution network. Timely deliveries and consistent quality products are the key issues for retailers and foodservice operators. According to several wholesalers in the U.S., the oyster culturing industry in the northern states are currently facing disease and contamination, which has considerably reduced their ability to supply and meet today's demand. Canada is in a strong position to fill the void and New Brunswick growers, in particular, have the unique opportunity to gain market share.



## 5 NEW MARKET OPPORTUNITIES

### 5.1 Cocktail versus Traditional-sized Oysters

The marketplace can sometimes be deceiving and often reluctant to accept new ideas or products. In many cases it can take a long time to introduce a new idea with a traditional product. The New Brunswick oyster farmers have introduced the “Cocktail oyster”, which is basically a term used to identify an undersized (less than 3” long) Eastern Oyster. The catchy name is appealing to wholesalers and retailers and is gradually gaining market acceptance, which obviously is good news for the industry. Nevertheless, the oyster market is traditionally tied to the idea of “the Bigger the Better” in the case of a *Virginica* oyster. Since New Brunswick is the only supplier offering small *C. virginica*, the market potential could be interesting. Although traditional consumer habits are sometimes very difficult to change there is always interest in new innovative ideas. For example, some states like Rhode Island have recently changed their size tolerance policies to allow the sale of undersized (less than 3”) oysters. Other states, however, still have regulations specifically pertaining to size tolerance.

Still, as is the case with any new product idea, the New Brunswick oyster growers will need to invest in a strong promotional and marketing campaign to gain additional market share over the traditional market size 3” and greater, *C. virginica* oyster. The term “Cocktail oyster” certainly has instant appeal in terms of marketing ideas. The size uniformity and good meat yield is a tremendous advantage. A good marketing campaign focusing on its smaller size could target new adventurous consumers such as women wanting to try the tasty bivalve for the first time.

The other major issue apart from the size is the fragility of the shells. The larger oysters normally have a harder shell that can be easily opened from the front tip without breaking. Some distributors feel that the cocktail oyster in comparison is much more fragile at the tip and needs to be opened from the side, which according to many customers is more dangerous. Whether the observation is reality or simply a rebellious gesture against traditional change, it still demonstrates the need for consumer education. The cocktail oyster concept is a great idea but the industry will need to double marketing efforts to gain larger market share. They may also have to offer a discounted price in order to gain entry until the product is better known.

Although the “Cocktail oyster” market development is certainly worth pursuing, the oyster farmers should not necessarily assume that their entire production would easily sell as such. In fact, an astute producer may want to configure production to allow for a range of sizes and thereby target different market niches.

Cocktail oysters are only beginning to be introduced into the marketplace and therefore no specific market information exists to compare its potential with the traditional three-inch oyster. Early signs indicated some resistance by retailers although some changed their attitude once they were properly introduced to the product. The foodservice



establishments such as restaurants and oyster bars may represent better opportunities for the cocktail oyster. Supermarket chains and fish market retailers are very price conscious and generally cater to consumer’s perception of value for dollar.

Larger oysters may be more appropriate for these outlets. Restaurants and oyster bars are more geared towards travellers and social evenings where prices are less important than quality. Canada’s restaurant trade is more accessible than in the U.S. primarily because of Canadian’s easy going and open-minded mentality. The American trade would require more promotional support and different market penetration strategies for the cocktail oyster. Nevertheless, creating awareness of the availability of this size oyster for the U.S., will generate interest for niche markets, especially at the foodservice level.

### **5.1.1 Development Potential 2003 – 2010**

Based on projected production up to 2010, the table below is an indicator of where the oyster trade seems to have potential for development. This table is based on accessibility to markets and ease of entry into these markets. This information is provided as an example of market distribution and it is important that industry keep in mind that each market has its own unique characteristics and requires specific strategies to gain entry.

<b>Table 4. Oyster Trade Development Potential 2003-2010</b>				
	<b>Restaurant</b>	<b>Oyster Bar</b>	<b>Food Chain</b>	<b>Fish Market</b>
	<b>U.S./Canada</b>	<b>U.S./Canada</b>	<b>U.S./Canada</b>	<b>U.S./Canada</b>
<b>2003</b>				
Cocktail oyster	30%	30%	10%	10%
Traditional 3” and over	70%	70%	90%	90%
<b>2004</b>				
Cocktail oyster	40%	40%	20%	20%
Traditional 3” and over	60%	60%	80%	80%
<b>2005</b>				
Cocktail oyster	50%	50%	30%	30%
Traditional 3” and over	50%	50%	70%	70%
<b>2006</b>				
Cocktail oyster	60%	60%	30%	30%
Traditional 3” and over	40%	40%	70%	70%
<b>2010</b>				
Cocktail oyster	60%	60%	30%	30%
Traditional 3” and over	40%	40%	70%	70%

## **5.2 Year-Round Market Development**

Consumers are beginning to realize that oysters are becoming readily available throughout the year and consumption patterns are changing as a result. In fact, the trend has already begun with the oyster bar phenomenon in the U.S. and is also gaining momentum in Canada. Even retailers are beginning to realize the consumer's interest in oysters and the potential for increased sales. The same observation was witnessed with the salmon industry at the beginning as well as shrimp and other cultured species. Still, consumers need to be made aware and educated on the new dynamics of the industry. Marketers and distributors will have to promote the newly emerging industry through marketing campaigns that focus on creating awareness and generating additional sales.

New Brunswick growers have the unique opportunity to create awareness during the summer months when tourists are visiting the provinces in great numbers. In fact, the majority of visitors during tourist season are Quebec residents. The most popular dining establishments for vacationers during this period are the seafood restaurants. Tourists come to New Brunswick to relax, enjoy the beaches and eat seafood. During these two months of the year the oyster growers have a captive audience within their reach to make their products and industry known.

## **6 VALUE ADDED PRODUCTS**

As has been identified throughout this study, the preferred way to consume oysters remains fresh raw in shell. Prices for fresh oysters range from .20 - .50 cents per piece depending on area, size, quality, and availability. In an attempt to overcome the health risk associated with fresh products and encourage consumption many producers, especially in the United States have developed new products. New Brunswick needs to evaluate the potential of these types of products for their own industry.

### **6.1 Fresh Oyster Meat**

There is a niche market for fresh oyster meat in half pints or small 10 to 12 ounce tubs in specific areas. This product can be ideal for oysters that are not suitable for the in shell market because of shell shape and appearance. Prices range from \$15 - \$20 for half pints. This product is very convenient for restaurants that use the product for soups, chowders and other types of appetizers or entrees.

### **6.2 Pasteurized Oyster Meat**

This type of product has been developed by using a heat treatment process but unfortunately is a very costly endeavour. The product has a longer shell life than fresh-shucked meat and is very convenient for the "White Table Cloth" food service establishments that demand quality and needs to inventory products. Price can range from \$10 to \$15 for an eight-ounce can or plastic tub serving. It would not be cost effective for New Brunswick to consider this type of production at this time.



### **6.3 Ready to Serve Finished Products**

Finished ready-to-serve oyster hors-d'oeuvre products such as frozen Rockefellers, Bruchettas, Coquille St-Jacques, soups and others are prepared especially in the catering establishments and retail stores. These types of products are generally prepared in bakeries rather than traditional processing plants simply because of different regulations pertaining to this type of activity. Prices usually range from \$1 to \$3 a piece depending on type, quality, presentation, and establishment.

### **6.4 Frozen Half-Shell**

Frozen oysters on the half-shell have really become popular especially in foodservice establishments, such as casinos, buffet style restaurants, and cruise ships. The reasons for these demands are related to convenience, inventory control but primarily because of health risk issues associated with raw consumption. Reports demonstrate that freezing the oysters will apparently kill bacteria. Prices can range from \$US 2.50 to \$US 4.00 a dozen depending on type (meaning area of harvest by popularity), quality, and size. This type of product has a lot of potential for various applications in restaurants. They considerably reduce time and labour cost involved with opening oysters to prepare Rockefeller, Bruchettas, or other types of products. This type of production could easily be introduced in New Brunswick oyster plants since the investments required in technology and equipment is minimal. The product could also be packaged for retail and introduced in grocery chain stores as easy to prepare at home appetizers. (Refer to Appendix J)

### **6.5 Whole Frozen-in-Shell**

Whole frozen oysters were introduced for the same purpose as the frozen half-shells. The intent, of course, is to preserve as much of the natural juices inside the oyster as possible. Whole frozen oysters have gained some acceptance primarily in the Gulf States, but half-shells are much more popular.

### **6.6 Canned**

Canned oyster products are mostly imported from Asia where labour costs are extremely low in comparison to North America. Although some Pacific oysters as well as oysters from the Gulf of Mexico are canned, for the most part oysters are shucked and sold as fresh and frozen meat. The process of canning oysters would require a significant investment in processing equipment and would not be cost effective for New Brunswick processors at this time.

## **6.7 Smoked**

Smoked oysters are imported for the same reasons as canned products. Very limited niche markets exist for local salmon smokehouses that can easily include smoked oysters on their product list. This is however a specialized field that would require substantial investments to produce.

## **7 INDIRECT OPPORTUNITIES**

### **7.1 Technologies**

As the oyster industry in New Brunswick matures and becomes known as a major supplier of quality Eastern oysters, opportunities in new advanced technologies pertaining to culturing equipment or new processing and packaging innovations will certainly emerge. The New Brunswick salmon aquaculture industry is a good example of this process. (See Appendix I)

### **7.2 Food Safety**

The entire issue of safe consumable products will continue to dominate the columns of food critics for years to come. In fact, the recent subject of bioterrorism has greatly elevated this subject of discussion. With the gradual increase of oyster consumption, health risk concerns will certainly be raised from time to time throughout the industry. As the oyster production evolves in New Brunswick opportunities to conduct research and find solutions to certain health threats will be necessary.

The main criteria for marketable aquaculture products are primarily price, consistency in quality, and consistency in supply and freshness. The challenge for the seafood industry is often quality and consistency of supply especially in the culturing business. Oysters go through a natural life cycle during which approximately two months in the summer the spawning season is activated. During this time, the quality of the meat is substantially reduced. This phenomenon automatically creates a void in the availability of quality oysters. The Canadian and American west coast *C. gigas* farmers have alleviated that problem with the introduction of sterile oysters better known as triploids. Through techniques used in hatcheries they are able to genetically alter the reproduction cycle of the oyster thus creating an oyster that does not spawn and maintains consistent meat quality year round. However, hatchery systems are very expensive to build and maintain. As the New Brunswick oyster industry evolves hatchery systems could become feasible.

### **7.3 Processing**

The New Brunswick seafood processing industry has always been very innovative particularly with primary processing. As oyster volumes increase it will most likely

generate interest for the processing sector. Processing requires considerable investments in equipment and technologies that the oyster industry will have to justify when volumes are significantly higher.

## **8 KEY FACTORS TO ACCESSING OPPORTUNITES**

### **8.1 Quality/Safety**

Food safety is an overriding concern for all seafood and food companies. Companies dealing with fresh seafood products are more at risk particularly for products that can be consumed in raw form. In the shellfish business, mussels, oysters and clams have had their share of bad publicity in the past precisely because of illnesses reported by consumers as a result of eating raw mollusc. As a result of its strict shellfish harvesting and processing regulations, Canada has been very successful in avoiding any serious contamination problems. Still, New Brunswick oyster growers are reminded that consumer confidence and assurance is the key to gaining market penetration.

### **8.2 Consistent Production**

Another key concern for wholesalers, retailers and food operators is consistency of supply. Before a foodservice establishment decides to introduce a specific item on its menu they must be assured of two main criteria, namely quality and supply. Normally, restaurants have their menus printed once a year. As a result, their biggest frustration is to have to advise a customer that they do not have a certain product because of lack of supply. It is therefore very important for the oyster marketer to be realistic and to choose clients based on their ability to supply.

### **8.3 Distribution Channels**

Distribution is another key to gaining market share. Getting your products to the customers on a consistent and timely basis is absolutely critical. The various distribution options are described in detail further in the study but it is important at this time to emphasize the necessity of selecting an appropriate distribution network. Before evaluating the possibility of selling a product in a specific area the marketer must ensure distribution will be consistent and continuous. Choosing the right distribution channel can be a challenging task that needs to be well planned.

### **8.4 Price**

Being price competitive isn't as simple as it may sound. Understanding consumer behaviour and buying patterns in the specific target area chosen for distribution is very important when evaluating prices. Demographics and disposable incomes influence consumer demands that are directly reflected by products and prices retailers offer. If

there is a price differential between two competing products, consumers have to be clearly convinced that the higher priced product is of superior quality. New Brunswick oyster marketers have to identify their specific target audience and draw their attention to the quality characteristics of their oysters to justify price differentials. Sometimes marketers have to sacrifice prices to penetrate the market and gradually increase prices as the product gains popularity.

## **9 LOCAL CAPABILITIES**

### **9.1 Growers**

The oyster aquaculture industry in New Brunswick is very well structured and is comprised of many young and aggressive farmers who have become professionals in their field. During the last ten years, the industry has greatly matured and the culturing methods have been perfected to a near science. There is certainly sufficient knowledge acquired now to lead the industry into future growth. Some growers have paired together to combine their stocks for better volumes and begin processing and marketing.

### **9.2 Processors**

According to DFO, the Department of Agriculture, Fisheries and Aquaculture, and individual telephone interviews with plant owners, New Brunswick's production capacity for processing oyster is underutilized. However, having said this, not all processing plants that hold processing licenses for oysters could automatically start processing tomorrow should supplies be available nor would they seriously have an interest.

As part of the international agreement between Canada and the United States known as the *National Shellfish Sanitation Program* (NSSP), Canada has implemented the *Canadian Shellfish Sanitation Program* (NSSP) that requires every shellfish processing plant to adhere to a long list of regulations specific to each species. DFO, *the Canadian Food Inspection Agency* (CFIA) and *Environment Canada* jointly administer this program. Although many traditional fish processing plants still hold an oyster processing permit, owners are required to submit a complete processing program which includes demonstrating Quality Manufacturing Practices (QMP), and a HACCP (Hazard Analysis of Critical Control Point) plan specifically for oysters. The production plan needs to be approved by the governing bodies. Many of these plants currently have this program in place for other species production such as lobster or snow crab and could easily present the case for oysters with very moderate changes to their program.

Nevertheless, most of these plants are already involved in other primary production like lobsters and crab during the majority of the year. Oysters would not necessarily be of primary interest until the market was well developed and financially viable. The oyster industry needs to take these factors into consideration when entering new markets and make arrangements to have the appropriate processing capacity in place. According to



information obtained from the Province of New Brunswick, there are 31 plants that have a valid oyster processing license but only four are actively in the oyster business. This needs to be factored in as a potential new cost to enter oyster markets.

## **10 REGIONAL COMPETITORS**

### **10.1 Prince Edward Island**

As previously mentioned, Prince Edward Island is the largest producer of oyster on the East Coast. Although the growth in production has been relatively steady over the past four years, production may have reached its peak in 2001. The information gathered does not suggest any major increase in oyster production in the foreseeable future. Furthermore, since PEI oysters are mostly grown by bottom culture there is a very high percentage of oysters that do not meet the high quality standards of the fancier restaurants. It is very difficult to achieve size and shape consistency with bottom culture. In contrast, New Brunswick growers employ a suspended culturing method and have subsequently created an opportunity to position themselves as consistent high quality producers. Prices for Eastern Oysters range from .20 to .50 cents per piece on the wholesale market depending on size, quality, and availability.

### **10.2 Nova Scotia**

Nova Scotia's oyster production has remained steady for the past couple of years and is in fact comparable to New Brunswick's production although slightly higher. Unfortunately the industry will likely face a set back due to water contamination problems in some of its major producing areas. Nova Scotia oysters have a very good reputation as being a quality oyster and are well known in the marketplace. The province has done a good job in marketing their oysters and consequently has never been in major competition with New Brunswick. The expected lack of supply from Nova Scotia will probably boost sales for New Brunswick growers.

## **11 UNITES STATES COMPETITORS**

### **11.1 North East Region**

The North East Region of the United States is comprised of states that border the Atlantic Coast from Maine through to New Jersey. Most of the oyster producing areas in these states were seriously ravaged with disease back in the 1960s and have had a difficult time recovering. Since 1970, the industry has gradually recovered mostly along the Long Island Sound of New York, where growers in Connecticut and New Jersey own most oyster beds. But recent occurrences of new diseases are once again jeopardizing the stability of the industry. In addition to disease and contamination problems, the oyster industry along the Northern Coast faces serious resistance from environmental groups and summer cottagers. The industry is not expected to seriously expand for the next four to five years but will surely concentrate in maintaining its current level of production. The Long Island oysters are very popular with American consumers. Because of short supply, prices remain high and New Brunswick growers have the opportunity to fill the void with a similar quality oyster.

### **11.2 Atlantic Region**

The Atlantic region follows the Eastern Atlantic Shore from Maryland to East Coast Florida. The major producing state is Maryland with oysters from the famous Chesapeake Bay area. The other states have very limited volumes along the coastline, which tends to fluctuate up and down from year to year pending weather conditions. These areas have also suffered greatly from diseases that nearly eliminated the popular natural oyster beds in the Delaware River and Chesapeake Bay in 1950. Since then much effort has been devoted by state research facilities in this region to developing lines of disease-resistant oysters. But the re-occurrence of new parasites and diseases keep threatening the industry. Volumes are not expected to increase in the near future. However, there is an enormous amount of research currently being done throughout the North East and Atlantic regions to find a strain of oyster that would be resistant to the existing diseases. In the meantime, New Brunswick has an opportunity to carve itself a reliable market niche.

### **11.3 Gulf Region**

The Gulf of Mexico's surrounding States are major players in the oyster culturing business. The State of Louisiana and Texas alone produce eleven million and six million pounds respectively. In total some 25 million pounds are produced in the Gulf region. Most of these oysters are either shucked for meat or frozen half-shell for the foodservice trade. The Gulf oyster is not considered to be as good quality as oysters produced in the Northern States and prices are generally much lower. The Gulf oyster doesn't really compete on the same level as New Brunswick and therefore present minimal threat.



## **12 NEW BRUNSWICK COMPETITIVE EDGE**

New Brunswick's oyster industry has come a long way in the past decade. The pioneers of the oyster culturing industry have battled hard times with the good and persevered. Through the last decade these farmers educated themselves through trial and error with great determination. A lot of credit must be given to the various public servants that worked with the industry and many government agencies that contributed in various ways to help the industry learn and understand the many facets of culturing oysters. The same could probably be said for oyster farmers in PEI and possibly Nova Scotia but somehow New Brunswick has managed to recruit a young aggressive group of individual to lead the industry's development. There is undoubtedly a pool of knowledge that exists in New Brunswick's oyster culturing industry today that will gradually place the province at the forefront of the oyster industry in Atlantic Canada within the next five years. Furthermore, the industry has formed a strong association and hired talented staff to lobby and protect their interests as well as work closely with government and other interest groups to develop a lasting cohesive industry.

New Brunswick has vast amounts of coastlines and bays that open to the ocean and are considered prime areas for culturing oysters. Most of these areas are not used for any other culturing activity and therefore, offer plenty of room for future expansion. By comparison, Prince Edward Island continues to devote much of their attention to their lucrative mussel industry, which undoubtedly has its challenges. The oyster industry in PEI has remained at its current production level for some years and no major expansions are expected in the near future. Nova Scotia is expected to battle major problems with infected areas in the next few years, which will certainly reduce their production.

New Brunswick oysters are virtually unknown in the export markets other than in Quebec, where the great majority of its oysters were traditionally sold. With its newly emerging oyster industry, New Brunswick is poised to claim its market share in other Canadian cities as well as the huge American market. New Brunswick must take advantage of PEI and Nova Scotia's hard work to introduce maritime oysters in many export markets to carve it's own niche. The American Eastern Seaboard States are also heavily involved in salmon culture and the ever-growing mussel industry. As for oysters these states are experiencing many difficult times with diseases that are crippling their ability to expand rapidly. In fact, the oyster industry in the state of Maryland has recently been ravaged by disease that is caused by three years of drought. The conditions were ripe for the salinity loving parasites MSX and Dermo to flourish. The whole region of the Chesapeake Bay is at risk and prices have jumped from \$16 a bushel to \$35 translating to \$1 more per dozen for the restaurant clientele. New Brunswick should promote its pristine environment and take advantage of Canada's reputation for cleanliness to gain market share.

In the past, New Brunswick's minimal production caused transportation disadvantages to the industry. The cost of shipping small quantities to various areas proved to be too expensive to compete. As production volume increases the producers will most certainly



benefit from transportation cost savings that will allow them to explore other markets. In addition, the producers could possibly work closely with the salmon industry to take advantage of their distribution channels to further develop the market. New Brunswick's proximity to the major Canadian markets and to the U.S. border is also a cost saving advantage.

New Brunswick growers have invested tremendous amounts of monies and time in developing a sustainable culturing method. As a result, the quality is exceptional and should be promoted with a solid marketing strategy that demonstrates the knowledge and professionalism of the industry.

The oyster industry in New Brunswick has never benefited from an extensive marketing or promotional program in the past, due to lack of supply. New Brunswick has certainly fallen behind in comparison to PEI and Nova Scotia's aggressive market development strategies to introduce Canadian Eastern oysters. New Brunswick can, however, quickly create awareness and generate interest through strategic investments in marketing and promotional campaigns of its own. The marketers need to take advantage of the marketing efforts of the other provinces to introduce their products and create their own niche.

## **13 MARKET LOGISTICS**

### **13.1 Description**

Consumers in many areas of the world enjoy oysters both at home and in restaurants. Of all seafood species, the oyster has been known for hundreds of years and is generally a recognized name by most people around the globe. There are, of course, many different species of oysters and some are preferred over others by different consumers. Nevertheless, oysters have long been a delicacy among seafood lovers and still hold an international persona of enhancing one's sexual drive (though there is no evidence that the bivalve will increase your sexual desire!).

Although oysters are consumed in many different countries outside of North America, including Europe, Japan, Australia, New Zealand, Chile and Mexico, this study will focus on Canada and the United States.

In the past four to five years there has been a renewed interest from the food service industry, such as hotels and restaurants in North America, to place oysters at the forefront of their menu items. In fact, many restaurants have added oyster bars to their establishments and tremendous numbers of independent Oyster Bars have opened all over the continent. Restaurateurs and hotel owners were looking for some kind of activity within their establishments that would generate a sense of adventure and excitement for their clientele. The Oyster Bar seemed to fit the bill perfectly.



### **13.1.1 Oyster Bar Phenomenon**

Consumer trends and patterns are sometimes difficult to predict and harder to explain. In many cases a simple idea can unleash a chain reaction that causes people to want to move in the same direction. As was the case with Sushi Bars back in the early 1980s, Oyster Bars have become the trendy phenomenon of recent years and continue to expand at record pace. In fact, many top restaurant chains confirm that oyster bars are the driving force behind their expansion plans. What started as a simple idea from a seafood restaurant owner to keep his customers from leaving his premises because of having to wait to be seated has turned into a business on its own. Consumers have really caught on to the idea of slurping down a few raw oysters and clams with a nice glass of wine or beer while making casual conversation and waiting for a table in the restaurant. The demand has become so strong that Oyster Bars keep popping up everywhere across the country and especially throughout the United States.

In Canada, the idea has caught on in Ontario particularly in Toronto and Ottawa. Although Montreal and Quebec are yet to follow the trend they certainly represent good opportunities for the future. Vancouver is also a prime target market on the West Coast while Calgary and Edmonton are gradually working the concept.

In the United States, the Oyster Bar phenomenon is clearly gaining popularity and is expected to continue its course for the next four to five years. Most seafood restaurants in the major cities like New York, Boston, Chicago, Washington, Houston, Philadelphia, Miami, Los Angeles and San Francisco are introducing an Oyster Bar section to their establishments. The demand for oysters is expected to exceed supply as consumption is bound to increase. It is therefore predicted that the future looks very positive for oyster farmers from all areas.

## **13.2 Canada**

In Canada, the oyster harvesting industry is limited to the three Maritime Provinces on the East Coast and British Columbia on the West Coast. The Maritime consumers are by no means indifferent to oysters but consumption by tradition is generally activated according to the seasonality stigma attributed to oysters. During October through December, which is considered in season, there is a substantial number of oysters consumed in local restaurants, hotels and particularly at home. The competition from neighbouring provinces and sensitive price conscious consumers can, however, limit the opportunity for increased sales in these local markets. Nevertheless, target areas such as Moncton, St. John, Fredericton, Dartmouth/Halifax and other small cities are host to many international travellers and tourists. These markets represent potential opportunities for certain growers (Refer to Canada target market map, on page 31).

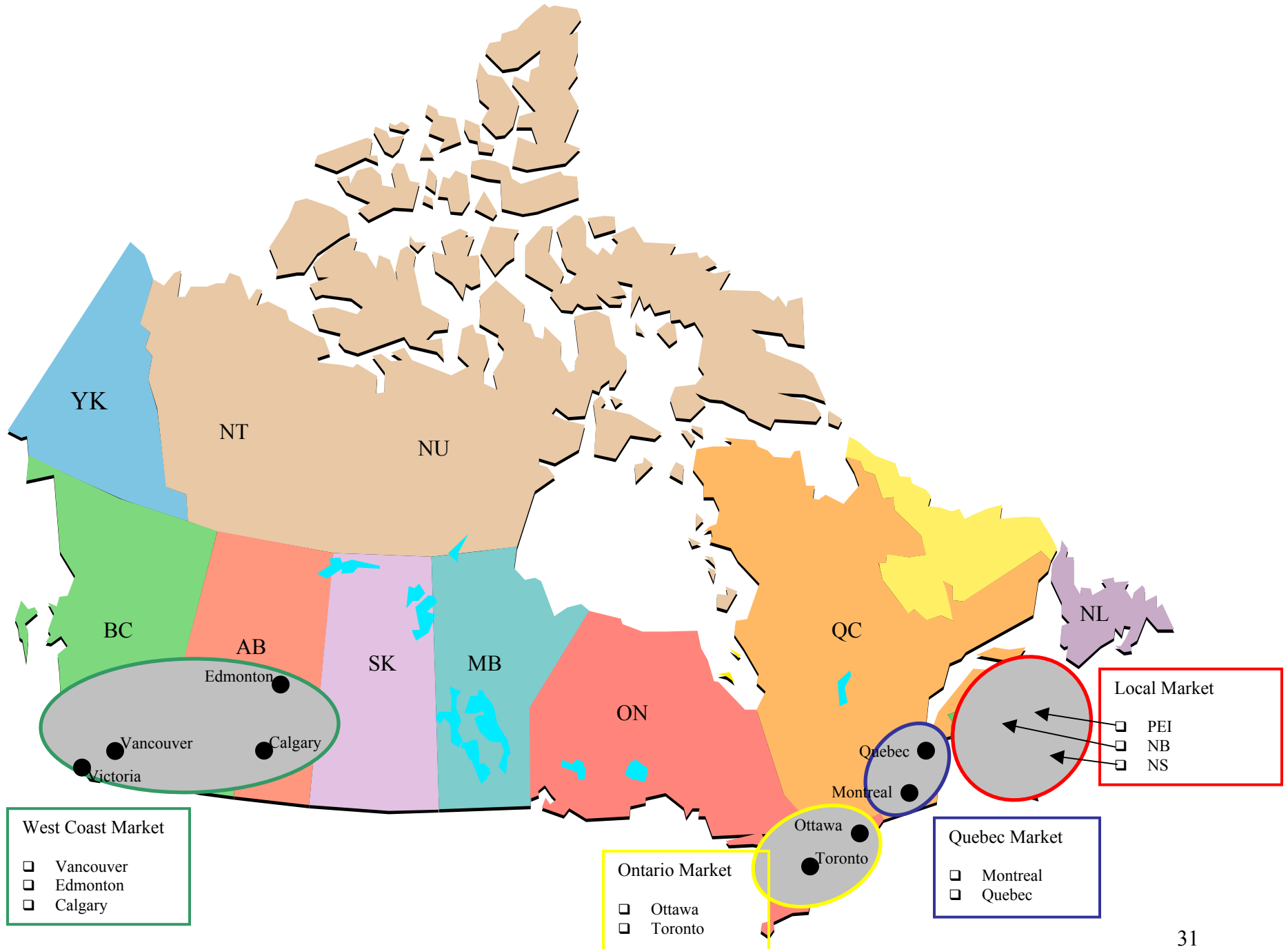
The majority of oyster bars, restaurants and hotels serving oysters are located in major metropolitan areas including Quebec, Montreal, Toronto, Ottawa, Edmonton, Calgary, and Vancouver. These areas with the exception of the West Coast have always been

traditional oyster markets for the maritime oyster marketers. In fact, Quebec was more of a market for New Brunswick, while PEI and Nova Scotia traditionally served Ontario. Unfortunately, these markets have always been used to buying and consuming oysters according to a specific season, namely October to December. Consequently, there was always a glut of oysters available during this time of the year, which led to competition and a downward pressure on prices.

Since the mussel industry in PEI really began to expand, many marketers started to piggyback on this industry to help develop new markets in the United States for their oysters. Given that transportation and distribution can be so costly, being able to combine oyster orders with mussels has allowed PEI to expand their market base. Nova Scotia has always exported live or fresh fish products and has developed a good reputation with many fresh fish buyers in the states over the years. There is a great deal of fresh fish transported from Nova Scotia to the U.S. every day that has also helped the exports of fresh oysters. In reviewing the oyster export statistics for the Maritimes, clearly PEI and Nova Scotia outperform New Brunswick by a very wide margin. This would lead to the belief that New Brunswick has a limited resource of oysters and was content with its share of the marketplace in Quebec or simply does not have the distribution network available to explore other avenues. With the introduction of the cultured oyster techniques, New Brunswick is expected to substantially increase supply and therefore the industry will need to place much more emphasis on developing other market niches. The major Canadian cities remain the target market in Canada for the growers but a serious change in traditional marketing methods and strategies including distribution will be essential to successfully penetrate these areas with greater volumes.

For the purpose of this study we will take a closer look at the Canadian and American markets to give the reader a better understanding of the target markets and their opportunities.

# Distribution of Major Canadian Niche Market Opportunities for Oyster Growers



### **13.2.1 Local Market**

As indicated earlier the Maritime Provinces have many small cities that could serve as potential niche markets. The populations are much smaller than the larger metropolitan areas of other provinces in Canada but nevertheless could offer surprising potential. Maritimers are seafood consumers and are generally comfortable with local products from the sea. They are also very familiar with oysters and given the opportunity to consume oysters in restaurants or buying them at retail outlets on a regular basis would certainly increase consumption. Atlantic Wholesaler and Sobey's have confirmed two years of consecutive increased sales of oysters in the Maritime retail stores. Furthermore, the local consumers could potentially introduce the product to many business travelers and tourists throughout the year. New Brunswick has become the number one tourist destination during the summer months for people of Quebec and from other provinces. In addition, many Americans visit the Maritimes during this period as well. The oyster growers should take advantage of this reality to promote their oyster industry during this time. They should work with the local retailers and wholesalers to create awareness.

### **13.2.2 Quebec/Montreal**

The Quebec City and Montreal markets are very familiar with oysters from New Brunswick. In fact, New Brunswick has been their major supplier of oysters for many years. However, they are not necessarily aware that New Brunswick can now offer oysters on a year round basis. Traditionally oysters were mostly available during October through December and that perception still exists today amongst most consumers.

The growers need to work closely with the Quebec wholesalers and retailers to create awareness and generate interest for oysters on a broader scale. The larger retail institutions in Quebec are the same as in New Brunswick namely, Sobey's, and Loblaw's (Super Stores) which should make it relatively easy to contact. Metro Richelieu, Quebec's largest retailer is easily accessible through Pêcherie Atlantiques, it's seafood distribution network. All of these establishments have indicated growth in oyster sales this year. It appears that oyster parties and social events featuring oysters have regained their popularity in Quebec.

Other distributors in Quebec can easily be found in the telephone directory or seafood related magazines. The restaurant business should be targeted through distributors. They have the ability to store products and deliver them in a timely fashion to the restaurants. The important factor for the growers/marketers to remember is that each distribution channel is different from one another and must be approached separately with specific objectives in mind. These objectives and strategies should be further expanded in a sound marketing program.



<b>Table 5.</b>		
<b>Quebec's Oyster Market by Major City</b>		
<b>City</b>	<b>Seafood Restaurants</b>	<b>Oyster Bar</b>
Quebec	12	-
Montreal	77	-

\* Based on Internet Research

### 13.2.3 Toronto / Ottawa

Although Toronto and Ottawa are new markets to be explored by New Brunswick oyster growers/marketers these cities are also very familiar with New Brunswick. Traditionally, Prince Edward Island and Nova Scotia have been the major suppliers for these areas simply because New Brunswick had insufficient volume to support both Quebec and Ontario sales. Now that the volumes are gradually becoming available the oyster marketers should take advantage of this new reality to introduce themselves to the various distributors and retailers in the same way as in Quebec. The introduction of the cocktail oyster as a new product could work to the advantage of the industry.

The oyster bar phenomenon mentioned earlier in this section is more developed in Ontario than in Quebec. Oyster parties and home consumption are more entrenched in the Quebec mentality than in Ontario. Although the retailers in Ontario are showing signs of increased sales according to Loblaw's, Ontario's largest retailer, the consumption is greater at the restaurant level. Distributors such as Allseas Fisheries and Export Packers have confirmed these findings. In fact, they also indicated that oyster meat sales were quite popular at the foodservice level.

The restaurants and oyster bar trade should be the immediate focus for the growers. Again, the marketers should carefully study the distribution network in these areas and work with the system to promote their products. For instance, the Food and Beverage show, which is held in Toronto every year, is a perfect venue to launch a generic marketing campaign. Creating public awareness and stimulating interest can be costly but the industry could collectively pursue generic promotional activities to minimize individual expenses. In addition each marketer must develop a sales and marketing plan according to specific marketing objectives.

<b>Table 6.</b>		
<b>Ontario's Oyster Market by Major City</b>		
<b>City</b>	<b>Seafood Restaurants</b>	<b>Oyster Bar</b>
Toronto	210	5
Ottawa	44	2

\* Based on Internet Research



### 13.2.4 Edmonton /Calgary/Vancouver/Victoria

The study has grouped three of the larger cities on the West Coast as a target market simply because of their proximity to one another and where it is felt the best returns would be for the industry. Furthermore, the distribution network of seafood products between these three cities is well developed.

These Canadian cities are considered almost virgin country to New Brunswick oysters. Nevertheless they are very familiar with the popularity of Maritime seafood. New Brunswick lobsters and shrimps, for example, are shipped to these areas on a regular basis. Although the western cities other than Vancouver are generally known as beef country there has been a tremendous emphasis placed on developing an international cuisine in these areas over the last ten years. Calgary and Edmonton, in particular, host many world-sporting events each year that bring visitors from all over the world. This has inspired the local restaurateurs to diversify their menus. Seafood restaurants and oyster bars have become very trendy and popular.

Vancouver, of course, is a major metropolitan city and is no stranger to seafood. The West Coast fishery is very active and British Columbia has the highest national average seafood consumption per capita. This is to be expected because of the large Asian population. The oyster industry in British Columbia is also very well developed and valued at approximately \$7 million and is constantly increasing. Production is, however, concentrated on the *C. gigas* oysters and very small quantities of other species. Vancouver is very well known for its many world-renowned seafood restaurants and international cuisine. Oyster bars have become very popular in the last four years. To enter these markets, the New Brunswick oyster marketers should carefully select a good distributor in one of these Western cities particularly Vancouver.

<b>City</b>	<b>Seafood Restaurants</b>	<b>Oyster Bar</b>
Vancouver	100	9
Edmonton	42	-
Victoria	9	5
Calgary	17	4

\* Based on Internet Research





### 13.3 Unites States

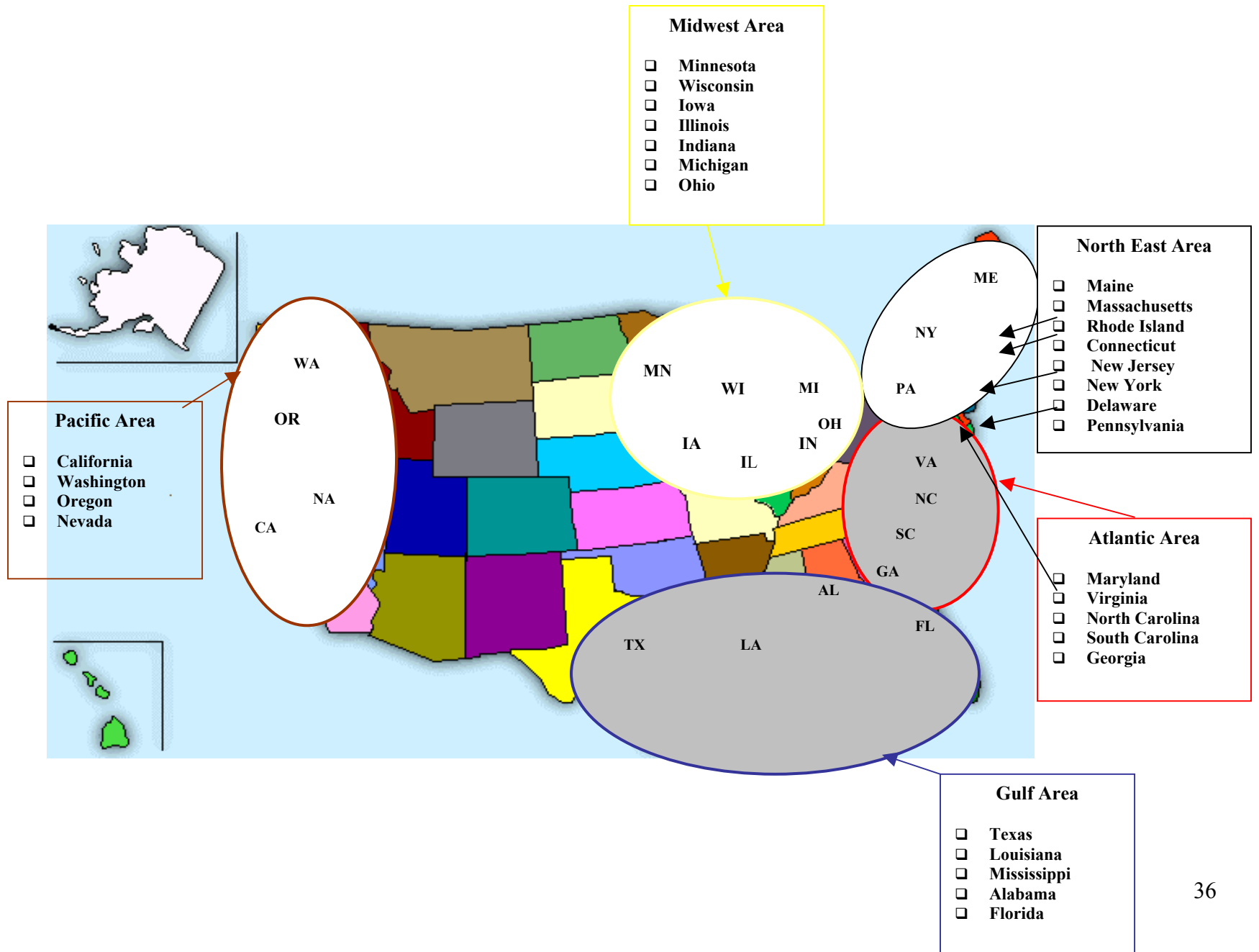
The United States represents a much wider target market than Canada. However, they have major oyster landings of their own. All of the areas indicated on the map (following page) except for the Midwest Area and the Pacific Coast are producers of Eastern Oyster (*Crassostrea virginica*) (see U.S. annual landing statistics). The Pacific Coast consists primarily of *Crassostrea gigas* producers along with small volumes of other species such as the Kumamoto (*Crassostrea silamea*) or the Olympia (*Ostrea lurida*) oysters. The major markets for oyster consumption in the U.S. are concentrated around the big cities such as Boston, New York, Philadelphia, Detroit, Chicago, Cleveland, Atlanta, Houston, Seattle, San Francisco, and Los Angeles. These cities are generally areas where seafood consumption is the highest. They are obviously major cosmopolitan areas with a continuous flow of business travellers. The restaurants and hotels are usually very busy with people from all over the world. The state of Florida has a great deal of appeal because of many vacationers, but is considered as a very price sensitive market. The restaurant trade is competitive in Florida and continuously seeking the best valued products available. The Gulf of Mexico oysters are their primary source of supply and prices are relatively cheaper than the North Atlantic products. Nevertheless, there is a demand for better quality oysters for a certain niche market in Florida and New Brunswick should work closely with good distributors to develop these opportunities.

The interesting part about the sales and marketing strategies of oyster bars and restaurants in the United States in comparison to Canada is that they enjoy offering what is perceived to be a wide variety of oysters. By variety, we do not necessarily mean different species, but instead, the areas of production are generally promoted. For example, an oyster bar may display oysters from four different places in PEI and three or four areas in New York or Cape Cod. Each area has its own little anecdote about its specific attributes such as salinity factors, meat consistency, and differences in taste and in texture according to the oysterman (see anecdote in appendixes). Yet they are all *Virginica* oysters. In reality there are five basic species generally found in oyster bars and restaurants across the country. The *C. virginica* (Eastern) oyster is the most prevalent, then *C. gigas* (Pacific) followed by the *O. lurida*, (Pacific Olympia), the Kumamoto (Pacific Japanese), *C. sikamea* and the *Ostrea edulis* (European Flat).

In reality every species has its own recognition in the marketplace and do not necessarily compete against each other. The same species competes on many different levels such as price, availability, consistency, size and shape, meat quality, presentation and promotional support. For the purpose of the study we will concentrate on the *C. virginica* oyster to evaluate New Brunswick's market opportunities and challenges.



## *Distribution of the Five Major United States Oyster Market Groups*



As noted on the map, the United States has been divided into five distinctive market groups primarily because of each areas specific background and historical seafood consumption patterns and distribution network.

### **13.3.1 North East Area**

The North Eastern states are obviously the closest available markets to New Brunswick oyster marketers. This certainly has its advantages in terms of transportation cost and distribution. Furthermore, these states are very familiar with fish and seafood products originating from Canada, which is very well received by the American consumers. More importantly, they also have the highest per capita consumption of seafood in the country. In fact, the majority of seafood products that are imported into the United States first arrive into Massachusetts or New York and are re-distributed all over the country from these areas.

Boston for example is considered the nation's seafood capital and primary hub for distribution. Many famous seafood restaurants in the area such as Legal Seafood, McCormick & Schmick Seafood Restaurants and Jimmy's on the Pier have expressed their keen interest in products from good quality and consistent suppliers. Boston also hosts the biggest International Seafood Trade Show in the world every year. People from all over the country and from nearly 70 other countries visit this show every year to meet suppliers, distributors and retailers of seafood.

New Brunswick oyster marketers should take advantage of this event to meet potential buyers. Meanwhile, almost every city that is part of this group represents good opportunities for New Brunswick oysters. Slavin M & Son's a prominent distributor in the New York area is interested in additional oyster suppliers and also confirmed sales were on the increase. The famous Fulton Fish Market has several wholesalers and distributors that would welcome new supplies. The consumers of these areas are more familiar and prefer oysters from the North Atlantic areas. They have their own limited production of course in selected areas from Maine to New Jersey but insufficient to meet demand.

The Canadian Maritime Provinces, especially New Brunswick is poised to take advantage of this opportunity to gain market share. However, this is not as easy as it may sound. Americans are very protective of their historical ties to oyster harvesting from their own areas which they claim are the best. Consequently they also perceive good oysters to be a seasonal product as has been the case for generations. The challenge for the New Brunswick oyster marketer is to work closely with the distributors and restaurateurs of the areas to prove otherwise. A careful selection of the right distributor supported by a good marketing plan will certainly be successful for New Brunswick.

<b>Table 8.</b>			
<b>Oyster Market by Major City, North Eastern United States</b>			
<b>State</b>	<b>City</b>	<b>Seafood Restaurants</b>	<b>Oyster Bar</b>
Maine	Portland	61	1
Massachusetts	Boston	100	4
Connecticut	Newark (Hartford)	37	1
New York	New York	138	24
Pennsylvania	Philadelphia	59	3

\* Based on Internet Research

### 13.3.2 Atlantic Area

The Atlantic states extend from Maryland to Georgia. These areas have a good mix of medium sized cities and many tourist resorts all along the coastline. The population of these five states together exceeds 30 million not counting the 10 million or more tourists that visit annually. This area can be a very interesting market to explore since they historically had good oyster beds that have since greatly depleted because of multiple toxins in the water and over harvesting. The residents are familiar with oysters and are also traditional consumers.

The Maryland and Virginia states are the primary suppliers and many distributors offer the infamous Chesapeake Bay oysters. However, even these oysters, which were once plentiful, are now in short supply due to over fishing. In fact, the state of Maryland is currently undertaking a major effort towards restoring the natural oyster bars through intensive planting of shell on public grounds, but this project is said to be jeopardized by the dual threat of the parasites *Haplosporidium* and *Perkinsus*. New Brunswick oyster marketers could possibly work with distributors in these areas to develop niche market opportunities.

<b>Table 9.</b>			
<b>Oyster Market by Major City, Atlantic Region of the United States</b>			
<b>State</b>	<b>City</b>	<b>Seafood Restaurants</b>	<b>Oyster Bar</b>
Maryland	Baltimore	113	4
Virginia	Washington, D.C.	100	7
Georgia	Atlanta	67	3

\* Based on Internet Research

### 13.3.3 Gulf Region

The Gulf Region comprises states surrounding the Gulf of Mexico. Oyster production in the Gulf presently exceeds that of the Chesapeake Bay, once by far the leading producing area. The number one state in this region as well as in the United States is Louisiana, where the industry has remained relatively stable during the past 60 years. Landings in

Louisiana actually increased during the 1980s while those along the Atlantic coast were in a sharp decline.

As in the case of most of the oystermen on Long Island Sound, Delaware River and Chesapeake Bay, Louisiana growers rely entirely upon natural reproduction as the source of supply of seed. The state of Louisiana assumes responsibility for the planting of cultch on public seed grounds each year. The private growers transplant the seed from the seed grounds to their private bedding grounds. The seeds are normally spread out in low salinity areas safe from major predators and only transported to higher salinity growing grounds in the Gulf when they reach approximately three years of age. Here they grow rapidly and improve in quality and flavour in a few months time. The oysters of superior quality are sold for half-shell consumption but the majority are shucked for the meat trade or steamed open and canned for distribution.

This observation can actually benefit the New Brunswick growers/marketers. Obviously the residents of these states are again very familiar with oysters and are effectively large consumers. Based on interviews with several distributors in these areas such as Beaver Street Fisheries in Jacksonville, Florida, the sale of live in shell oysters from the Gulf has declined considerably because of health risks associated with eating raw oysters. The distributors reported that Gulf oysters are generally known to be of lower quality and lesser value than the North Atlantic Eastern oyster. Consequently, Gulf producers have turned to frozen half-shells and whole frozen to accommodate consumer concerns.

Nevertheless, demand exists for good quality fresh oysters for specific niche markets. New Brunswick would need a sound marketing campaign backed up by a convincing quality control monitoring program to create awareness and generate keen interest. Florida and Texas offer tremendous opportunity through their abundance of seafood restaurants and oyster bars. New Brunswick could easily position itself as a superior quality oyster supplier and create a comfortable niche market for its product. Opportunities exist also in a half-shell superior product for the White Table Cloth institutions. Furthermore the large Canadian retired population residing in Florida, especially from Quebec, offers great potential. Selecting the proper distributor to help develop these market areas is again the critical factor for success.

<b>Table 10.</b>			
<b>Oyster Market by Major City, Gulf Region of the United States</b>			
<b>State</b>	<b>City</b>	<b>Seafood Restaurants</b>	<b>Oyster Bar</b>
Texas	Houston	99	11
Louisiana	Lafayette	57	2
	New Orleans	63	8
Alabama	Birmingham	15	3
Florida	Miami	100	3
	Tampa	93	9
	West Palm	36	3

\* Based on Internet Research

### 13.3.4 Mid West

With a total population of 52 million, the Mid West Region has a very interesting circle of large and medium sized cities that could have great opportunities for New Brunswick oyster marketers. Cities such as Detroit (Michigan), Chicago (Illinois), Minneapolis / St-Paul (Cincinnati) and Cleveland (Ohio) are great metropolitan cities that generate a wide range of business activity. Rainbow Fish House in Chicago, for example, confirmed keen interest in East Coast Oysters both for the restaurant and oyster bars of the area. The New Brunswick growers should concentrate on distributors in the states of Michigan, Illinois, Ohio and Minnesota where the majority of population is concentrated. Any multi-state distributor in either one of these areas would probably service most of the key hotels and restaurants in this entire region. The key is to select the appropriate distributor. Not enough can be said about this most important facet of sales. Although distributors are plentiful choosing the best one for your needs should be a serious and diligent process.

**Table 11.**  
**Oyster Market by Major City, Mid West Region of the United States**

State	City	Seafood Restaurants	Oyster Bars
Minnesota	Minneapolis	41	-
	St-Paul	41	-
Illinois	Chicago	126	6
Michigan	Detroit	67	6
Ohio	Columbus	30	-
	Cleveland	37	-
	Cincinnati	34	1

\* Based on Internet Research

### 13.3.5 Pacific

In 1995, the Pacific Oyster accounted for about 15 per cent of total United States oyster production. This industry is primarily based on private control of oyster beds and comprises mainly of *C. gigas* oyster. Except for very few locations, summer water temperatures are too low for this species to reproduce with any regularity. Therefore, the industry relied heavily upon the imported seed until the 1970s, when the development of hatcheries on the Pacific Northwest in the mid-seventies resulted in a less expensive and more dependable alternative.

The traditional method of growing *C. gigas* on the Pacific Coast is by bottom culture. Off bottom culture techniques are more costly and often not justified by market prices. Furthermore the vast majority of Pacific oysters are shucked for meat that is sold either fresh, frozen or canned. In recent years many of the producers have gradually developed a market for frozen half-shell oyster, especially for casino and large buffet type of establishments. The Pacific Oyster does not necessarily compete with the Eastern Oyster simply because they are a completely different species. Oysters are generally sold first

by species and second by specific growing area. It is one of the very few food products that enjoys such an advantageous marketing tool. Oyster bar owners and food service operators are generally delighted to offer product from various regions.

The West Coast region is a very large market area but offers tremendous opportunities in every state. The West Coast is very well known for its lucrative commercial fisheries as well as cultured products. Cities such as Seattle (Washington), Portland (Oregon), Los Angeles, San Francisco (California) and Las Vegas (Nevada) should be the major target areas of focus. Large distributors such as American Fish and Seafood in Los Angeles and Tai Fong USA in Seattle have indicated that the oyster trade has increased and demand is expected to rise for oyster products in general. These are the areas where seafood consumption is relatively higher and where the bulk of the major hotels, restaurants and entertainment centres are located. Nevertheless, these are not necessarily easy markets to penetrate. Therefore the key for New Brunswick oyster marketers is to find good distributors and work closely with them to develop the market.

**Table 12.**  
**Oyster Market by Major City, Pacific Region of the United States**

State	City	Seafood Restaurants	Oyster Bar
California	Los Angeles	181	2
	San Francisco	162	14
Washington	Seattle	100	5

\* Based on Internet Research

## **14 MARKET DISTRIBUTION NETWORK**

### **14.1 Channels of Distribution**

The distribution network for fresh oysters is much the same as it is for any other fresh seafood products. The same channels of distribution are used in Canada as well as in the United States. Although distribution channels can seem simple in theory, they are for the most part very complicated. The product is usually transported from the harvesting grounds directly to a federally approved processing plant. The plant owner (processor) may decide to sell live in shell or further process the oysters into shucked meat, frozen half-shells, cooked in cans, breaded or smoked products. From the plant the product will reach the end user either by direct selling or through a mix of brokers, wholesalers and distributors.

The most important fact to remember is that every level of distribution has a cost and should be included in the final selling price whether used or not. In other words the marketer must structure his selling price by calculating every cost starting from a suggested retail price and working his way back to the plant. Every cost associated with each segment of the distribution network should be added to the initial cost to avoid

future price complications. For example, the processors/marketer should determine the retail selling price of oysters and base the supply price accordingly.

<b>Table 13. Profit Margins at Each Level of the Distribution Channel</b>				
<b>Restaurant</b>	<b>Retail Supermarket</b>	<b>Wholesale Distributor</b>	<b>Commission Agent</b>	<b>Processor Marketer</b>
200% margin	45% margin	20% margin	7% margin	25% margin
Menu Price	Suggested retail price	Distribution price	Selling price including commission	Supplier Price
\$1.30/pcs	\$0.65/pcs	\$0.44/pcs	\$0.37/pcs	\$0.35pcs

The distribution channel utilized by marketers can differ from one to the other. The marketer should always keep his options open to any possible choice of distribution he wishes to use or may have to utilize in the future as his business increases. Its important to remember that the processing plants as well as the brokers, the wholesalers/distributors, and retailers are all part of the distribution network. Whatever mix of channels the oyster farmer decides to work with is irrelevant but understanding the different levels of distribution and being prepared to work with them will help maintain market prices at a competitive level.

#### **14.1.1 Direct Sales**

The processor/marketer may decide to market products directly to the end user, that is a retail store or restaurant. By doing so the marketer may have a competitive advantage over his competition that uses a different approach. This may be true if the marketer is simply passing the cost savings on distribution to the retailer by offering a better price. This practice can be very costly in the long term as transportation costs will eventually hurt profit margins and the competition will gradually lower their prices. Direct sales can also become very difficult to handle especially if the marketer has limited resources. In any case, it is best to compete on quality issues and consistency of supply than simply prices. Treating every level of distribution with the utmost respect will help maintain good market prices.

#### **14.1.2 Agent**

An agent can play an important role for the processor especially when financial and human resources are limited at the plant level. In reality a good agent should really be viewed as an extension of the processors personnel. The advantage is that he only gets paid based on performance. Commissions are paid on a percentage of sales basis and therefore represent hardly any risk for the processor. Nevertheless the processor needs to choose an agent with proven qualifications and good seafood marketing skills. A good



knowledgeable agent can easily pay for himself and quickly help the processor get established in the marketplace.

### **14.1.3 Wholesaler**

Wholesalers are actually one step closer to the end user but normally service a specific local area. These people are normally well established in the area and have a very loyal clientele. Retailers and food service operators shop directly at these establishments, which makes it very appealing to the processor. But on the other hand they also like to shop around for the best buys. Wholesalers are generally very knowledgeable about sourcing products. The processor's marketer must be cautious and always aware of the wholesaler's ability to negotiate prices.

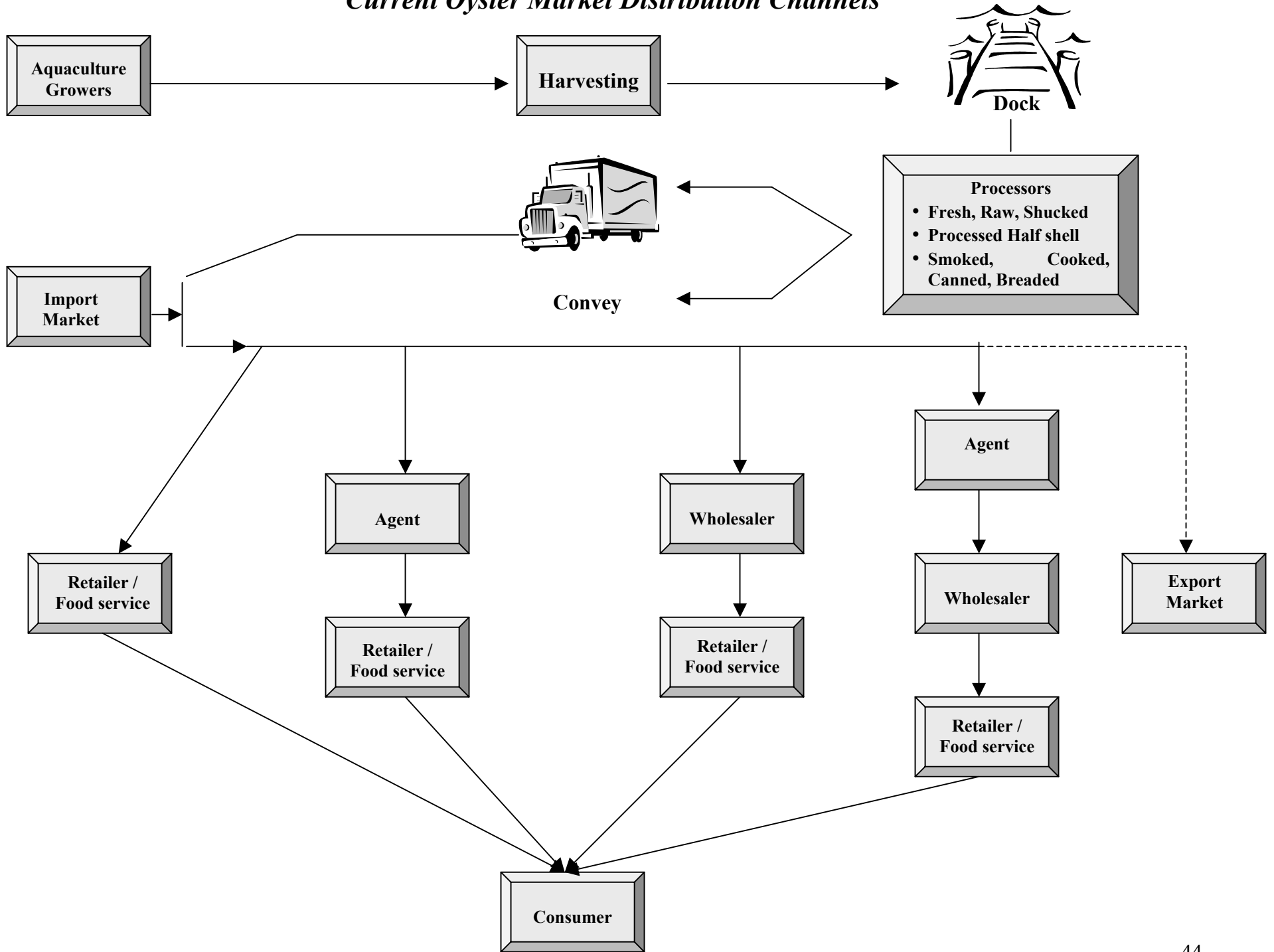
### **14.1.4 Distributor**

Distributors are one of the most important links to the distribution network. They have fleets of refrigerated trucks that deliver directly to the end user such as restaurants and hotels. They usually service several provinces or states and some distribute nationally. These people are experts in their field of work and can be very demanding of their suppliers. If a supplier is consistent and provides a good quality product, then most distributors welcome the chance to work with them.

### **14.1.5 Retailer**

Retailers are of course the closest link to the ultimate end user, the consumer. Unfortunately, retailers for the most part are always concerned with prices. They are volume driven and generally try to negotiate the best possible rock bottom price, which they claim their savings are passed on to the consumers. There are of course quality-oriented retailers that cater to higher income consumers who demand quality products. Processors should not give in to prices because of potential volume sales but should seek out the higher end retailers for their products.

## *Current Oyster Market Distribution Channels*



## **15 MARKET PENETRATION CONSIDERATION**

### **15.1 Business Practices**

The seafood industry is a very big business worldwide. Landings and processing of seafood products accounts for billions of dollars in revenues and millions of direct and indirect jobs depend on the industry for their survival. The world trade in seafood is huge, estimated at U.S.\$100 billion per year. In Canada alone the seafood distribution industry is estimated at more than \$5.6 billion at the wholesale level and more than \$25 billion in the United States. Based on such astonishing numbers, it is fair to say that the seafood industry is serious business. Seafood suppliers of all types regardless of size must adopt sound business practices much like any other industry to survive. Everyone in the distribution network is seeking honest reliable suppliers with consistent quality products.

### **15.2 Canadian and American Regulations**

Canada and the United States have strict regulations governing all aspects of the fish and seafood trade industry. Both countries cooperate closely to ensure that only the best possible quality products are sold to the consumers. In the case of shellfish particularly for the oyster and mussel trade, specific guidelines and regulations have been formulated which further demonstrate the need for product safety. The harvest and sale of shellfish/oysters are regulated by several agencies in Canada and the United States. The reader can find a complete version of the existing oyster trade regulations that include everything from actual harvest through to the point of sale in appendix F. It assumes that the harvesters/dealers/re-packers/ shippers have the required licences, certifications and leases to approved shellfish growing and harvesting areas. It assumes that processing plants are federally inspected and that the facilities operate under HACCP (Hazard Analysis Critical Control Points) principles and sanitation prerequisite requirements, which are specific to each processing location and each kind of shellfish processed including microbiological checks.

As the document in appendix F explains, there are many different agencies involved in the process and the regulations are all spelled out clearly in the FIR (Fish Inspection Regulations), NSSP/CSSP (National or Canadian Shellfish Sanitation Program) and the ICSSL (Interstate Certified Shellfish Shippers List) documents.

To export shellfish to the United States, the dealer must be included in the ICSSL, a list that is updated monthly (additions and deletions). In fact, Canada and the United States have a Memorandum of Understanding and similar Shellfish Sanitation Programs that allow for shellfish companies, that have certified operations under Canadian regulations, to apply for inclusion on the ICSSL without necessarily requiring inspections and audits by U.S. agencies. The ICSSL states the usual business name(s), business address where inspections occur, certificate number that includes a code for operation type and expiration date.



The responsibility rests on the shoulders of the provincial and federal authorities including all industry stakeholders starting from the grower and throughout the distribution network to provide good quality and safe products to the marketplace.

The future of the industry depends greatly on the true diligence of the growers and the governing authorities. Both parties are urged to work closely together to continue finding ways to assure product safety without strangling the industry by over regulating.

### **15.3 Documentation**

As it is well stated in the Canadian and American rules and regulations, documentation is an intricate part of the entire process that is important to sell product. In the case of oysters in particular, every site from which oysters are harvested must be recorded daily in details and kept on file for a minimum of 90 days. The purpose of the exercise demonstrates the seriousness of food safety measures and must not be taken lightly. In the event of any crisis resulting from contaminated product that somehow reached the marketplace it would be crucial that the incident be quickly isolated, contained and traced back to its origin to be resolved. Food critics and others will certainly scrutinize the New Brunswick oyster industry as the industry evolves and becomes a major supplier. By becoming a well-structured industry and demonstrating professionalism through proper documentation, the industry will gain significant market acceptance.

## CONCLUSION

The following few paragraphs cited from a George C. Matthiessen book entitled “Oyster Culture” delivers a very strong statement of validation for the New Brunswick oyster culturing industry. All of the efforts invested in the development of the industry suddenly seem justified by the following comments:

*“In 1970, one of the leading authorities on the oyster industry in the United States wrote the following:*

*By the year 2000, our industry probably will be growing large quantities of oysters in a mechanized closed system. Oysters will not be placed overboard in open waters at any time. Losses to predators and to smothering will be a thing of the past. Diseases of the young oysters will be known and controlled by drugs. Oysters will reach maturity in 12 month, with 3 or more months to fatten them for market. This rapid growth will be attained as a result of genetic studies to develop fast-growing strains, by controlling water temperatures at optimum levels, and force feeding with proper cultures of the right species of algae.*

*Although these predictions did not seem unrealistic at the time they clearly have not been realized by the year 2000. The concept of growing oysters in mechanized closed systems on a commercial scale has been shown to be economically impractical beyond the oyster juvenile stage, primarily because the volume of planktonic food that must be provided to sustain growth to market size is enormous, and hence costly, and is not justified by the market value of the product.”<sup>1</sup>*

Obviously these statements hold true even today. The culture of oysters in Canada as well as in the United States or in other parts of the world still depends on adequate natural environment for survival. The losses due to natural causes, such as predation, smothering, toxins and diseases may be controlled to some extent but will have to be accepted as part of the process. The unfortunate reality is that instead of being reduced, the problem of disease has become increasingly widespread during the last 40 years and much more remains to be known about oysters before drugs can be considered.

On a brighter note, the misfortune of some areas works to the benefit of others. Although oysters can be cultured in many parts of the world the fact remains that they can only be grown where the right climatic temperatures provide the ideal sustainable eco-system. The Maritime Provinces and the American Eastern Seaboard States along the Atlantic coastline are the primary source of supply for Eastern Oysters to the North American market. Amongst all the other suppliers perhaps New Brunswick stands to foster the greatest economic gains in the oyster culturing industry. While others struggle to maintain or stabilize their declining oyster industry, New Brunswick’s newly emerging industry will be poised to take advantage of increasing demand.

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<sup>1</sup> Matthiessen, George C. *Oyster Culture*. 1<sup>st</sup> ed. Oxford: Fishing News Books, Blackwell Publishing, 2001. p 143

The oyster industry along the Eastern Coastal States continues to decline because of various problems with contamination, predators and increased public resistance to aquaculture sites. In fact, huge amounts of research and effort has been devoted by federal states, academic and private agencies, institutions and individuals during the past 40 years to various strategies and methods for stabilizing the decline of the eastern oyster. The major efforts were directed to the more critical areas of the New England states and Middle Atlantic including the famous Chesapeake Bay regions where in some areas disease has threatened to eliminate the entire industry. The fact remains, however, that, during the last 40 years national production of eastern oysters has significantly declined in the United States.

Although New Brunswick seems to be in a very enviable position at the present time the industry should be reminded that nothing can be taken for granted. The oyster farmers cannot become complacent and negligent of the environment or the quality control measures implemented for their own protection. The entire industry depends on the ability of every stakeholder to continue working diligently to protect and preserve the environment and to implement very strict regulations concerning culturing, harvesting and processing.

The oyster marketers will need to develop their own individual marketing plans to identify their specific target areas and develop strategies and promotional activities to successfully penetrate these markets. In addition, the industry could greatly benefit from an overall generic marketing plan to create awareness and promote New Brunswick oysters.



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