HISTORICAL EVOLUTION OF HARVESTING AND GENESIS OF PROVINCIAL SHARES IN THE FISHERIES

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BY GASTIEN GODIN
SENIOR COMMERCIAL ADVISOR
DEPARTMENT OF AGRICULTURE, FISHERIES AND AQUACULTURE

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EDITOR'S NOTE Mr. Gastien Godin, senior advisor to commercial fisheries for the Department of Agriculture, Fisheries and Aquaculture, presented this paper at a forum organized by the Acadian Peninsula Fisheries Council (APFC) and held on March 22, 2002, in Shippagan. He was invited as a DAFA representative to speak about the historical evolution of harvesting and the genesis of provincial shares. DAFA turned his paper into a working document, which will be completed with information from the province's other fishing regions in order to support the New Brunswick government's actions with regard to provincial historic shares. Mr. Godin has worked in the fishing industry for the past 20 years. Having witnessed first-hand the vast changes that have marked the past quartercentury, he was well prepared to submit this argument in favour of PHSs.

WORKING DOCUMENT OF THE DEPARTMENT OF AGRICULTURE, FISHERIES AND AQUACULTURE: A REFLECTION ON PHS s

INTRODUCTION

Tracing the genesis of the concept of provincial historic shares is equivalent to tracing the history of our presence in the Atlantic fisheries. Although the expression "provincial historic shares" corresponds to the recent development of Canadian fisheries management, the concept originated in the more distant past, a quick examination of which would be worthwhile. We will look at the customs and practices that give this concept greater legitimacy.

The history of the fisheries in New Brunswick and particularly on the Acadian Peninsula is characterized by the simultaneous development of two fisheries: the midshore /offshore and the inshore. Each has contributed to the establishment of an industry based on a resource that has the advantage of being renewable, provided we look after it. Despite the storms that occasionally buffet the industry, as long as we retain a reasonable share of these renewable resources, we will be able to pass on to coastal communities and future generations the right of usufruct resulting from more than four centuries of labour and human and financial investment. This history was also built at the cost of indelible memories of great tragedies at sea, and many families can claim they have bequeathed a well-deserved share of this common resource to their communities. Of the nurturing sea of our ancestors was born a great industry. Is this industry threatened today? Will this resource remain renewable for the community that gave it life? These are the questions that we will attempt to answer.

Unfortunately, unlike in other Atlantic provinces, the history of the fisheries is a very short chapter in the written history of New Brunswick. It is remarkable to see the pride with which Newfoundland so often refers to its long fishing history and tradition when defending its fisheries, and how the province incorporated this aspect of human activity into its written and taught history. Fortunately, efforts are being made to fill this gap in New Brunswick by new historians and other scientists who are taking an interest in this subject by slowly dusting off and scrutinizing the too long forgotten pages recounting our ancestors' deeds and actions that shaped our modern fisheries. Our failure to teach this history compromises the development of feelings of pride concerning our historical accomplishments.

Note to reader: This working document is the product of several years of reflection, and we hope that it will serve this purpose. Any observations, corrections, or contributions are welcome. The author wishes to thank Nicolas Landry for revising the historical section to ensure that it contains no major errors and DFO for the use of their fishing area maps. The author wishes also to thank Mario Gaudet and Paul Cormier for their help with the statistics and tables, and his superior, Yvon Chiasson, for his support. Thanks go as well to Claire Noël and Melvin Doiron for their technical assistance.

The link between the history of communities and the fisheries is particularly close on New Brunswick's northern coast, southeastern coast, and southwestern coast (Bay of Fundy), and each of these coasts has its own historical characteristics. It should be mentioned that, even though this document pertains to a provincial issue, it focuses more specifically on the Acadian Peninsula. It was prepared for a forum whose theme was historic shares in the fisheries and their impact on the Acadian Peninsula economy. It should be noted as well that the provincial historic shares of several of the resources considered in this analysis are concentrated in this region. A similar exercise should be conducted in each of the province's other two major fishing communities. The Bay of Fundy has a unique history due its proximity to the United States and Nova Scotia, and the southeastern region's history is unique in that it shares coastal maritime territory with Prince Edward Island.

Neither should we overlook the earlier presence in these territories of Aboriginal communities that practised a seasonal fishery on certain coasts. Recognition by the Supreme Court of Canada of their treaty rights will require significant adjustment by the entire Atlantic industry, including ours. While recognizing their rights, we will explain why these adjustments should not affect the provincial sharing of fishery resources.

1. BACKGROUND OF ACADIAN PENINSULA FISHERIES

The history of our fisheries dates back 400, even 500 years, if we include the European fishermen who arrived before the official "discoverers." Little reference has been made to this longevity. Has not the time come to use this historical basis as a justification of our gains? We are not going to rewrite history here but rather look at the known historical sources and extract a few key points in support of our argument in favour of recognizing, re-establishing, and securing New Brunswick's historic shares in the Atlantic fisheries where the province has been an ongoing presence.

Maurice Beaudin recalls the beginnings of our adventure in America: [Translation] "The history of the fishery in New Brunswick probably began with the discovery of the cod banks in the waters of Atlantic Canada (...). In New Brunswick, the honour of discovering the surrounding waters, and more specifically Chaleur Bay, lies with Jacques Cartier. On July 3, 1534, Cartier rounded Miscou Point (which he called Cap d'Espérance) and sailed into the bay that he baptised with the name it still bears today" (Maurice Beaudin and Donald Savoie, Les défis de l'industrie des pêches au Nouveau-Brunswick, 1992, p. 19).

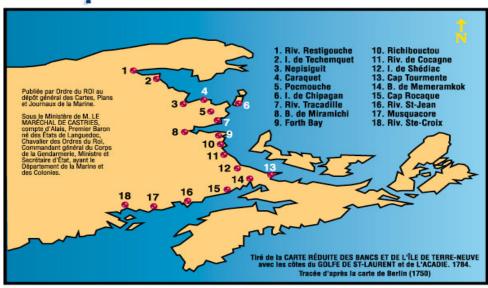
Certain historians, such as P.D. Clarke, maintain that the fisheries [Translation] "shaped the communities and their identity." He also demonstrated how the fisheries "contributed to safeguarding the popular culture and the Acadian memory" (P.D. Clarke, Pêche et identité en Acadie: Nouveaux regards sur la culture et la ruralité en milieu maritime, 1998:59-101).

2. 1600 TO 1750: THE PIONEER PERIOD – THE FIRST FACILITIES

As with the Grand Banks, the Europeans had no doubt already fished the Gulf of St. Lawrence banks, probably Bradelle Bank and Orphan Bank. The Acadian Peninsula's presence in the Gulf of St. Lawrence fisheries dates back to the first settlement efforts. According to Beaudin, [Translation] "As early as 1619, France encouraged the development of this industry by setting up two companies in Bordeaux, one designed to engage in the fur trade and the other designed to monopolize the sedentary fishery in the Miscou region. These new companies were part of a colonial development policy where the lands of the royal domain claimed by explorers were transferred to companies willing to see that they were populated" (Beaudin and Savoie, p. 20). In 1622, Raymond de la Ralde already had a commercial fishing station on Miscou Island. The history of the first company in Miscou was recounted by Robert LeBlanc (LeBlanc, 1963). In 1672, Nicholas Denys described the fishing activities in the Gulf and handling activities on the shores of the Acadian Peninsula. He played a key role in these fisheries at the time of the first facilities and the beginning of the sedentary fishery.

This interest continued until the early 1700s: [Translation] 'The fishing banks in the Gulf of St. Lawrence led to fierce competition at the turn of the 18th century on the part of New England merchants. The Acadia region (which took in the current provinces of Nova Scotia and New Brunswick) was then located between the Boston market and the Newfoundland banks (Bonavista and Trepassy regions)" (Beaudin and Savoie, p. 21). See geographic map below of the French fishing settlements in New Brunswick.

Lieux de pêche du Nouveau-Brunswick au XVIII^e siècle



Source: Archive Publique Canada Collection Nationale de Cartes et Plans. Document NMC 52070H2/1102/1784

3. 1750 TO 1850: A NEW START – THE REIGN OF THE SCHOONERS

After a period of decline associated with the war between France and England, the Acadian Peninsula fisheries resumed under the English regime, starting in 1760. Starting in the late 18th century, the Acadian Peninsula was a solid, permanent presence in the history of the fisheries and became a major fishing centre in the Atlantic region.

However, it should be pointed out that the first century under English rule was spent under particularly harsh conditions. The fishery revolved around the cod harvest. This industry was owned by Anglo-Norman companies and managed by a private system that maintained absolute control over all components, including harvesting, processing, marketing, services, and supply of commodities essential to the inhabitants. Jean Chaussade describes the situation of familes at that time as follows: [Translation] "Caught in a vicious circle of poverty and indebtedness, they were forced to give up a little bit more of their independence every day" (Jean Chaussade, La pêche et les pêcheurs des Provinces maritimes du Canada, 1983, p. 219). He calls their condition "implacable subjection."

Although the trade was hard learned, this period also marked the beginning of a slow appropriation of the territory, the fish handling and processing sites, and a maritime space that was gradually growing larger. Appropriation of the primary and secondary sectors of this industry started a century later, mainly with the lobster industry.

The first century of the fishing industry on the Acadian Peninsula was therefore characterized by the intense activity of a fleet of schooners controlled by Jersey companies. The schooners, which were the Acadian Peninsula's first "mobile" midshore fleet, fished not only along the coasts but sailed out to the vast groundfish banks in the Gulf of St. Lawrence, remaining there for several days. According to Hédard Robichaud and Léonce Chenard, it was by plying this difficult trade on the schooners for the two centuries following the Deportation (1750-1950) that the fishing families of the Acadian Peninsula prepared themselves to meet the considerable challenge of the modern midshore and offshore fisheries.

There was also a fleet of small rowboats and sailboats that fished along the coast in order to supply the merchants and put aside stores for the long winters on the Acadian Peninsula. In addition, a small mollusc fishery provided families with survival food, and it expanded with the development of markets in Quebec and elsewhere.

4. 1850 TO 1950: EVOLUTION OF MOBILITY - FROM WIND TO MOTORIZATION

Acadian historian Nicolas Landry, a professor at the Shippagan campus of the Université de Moncton, has painted an extraordinary historical portrait containing detailed information about this transitional century in the history of the fisheries on the Acadian Peninsula (Nicolas Landry, *Les Pêches dans la Péninsule acadienne 1850-1900*, Éditions d'Acadie, 1994). Professor Landry specializes in the history of the Canadian fisheries and has already published several articles in specialized journals.

The community and industry on the Acadian Peninsula are lucky to have had one aspect of their past recounted with such rigour. His work contains specific information about the condition of fishermen and families, fishing and handling techniques, markets, labour, and fluctuations in fisheries resources until the development of constitutional responsibilities and the beginning of federal regulation of the fisheries. This century, which overlaps the birth of Canada as a country, witnessed the end of excessive servility and absolute control over the industry by the Jerseyans. Nicolas Landry describes the great upheavals that occurred during that century and how local fishermen and entrepreneurs gradually took control of their work tool and of different sectors of the industry.

4-a The birth of a lobster industry: a break with the past

Despite the decline in the dried fish industry, a significant fishing effort using schooners continued throughout this century and until 1950. It is interesting to note that coastal communities really gained control over their fishing industry after the arrival of a new, truly inshore fishery: the lobster fishery. This was facilitated by the transition from rowboats, which limited the activities of inshore fishermen to the immediate coastline, to small motor boats (the famous putt-putts of our fathers and grandfathers), which led to an intensification of harvesting activities. These "inshore" fishermen were the ones who benefited the most when the phenomenon of motorization was introduced. [Translation] "Around 1908-1910, the motorization of small vessels began, the result being an increase in the number of trips to sea and an expansion of the vessels' radius of action" (Jean Chaussade, 1983, p. 224).

An industry controlled more and more by the Acadians, from harvesting to processing, then developed. With this "lobster rush" came an increase in the number of lobster pounds in all the small villages, bays, and estuaries, anyplace where there was lobster to be caught close by. The concept of resource "adjacency" and the granting of fishing privileges to fishermen from communities adjacent to these fishing areas probably originated with these fisheries, which were very limited geographically.

The birth of this inshore lobster fishing industry only slightly more than a century ago led Jean Chaussade to point out that it had a liberating effect on the coastal

communities and caused a break with the past: [Translation] "In addition, this canning industry benefited immediately from unquestionable popular support. Momentum was provided by American-owned companies whose work methods and labour-management relations represented a complete break with the customs of the British trading companies, particularly with regard to the remuneration of salaried workers and fishermen, which no longer took the form of purchasing vouchers but liquid cash. It is easy to imagine the importance of this change to the coastal populations. Not only did the lobster industry make thousands of new jobs available to the seamen's wives, but it made the fishery so valuable that agriculture and logging were relegated to the role of secondary activities, and last but not least, it enabled these people to cast off the yoke in which the merchants had kept them trapped until then. The introduction of cash remuneration, even though the amount was small, placed these families on an irreversible path towards emancipation and social advancement, a break with the past" (Chaussade, p. 223).

Jean Chaussade's most revealing observation, which still applies today, in his analysis of this transitional period is as follows: [Translation] "More generally, the opening up of a lobster market had the effect of revitalizing the traditional fishery, while at the same time preventing many families from heading off to the large American cities. In this sense, it was a geographic stabilizing factor" (Chaussade, p. 225).

This observation makes us wonder what the demographic status and fate of the Acadian Peninsula and the province's entire east coast would have been had this lobster industry not been established during the first half of the 20th century. In this new worrisome phase of emigration towards the urban centres, which we are experiencing today, it is recognized that this exodus would be even greater if we were unable to maintain a fishing industry whose supply is based primarily on respect for our acquisitions. The Acadian Peninsula therefore must remain a major, diversified fishing centre. Furthermore, it is essential that our modern industry take greater care of its human resources in order to ensure its own viability, which depends on a qualified, sufficiently large labour force. This same message is found in economist Maurice Beaudin's study entitled "L'industrie des pêches dans la Péninsule acadienne: son profil, sa dynamique et sa capacité à soutenir l'économie régionale" (CEEPA, 1998).

Like the dried-fish industry, the lobster industry also went into a decline as a result of exhaustion of the considerable reserves of this species that had accumulated along the coasts owing to the practice of an intensive fishery. This same decline would later occur in the groundfish fishery and nearly all the other fisheries until the end of the 20^{th} century. It was as if we had learned nothing from history or that history was condemned to repeat itself!

At the same time as the lobster industry was experiencing its first difficulties, the invention of freezers, rail transport, and trawlers would give new impetus to the groundfish and pelagics industry and revolutionize the Acadian Peninsula's

midshore and offshore fisheries. Yet the lobster industry survived thanks to an increase in its value that made up for the decline in landings as well as a spectacular upsurge in landings over the past 20 years. However, the downward trend with regard to landings seems to have resumed since 1995 and will no doubt represent the greatest challenge of the inshore fishery in this early part of the 21st century.

4-b Development of Harvesting Technologies

In 1935, the Acadian Peninsula still had an impressive fleet of schooners, in addition to its inshore fleet of motor boats or rowboats and sailboats. According to Léonce Chenard, [Translation] "At that time, there were around 175 schooners, each with a crew of five or six men who fished offshore cod from June 1 to October 15 in the southern part of the Gulf of St. Lawrence" (quoted in Gérard Saint-Cyr, L'École et l'industrie des pêches du Nouveau-Brunswick, 1998, page 98).

This parallel development of the inshore fleet and the fleet of schooners continued until the 1950s. The Acadian Peninsula was not immune to what was going on elsewhere in the Atlantic region, where similar fleets were appearing. It should be noted that Newfoundland, which calls itself the heir of the Basque, Breton, Norman, and even the Viking fishermen, in 1875 still [Translation] "was content to practise a sedentary fishery along the coasts of Newfoundland and Labrador" (Chaussade p. 227). Despite 400 years of history, in the late 19th century, the schooners of Newfoundland and Nova Scotia were basically fishing along the coasts, without venturing too far into the offshore areas recognized today.

It was not until after 1875 that the fishermen of Nova Scotia, followed by those of Newfoundland [Translation] "ventured to fish on the grand banks off the continental shelf" using a new harvesting technology: [Translation] 'the bottom line replaced the hand line, which prompted the schooners to almost simultaneously equip themselves with small auxiliary boats (dories) to place and retrieve these lines!" (Chaussade, p. 227). It should be noted that Acadian Peninsula fishermen participated in certain Atlantic traditional fisheries at the same time as their Newfoundland and Nova Scotia counterparts and were pioneers in some new fisheries.

4-c Arrival of Trawling: From Wind to Motorized Mobility

It would be necessary to wait another 50 years, until around 1925, for the introduction in the Atlantic of the technology that would significantly change the face of the fisheries and give a considerable advantage to the provinces and fishermen that adopted trawling for the harvesting of groundfish and pelagics. In 1925, the 11 offshore trawlers in the Maritimes, all based in Nova Scotia, were already landing more than 18,000 tons of fish compared with 16,000 tons for the traditional fleet in the Maritimes. New Brunswick followed suit 25 years later but quickly caught up in terms of technologies and mobility, in turn gaining an advantage through the diversification of its fleets and the species fished.

The race for the Atlantic fishery resources had begun. The fishermen of the Acadian Peninsula, with their vast experience on the schooners, entered the race in 1947. In 1950, 23 new trawlers, the pioneers in the first collection of *Gloucester* trawlers, were already active. This new midshore fleet would now lead the way for provincial historic catches in certain traditional fisheries and especially in the new fisheries.

Nonetheless, we must not overlook the developments, the gains, and the socioeconomic contribution of the inshore fishery in sectors important to maintaining the balance and stability of the Acadian Peninsula and provincial fisheries. Thanks to the lobster, herring, mackerel, gaspereau, and other fisheries that it has developed, such as scallop and rock crab, the inshore fleet continues to be dynamic and vital today.

5. 1950 - 2000: THE MODERN ERA

This period was characterized by two sizeable challenges for the Acadian Peninsula fishing industry: competing with the new foreign fleets in the Gulf of St. Lawrence and the Atlantic, equipped with the new trawling technology, and carving out a place for itself in the Atlantic provinces arena. Tribute should be paid to the first Acadian mandarins who took up the challenge and showed leadership at a decisive period of our presence on this maritime stage. Along with the fishermen, obviously, they were the first authors of the provincial historic shares that we are defending today.

Hédard Robichaud, the man behind the Fishermen's Loan Board, which was set up in 1946, discusses the beginnings of the trawler fleet in his political memoirs. He later became Federal Minister of Fisheries. Léonce Chenard who was Deputy Minister witnessed that crucial period, by its Notes historiques sur le Ministère des Pêches du Nouveau-Brunswick (as yet unpublished). His document is another abundant source of information for writing the pages of the modern history of our The fundamental role played by the province when it comes to support for and strategic development of the fisheries is widely documented by these two visionaries and players from the modern era. For his part, Gérard Saint-Cyr describes the importance of training for fishermen during this critical time in fisheries development, and the School of Fisheries spearheaded this effort. This provincial institution offered fishermen courses in high-tech fishing, enabling them to meet the new challenges of the last half-century. They were therefore able to play a key role in the establishment of a great industry and participate actively in building provincial shares. These provincial shares defended by DAFA are the sum of the individual shares of the catches and quotas of each fishermen laboriously acquired by them and their fathers and ancestors through decades and centuries.

In this chapter, we emphasize the province's role, and we do this for two reasons: to remind today's federal decision makers of the province's contribution to the

development of its essential infrastructures and the dependence that the province and its industry have established with its fisheries. Our industry may then recognize the province's substantial contribution to the means and tools with which the province has provided them in order to build these historic shares to assure their long-term individual viability and the general interest of the fishing communities. This argument based on collective and community interest was widely used to subsidize and fund the different sectors, including harvesting, processing, markets, services, shipbuilding, and training.

Beaudin and Savoie summarized this period as well, pointing out the determining and strategic role played by the provincial government: [Translation] "The fact that the two levels of government – federal and provincial – agreed on the objectives of this modernization was instrumental... Long before that, however, the province had joined the movement towards fisheries industrialization by setting up, within the provincial fisheries department, a financial assistance agency (1946) to help fishermen make the transition from the traditional fishery to the industrial fishery. This agency had such a major impact on the development of the industry that it warrants a closer look" (Beaudin and Savoie, page 42.)

The development of the Acadian Peninsula's midshore fishing armada picked up steam in the early 1950s with the completion of the *Gloucester* fleet and the construction of a new series of small trawlers in the *Chaleur* family. This choice of fleets became so popular that Joey Smallwood, then Premier of Newfoundland, went to the Caraquet wharf himself in 1950 to negotiate the purchase of a trawler (*Charlotte I*) with Hédard Robichaud, then director of the Fisheries Division of the Department of Industry and Development. (The *Charlotte I* was the first trawler built for a Bay of Fundy fisherman, but he did not take possession it.) Hédard Robichaud relates this anecdote with some amusement, an anecdote that also demonstrates our province's contribution to the development of certain fisheries in our neighbouring provinces. He adds [Translation] 'During the years that followed, the Quebec and Prince Edward Island governments adopted the trawling method that I had managed to introduce in northern New Brunswick. In 1949 and 1950, this fishing method spread to almost all the regions of the Gulf of St. Lawrence' (Hédard Robichaud, p. 64.)

By 1955, the Acadian Peninsula already had 57 midshore trawlers, the complete inventory of which included the 37 *Gloucester* trawlers, 12 *Chaleur* trawlers, and 7 other trawlers 64 feet in length.

However, in 1955, there were still more than 1,560 traditional vessels (25 over 10 tons and 1,535 under 10 tons, 980 of these being sailboats and rowboats) (Léonce Chenard, p. 100-101). The Great Depression of the 1930s had led to a considerable increase in the number of fishermen sharing the crustacean resource.

5-a Uniqueness and Historical Perseverance of the Acadian Peninsula

It is quite surprising that, of the province's three fishing regions, the Acadian Peninsula made the transition to the new technology the most easily and the most quickly. In 1955, there were 57 trawlers in the northeast and only 4 in the Bay of Fundy. A fourth had been resold on the Acadian Peninsula in 1954. In his *Notes historiques du ministère des Pêches*, quoted by Gérard Saint-Cyr, Léonce Chenard provided the following explanation: [Translation] "Although the technical modernization program for the offshore fishery was an overwhelming success in the Gulf of St. Lawrence, such was not the case in the Bay of Fundy where the construction of small trawlers was temporarily abandoned. The success achieved in the Gulf of St. Lawrence was attributed, and rightly so, to the calibre of the Acadian fishermen who had practised this trade for a number of generations while they were engaged by the Jersey barons as captains and deckhands on board the company-owned schooners." The Bay of Fundy would catch up later, by adopting the new technology and increasing significantly the size of its mobile fleet.

For his part, Hédard Robichaud offers a similar explanation for the failure of the midshore fishery in the southeastern region: [Translation] "The Fishermen's Loan Board thought it wise, maybe because of the political pressure being brought to bear in certain regions of the province, to seek out fishermen from regions other than Gloucester County who might be interested in this new type of fishery. To the great surprise of the politicians of the time, fishermen in Northumberland, Kent, and Westmorland counties were reluctant to adopt a fishing method that was totally different from the one they were using. Fishermen in those regions practised a day fishery, travelling only a short distance from their home port and returning to the wharf every evening or every morning, depending on the fishing conditions. For their part, the Gloucester County fishermen were familiar with all the regions of the Gulf and would go to sea for periods of five or six days, often having to sail for more than 10 hours to reach the fishing banks. The Board eventually approved loans for a fisherman from Saint-Louis-de-Kent, a group of four fishermen from Neguac, and a fisherman from Loggieville. They had trouble adapting to this new type of fishery and were only moderately successful at it. After a few years, most abandoned this fishery and sold their vessels to fishermen in Gloucester County" (Hédard Robichaud, *Un politicien acadien au service des pêcheries*, 1991, p. 60).

5-b Competing with the New Foreign Fleets

The following excerpts sum up the issues of the time and the province's role in helping our fishermen compete with the foreign fleets. According to Léonce Chenard, drastic measures were required: [Translation] "In 1960, New Brunswick was already starting to express concern about foreign fleet encroachment into fishing areas that were considered Canadian. The only tool at our disposal was to develop fishing methods capable of taking on this competition."

Maurice Beaudin recalls the situation at the time: [Translation] "After the Second World War, we witnessed the arrival in force in northwestern Atlantic waters of new foreign fleets, particularly from Eastern European countries such as the USSR, Poland, and East and West Germany, as well as fleets from other countries that regularly fished in those waters, such as France, England, Portugal, Spain, Norway, and the United States. This increased the competition, even within the Gulf, and the fishermen from our regions were not able to deal with it at that time (...) The time had come for fishermen from the Maritime provinces to acquire more modern equipment so they could seek out their share of the resources and serve as regular suppliers for the processing plants located along the entire coast. But the transition from the traditional fishery to the industrial fishery did not happen without some gnashing of teeth for many fishermen, who, although not prepared to abandon a traditional activity that was in their blood, did not have the financial means to take this giant step towards industralization" (Beaudin and Savoie, 1992, p. 41).

5-c Carving Out a Place in the Atlantic Provinces Arena

According to Léonce Chenard, in 1955, New Brunswick [Translation] "outdid its sister provinces a second time when it introduced a larger unit, namely the 65-foot model." This was followed by the introduction of Danish seiners in 1959. The province did the same thing again just a few years later: [Translation] "Finally, in 1962, New Brunswick was the first in North America to launch a stern trawler, with Shippagan as its home port. This was also the first steel fishing vessel built in the Maritimes." These vessels were built in Bathurst by a Norwegian company that moved to Prince Edward Island three years later and went on to build a midshore fleet for the other provinces and consolidate the Acadian Peninsula fleet. That meant that everyone had the same advantage in the race that was under way.

Also, the Department became actively involved in developing the inshore fishery. More than 100 new modernized, well-equipped lobster and herring vessels were built between 1947 and 1965 alone,

According to Léonce Chenard, after 20 years of ongoing development by the province, the inventory of the region's fishing fleet was as follows: In 1965, Gloucester County's fishing fleet consisted of 64 draggers (48' to 65'), 7 trawlers (84' to 92'), 25 Danish seiners (48'), and 900 motor boats, 45 of which were over 10 tons. From 1946 to 1964, groundfish landings increased from 20 to 53 million pounds, pelagics from 12 to 24 million pounds, while crustaceans and shellfish dropped from 5 to 1.5 million pounds. The landed value of all of these species combined had doubled in 20 years, going from \$1.5 to nearly \$3 million. Groundfish accounted for nearly two-thirds of the value in 1964. Maurice Beaudin says that, for all of New Brunswick, the Fishermen's Loan Board made 1,411 loans totalling \$13.8 million during a 20-year period (p. 44).

Starting in 1965, landed value grew at an impressive pace, as we will see further on, particularly with the arrival of some new fisheries that picked up speed that year. Investments grew at a tremendous rate as well, maintaining the pace of development and building a history of the catch that would serve to consolidate our gains.

5-d Movement towards New Fisheries in the 1960s

This midshore fleet was the impetus behind the development of new fisheries in the following years, during which small and large trawlers were systematically transformed into cod, redfish, herring, shrimp, and snow crab fishing vessels. In the 1960s, the redfish fishery took over from cod, followed by the shrimp and herring fisheries. The snow crab fishery started up in 1966 and then really took off a few years later. On this subject, Maurice Beaudin says that [Translation] "Euphoria soon took hold of Acadian Peninsula fishermen" and that it was [Translation] "the beginning of an activity that would expand so dramatically on the Acadian Peninsula that it set the pace for the entire fishing industry, and even the whole of the region's economy" (p. 48).

With regard to the period leading up to the 1980s, Beaudin added: [Translation] "Between 1966 and 1980, the Fishermen's Loan Board counted on the diversification of the species fished, as well as on the development of a more flexible fleet, capable of adapting quite readily to other species. Towards the late 1960s, the Board had to rush to find a way of helping New Brunswick keep up the other Atlantic provinces in the rush for fishery resources" (p. 45).

This feverish period was marked by the phenomenon of fleet "mobility" for the harvesting of certain species, a distinctive characteristic that all the Atlantic provinces used or had the opportunity to use. The 20 years that followed (1965-1985) were determining ones for the Acadian Peninsula and New Brunswick, during which it initiated or participated in all the new fisheries that were emerging in the Gulf of St. Lawrence and the Atlantic. That was when it carved out a place for itself commensurate with a history characterized by determination, perseverance, hard work, and continuity.

Again according to Beaudin, [Translation] "The Atlantic provinces and Quebec were in a hurry to develop their fishing and processing arsenal in order to take advantage of the spinoffs offered by the 200-mile limit, once the foreign fleets were kept at a distance (...) In New Brunswick, the surge in the fisheries sector was not just the result of the declaration of the 200-mile economic zone. Confined to the Gulf region, New Brunswick invested in the modernization and expansion of its fleet, while providing considerable assistance for the processing sector" (Beaudin and Savoie, 1992, p. 49 and 50). Today, except for a few fisheries that it has maintained in the Atlantic, the Acadian Peninsula is confined to the Gulf for its main fisheries, both midshore and, obviously, inshore.

This positioning in the face of foreign competition and competition among the Atlantic provinces required considerable public investment in the industry's three sectors. The increase in the province's and the Peninsula's catches encouraged the province to support the development of a vigorous processing sector that had to be kept on the leading edge of technology. Nor should we overlook the substantial contributions made by the federal government to all sectors of the New Brunswick fishing industry during this period, including port infrastructures, or all the other policies for supporting the harvesting, processing, marketing, research and development, and other sectors. Furthermore, this federal strategy confirmed its long-term objective of ensuring that the province could seek out, process, and conserve its share of the Atlantic fishery resources. It would be ridiculous for DFO now to come and take away the province's share of the fishery resources that the federal government helped to build for the benefit of the province's coastal communities.

It would be worthwhile to mention the size of the province's investment in its fleets. From \$14 million after 15 years of development (1965), its investment climbed, over the next 35 years (2000), to \$280 million, with the diversification and modernization of its fishing armada. This investment does not include the support and investment provided for all the other sectors of the industry during this half-century.

Was not the objective of these ongoing efforts over a 50-year period to guarantee New Brunswick's coastal and rural communities the benefits of renewable resources, which it was reasonable to believe would remain attached to the coastal communities?

In retrospect, it was a large fleet of schooners from Europe that first engaged in the fishery during the first century of the pioneer era. However, it was a fleet of Acadian Peninsula schooners that took on this "wind mobility" function in the traditional fisheries in the two centuries that followed, i.e., from 1750 to 1950. This impressive fleet of schooners gave way to modernity in 1947 with motorization, new fishing techniques, and the emergence of a new midshore and offshore fleets characterized by "motorized mobility." During the previous half-century, the province obviously developed an economic and political strategy for promoting the modernization and expansion of its inshore fisheries. It also ensured the development of new fleets and midshore fisheries. A small offshore fleet was then added, providing access, for the past quarter-century, to a modest share of Canada's resources in the new Atlantic fishery economic zone off the coast of Nova Scotia, Newfoundland, Labrador, and as far away as Greenland and Baffin Island.

Starting in the 1960s, this midshore fleet, which focused on cod, was transformed into a fleet of redfish, herring, shrimp, and crab fishing vessels that had to be mobile in order to reach the fishing grounds distributed around the Gulf of St. Lawrence and the Atlantic.

Generally speaking, our fishing industry was subject to the same constraints as those of the other provinces, if not more so, because of its greater distance from certain fishing grounds. With a highly advanced fleet that was constantly being renewed in order to adapt it to the emergence of each new fishery, the province, as the data shows, carved out only a very modest place for itself in the Gulf and Atlantic fisheries.

Comparative tables of Atlantic values and landings Landing Value by province (in percentage)

Prince Edward Island = 8.3%
Quebec = 9.3%
Newfoundland = 30.1 %
Nova Scotia = 39.9%
New-Brunswick = 10.4%
In year 2000: 10.4 % of the Atlantic Landing Total Value

Landing of major species by New Brunswick (in percentage)

- Scallop (10% 1990 / 2.7% 2000)
- Shrimp (22% 1980, 9.8% 1990, 4.2% 2000)
- Snow Crab (40% 1980 à 1985, 20% 1990, 9.1% 2000)
- Lobster (stable at 20% since 20 years)
- Groundfish (2.5 % / for 15 years, 1.1%- for the last 3 years)
- Pélagic (Stable à 30%)

In year 2000: 14% of Atlantic Total Landing

6. MANAGEMENT AIMED AT STABILITY OF HARVEST AND SUPPLY

Although based on inexact science, the first TACs (total allowable catch) were introduced in the 1970s, after a period when access had been generally quite open to anyone who wished to practise this trade. The fish biomasses and the quantities that could be caught varied considerably from one species to the next, as did the capacity to harvest these species. However, science and management both developed at the same rapid pace as the evolution of the fleets and the resources during the last quarter-century, resulting in a fishery that was more controlled and distributed on the basis of new criteria. The most deciding was certainly the share of some fisheries resources between individual fishermen or enterprises. It's obviously add to the recognition and confirmation of provincial shares.

6-a Federal Policies in Response to Provincial Dynamics

For the purposes of this exercise, it is worthwhile to analyze the development of fisheries management policies during the past quarter-century in terms of the

provincial and community stability considerations that existed at that time and the long-term objectives of the Department of Fisheries and Oceans.

Through its new approach based on conservation and stability, DFO set general rules for the distribution and management of fishing licences between provincial fleets, and as a result, defined the principles governing licence exchanges or transfers between provinces and even between regions within the same province.

For the purposes of this exercise, we will not examine in detail all the texts that confirm and reinforce this management approach based on compliance with the historic gains of each province. Yet it is still necessary to look at the most determining texts that govern the sharing and stability of the distribution of the Atlantic fishery resources. These include, notably, the Commercial Fisheries Licensing Policy for Eastern Canada and the complementary policy for the Gulf region, the broad principles of which have been adjusted to management models and customs.

In the introduction to its policy, DFO explains the policy objective as follows: "Licensing policies for the marine fisheries of Eastern Canada take into account the fact that, for the most part, this fishing industry is located in areas of scarce alternative employment opportunities (...) [where] the resource and the social and economic forces in play vary tremendously from area to area." The Gulf region policy adds that these resources "have a high impact on the rural communities." In the licensing parameters of the Gulf region policy, it is further stipulated that "geographic distribution of economic opportunities [is] maintained."

6-b "Residency, Home Port, or Area of Historical Fishing"

It is therefore obvious why DFO included in its policy an entire chapter devoted to "residency, home port, or area of historical fishing," and it would be worthwhile to reproduce those sections stating that the transfer of licences from one province to another and sometimes even from one village to another is officially prohibited. Until 1992, it was clearly stated that, in the Gulf region, the reassignment of fishing licences between provinces was not permitted (Article 19-4). Today, the policy refers to "administrative areas." It should be noted that these DFO "administrative areas" actually correspond to provincial geographic boundaries, particularly in the Gulf of St. Lawrence. This applies to New Brunswick, as well as to Prince Edward Island, Quebec, Nova Scotia, and Newfoundland.

Under the Commercial Fisheries Licensing Policy for Eastern Canada, *residency*, *area of historical fishing*, and *home port* are used as eligibility requirements when new or replacement licences are issued. Set out below are the restrictions on licences for vessels of different lengths, along with the author's observations in parentheses.

- Licences for vessels under 50' (15.2 m): In the two DFO Administrative Areas of Gulf New Brunswick and Prince Edward Island, where vessels less than 15.2 m (50') LOA are used, a vessel-based replacement licence for any species, other than mackerel, tuna, and snow crab, may only be issued to the head of a core enterprise or to a qualified new entrant residing adjacent to the same Lobster Fishing Area where the head who is relinquishing that licence was a resident when the licence was originally issued to him (In the lobster fishery, selling outside one's own lobster fishing area is prohibited. In the mackerel, tuna, and snow crab fisheries, the prohibition is limited to provincial boundaries, as for vessels under 65'.)
- Licences for vessels under 65' (19.8 m.): Unless provided otherwise in a management plan, a replacement vessel-based licence may only be issued to the head of a core enterprise or new qualified entrant who is resident of the same DFO Administrative Area where the head who is relinquishing that licence was a resident when the licence was originally issued to him. (We wish to emphasize the proviso "unless provided otherwise in a management plan." Our analysis of all the fishing plans reveals a tendency to reinforce these prohibitions see below.)
- Licences for vessels over 65' (19.8 m): Applications for any replacement licence for vessels 19.8 m (65'.) and over will be subject to a decision based on an individual examination. (The same prohibition as the one for vessels under 65' applies a priori. This has always been so until now. The practice is to consult the province concerned and the Department has final discretion. Exceptions where DFO has made such transfers without the knowledge of and against the clearly expressed wishes of the provinces are exceedingly rare.)
- Definition of resident: In respect of a licence, a person who has continuously had his main place of residence in a defined area for a period of not less than six months immediately preceding the time that residence becomes material for the purpose of licensing (The key element here is the meaning of "permanent residence." Can a person have two permanent residences? Is it possible to get around this principle?)

In addition, it is very important to place alongside these official policy excerpts their interpretation by the federal minister of Fisheries and Oceans Canada. In 2001, in the Hon. Herb Dhaliwal's reply to a letter addressed to him by the Hon. Paul Robichaud expressing concern about attempts to transfer crab licences and allocations to another province, the federal Minister clearly reiterated the prohibition on transferring licences from one DFO administrative area to another (which, in this situation, corresponds to the two provinces of New Brunswick and Prince Edward Island). He confirmed the practice of contacting the province about this issues beforehand, and he clarified the potential use of his discretionary power in such circumstances, i.e., only after a "reasonable" demonstration of noncompliance with the policy: [Translation] 'In your letter, you also raise the issue of

the acquisition of snow crab fishing licences by interests outside the province. DFO's current policy prohibits the reassignment of licences from one DFO administrative area to another. When the Department receives a reassignment application, it asks the province concerned to provide it with the information required to review the matter. When it is reasonably demonstrated that a person is not complying with the licensing policy, I can, using the discretionary powers vested in me under the Fisheries Act, prohibit reassignment of the licence."

The Licensing Policy therefore confirms the argument that the share of fish quotas allocated to licence holders in the provincial fleets cannot be transferred to another province because the licence is non-transferable. On the basis of this same logic, as we will see in the chapters that follow, the sharing among the provincial fleets, as a percentage of the total allowable catch (TAC), was meant to represent non-transferable provincial shares. We will explain how the federal fisheries ministers were able to get around what we had considered at that point to be provincial gains.

6-c Towards an Individual and Collective Quasi-Property Right

The need for a type of management adapted to the development of the fleets and the competition for the resource among the different fleets and the provinces led DFO to change its management models.

We do not intend to provide a detailed history of fisheries management over the past 50 years. However, we can say that we made the transition from a competitive fishery for resources that some thought were inexhaustible to fisheries characterized by a concern for conservation, stable resource distribution, and giving priority to communities that were linked to and dependent on certain resources. To this was gradually added the objective of sharing, at different levels, management with users and all those affected by these common resources. In the jargon of the initiated, there was talk of a transition from macro- to micromanagement of the fisheries.

During the past half-century (1950-2000), we therefore saw the fisheries move quickly from free access to resources, associated with the concept of common ownership, to a more limited access leading toward a system of quasi-property rights, governed by an individual quota system. The formula is relatively simple: for some species, a specific fish allocation expressed as a percentage of the total allowable catch (TAC) was attached to the harvesting licence.

For the past quarter-century, all fish licensing and licence replacement policies, the policy of fleet separation between independent fishermen and processing plants, the annual or multi-year or integrated fishing plans, and the sharing and co-management agreements for all resources have reflected this concern for community stability. All of these initiatives reflect a concern for linking the resource, the licences, and the allocations to fishermen to the communities and the provinces that have developed a dependence on them. The introduction of

individual quotas did not change this philosophy; rather they were to became its pillar.

In this context, the significance and importance of the fishing licence changed tremendously for the individual fisherman, the community, and the province of residence of the licence holder. Management policies supported this new concept, which combined individual privilege and individual and collective quasi-ownership.

It would be particularly disappointing, even harmful, to these communities and the province if these individual quotas, which were designed to provide plants and provincial communities with security and stability of supply and guarantee a handover to future generations, were to serve today as a privileged tool for increasing profit margins for a last generation of fishermen during the final sale of their fishing enterprises. We are referring here to attempts by interests outside the province to take control of fishing enterprises.

6-d PHSs Compatible with Federal Jurisdiction over the Fisheries

New Brunswick still believes that Canada's ocean resources, sedentary and migratory, could be better managed by an accountable central political authority. Until now, the province has never claimed jurisdiction over commercial fisheries and has remained consistent during the stormy constitutional debates of the past quarter-century. In fact, it was an ally of the federal government on these issues. We wish to emphasize the fact that recognition of and compliance with PHSs in no way compromises federal jurisdiction over the fisheries or its authority to manage licensing within the provinces. All it has to do is make provincial shares a clear principle of resource sharing and management. The application of the Licensing Policy, which makes it possible to protect licences in each of the provinces, is one example of the federal government's exercise of its jurisdiction over fisheries in favour of the provinces. Going just a little bit further would guarantee, secure, and stabilize the provinces' access to fishery resources by recognizing once and for all a set quota for each species in which there has been ongoing participation. In August 1994, the Minister of Fisheries and Oceans Canada confirmed the principle of safeguarding historic shares, first for groundfish, and he called for the establishment of a working group of the Federal-Provincial Atlantic Fisheries Committee, whose terms of reference would include proposing to the Atlantic Council of Fisheries Ministers a method of determining provincial shares. Since this exercise was proposed by Minister Brian Tobin, it does not seem to be incompatible with federal jurisdiction over the fisheries but rather appears to a useful model for stabilizing the fisheries of the future. This process end up on the back burner. Notwithstanding the difficulties with certain provinces, but with DFO leadership, it is more essential today than ever to put the objectives of determining provincial shares and long-term stability back on the political agenda. The inability of the Independent Panel on Access Criteria (IPAC) to reach more manifest conclusions in order to address this issue means that the exercise of establishing provincial shares must be carried out again.

7. RECOGNITION OF PROVINCIAL HISTORIC SHARES (PHS)

Although TACs imposed a ceiling in the 1970s, the provincial fleets naturally continued their race for the resource as part of a midshore fishery that would remain competitive until individual quotas were established. This fishery was carried out in the context of a two-tiered sharing process.

<u>First tier</u>: In the 1970s, DFO started distributing the various Atlantic fishery resources among the different inshore, midshore, and offshore fleets, first without taking into account the provinces that continued to compete among themselves. Each province had a fleet in each of these categories. DFO managed the distribution among the provinces using the privileged, discretionary tool of licences and particularly the Licensing Policy.

The geographic location of certain more inshore resources, combined with the principle of adjacency, favoured the allocation of these resources to inshore fishermen and communities very adjacent to them and therefore to the provinces. Lobster is probably the best example of this. Lobster PHSs were the first to be dictated by the natural geographic distribution of a very sedentary species near the coast. Certain other resources that were located farther off the coasts or were more migratory led to more mobile fleets that were better able to reach these fishing grounds safely. It should be mentioned as well that the inshore fleets that had become more mobile with motorization were also more active in the traditional fisheries and in certain new fisheries. DFO therefore took into account the dynamics of these various fleets in its distribution of fishery resources.

Second tier: The dynamics of the provinces and the search for greater distribution and management stability prompted DFO to establish a second level of quota distribution for the principal stocks of fish, pelagics, and certain crustaceans among the fleets of the different provinces.

After distributing the overall quotas among the three fleet categories (inshore, midshore, and offshore) on the basis of different historical participation or distribution criteria, DFO distributed these TACs, from the 1980s until the early 1990s, among the fleets of the different provinces on the basis of individual quotas inside each provincial fleet. Initially, each licence holder was allocated a percentage of the total allowable catch. In addition to individual considerations in order to ensure the viability of fishing enterprises and fishermen, provincial considerations were omnipresent throughout the processes that led to these These provincial considerations were confirmed in all longhistorical sharings. term agreements when non transferability clauses between provinces were added. Each province stood behind its industry to ensure that these sharing arrangements were implemented objectively, rationally, and equitably for the provinces involved that had made substantial investments in the fisheries subject to these historical sharing arrangements.

The fishermen and the fishermen's organizations in each of the provinces were vigilant, battling and negotiating to ensure that these new sharing arrangements reflected the individual fishing pattern and historical dependence of their fleet and They were persuaded to participate with the federal their provincial industry. government and the provinces at historic moments in order to ensure that these individual and collective catches, the result of so much sweat, labour, investment, and human lives, became permanent gains, or provincial historic shares. These fishermen and their organizations made a praiseworthy contribution to these negotiating tables over a period of several years. In view of the recent decline, even though they may sometimes feel that that DFO did not fulfil its commitments towards them in certain fisheries, it is important for them to understand that DFO did not fulfil its commitments to the province either. Given the losses sustained as a result of non-compliance with historic shares, it would be better to share the misfortune, demand corrective action, and more important, ensure that our communities do not experience a permanent loss, for the generations to come, of the fruit of so much investment on so many levels.

We could describe this sharing as historic and equitable because it was based on a balance between historical fishing patterns, investments, fleet mobility, adjacency, and economic dependence related to the coveted resources.

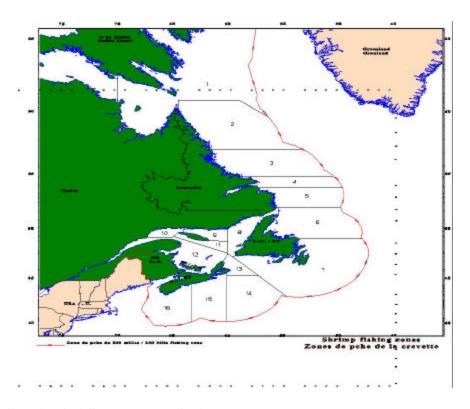
This new sharing formula process took place over a decade. It began with the setting of individual quotas for the Atlantic herring seiner fleet (1983), the offshore Atlantic groundfish fleet (1983), and northern shrimp (1989), followed by Gulf groundfish (1989), Gulf snow crab (1990), Gulf shrimp (1991), and finally the Scotian Shelf shrimp (1993).

Since each vessel had a home port in one of the five Atlantic region provinces, this sharing formula set the share of quotas and supplies for each province and for each species. In the following chapter, we will see that the partners, following the spirit and the letter of these agreements, thought that PHSs had been established once and for all. The industry did not suspect that, a few years later, under the pretext of temporary allocations, exploratory zones, and other subterfuges, politicians would chip away at these PHSs by using the minister's so-called "discretionary power." The Minister did it by denying the percentage of TACs already given to individual fishermen and provincial fleets in disrespect of provincial shares.

In order to illustrate the path taken by DFO in its tacit and often more explicit recognition of provincial shares, we thought it necessary to analyze all of the documentation establishing individual quotas (IQs), individual transferable quotas (ITQs), and enterprise allocations (EAs), co-management agreements, integrated management plans, and all annual or multi-year fishing plans for each of the fisheries in which the Acadian Peninsula and the province are active participants. Then, for each sharing of historic shares, we provide some background information, how the PHSs were established, and the pretexts used to get around this recognition.

The summary table at the very end of the document provides a synthesis of all the species documented in the following pages and data on the evolution of PHSs and the relative importance of each of these Acadian Peninsula fisheries in the Gulf and the Atlantic. This summary table also provides a estimate of the landed value of each inshore, midshore, and offshore fishery for the year 2000.

7-a Shrimp Fishing Areas in Gulf of St. Lawrence, Scotian Shelf, and North Atlantic



7-b PHSs – Gulf of St. Lawrence Shrimp

The Gulf of St. Lawrence shrimp fishery began in 1965 with the participation of the Acadian Peninsula and has been practised ever since in the St. Lawrence estuary, to the north and south of Anticosti Island, and in the Esquiman Channel on Newfoundland's west coast.

(i) Establishment of PHSs for Gulf Shrimp

In 1991, DFO negotiated with the parties concerned a sharing arrangement for this resource among the provincial fleets on the basis of individual quotas. One of the premises of the agreement took into account the stability of the processing sector: [Translation] "...in an effort to improve the overall viability of enterprises and to stabilize plant supplies, the Minister set up an IQ program for enterprises harvesting mainly Gulf of St. Lawrence shrimp (...) Individual quota is defined and expressed as a percentage of the quota for a given stock." The document adds: "Allocate the resource equitably, taking into account the participation and historic

share of the existing fleets, its proximity to various localities, the dependence of coastal communities on the resource, and the viability and mobility of the individual fleets."

This is an agreement where the provincial connotation is very appealing. Once the transferability of quotas and licences was introduced the following year, the vocabulary used makes it quite clear that this sharing targets not only sharing among individual fishermen but a willingness to define provincial shares.

In terms of the distribution of TACs, the plan describes the sharing among the provincial fleets as follows: 'Group B, composed of 44 Quebec enterprises and 20 New Brunswick enterprises, has access to 25% of the global quota for the Esquiman Channel and to all quotas for Sept Îles, Anticosti Island and the Estuary. The Quebec and New Brunswick fleets hold 72.17% and 27.83% of this quota respectively." Taking into account the combined calculation for groups B and A, and the three participating provinces, New Brunswick's share of the shrimp TAC for the entire Gulf is 21.9%.

The administrative guidelines for this five-year plan, entitled *Administrative Guidelines for the ITQ Program for Enterprises Fishing for Shrimp in the Gulf of St. Lawrence*, stipulate, in the section on the permanent transfer of ITQs, that '**No permanent transfers are authorized between the different provinces**." This text really just reinforces the Licensing Policy, which already set out this ban on transfers, except that here, the term "province" is used, confirming the provincial nature of the sharing arrangements.

(ii) Decline in PHSs for Gulf Shrimp

These provincial fleets were each supposed to share a percentage of the TAC, i.e., the total allowable catch for all Gulf of St. Lawrence shrimp. Changing these provincial shares in order to distribute some to other provinces represents a failure on the part of DFO to live up to its commitments. In the case of the Gulf shrimp, it is not so much the quantities of temporary allocations given to other provinces since 1998 but the principle of opening up the temporary sharing formula on an other-than-provincial basis. This was clearly in violation of the spirit and letter of the TAC sharing agreements entered into by the provinces involved in this fishery.

7-c PHSs – Scotian Shelf Shrimp

New Brunswick has been present on the Louisbourg, Canso, and Misaine banks off the coast of Nova Scotia for over 30 years. Our shrimpers starting fishing there in the early 1970s along with their counterparts from the southern part of the province, but only the Acadian Peninsula vessels have persisted, without interruption, since then. We fished alone until 1990.

(i) Establishment of PHSs for the Scotian Shelf

In 1993, the two provincial fleets negotiated a sharing of the total allowable catch of Scotian Shelf shrimp under DFO's direction, with the province's technical support and assistance. The agreement was as follows: 25% of the TAC was reserved for the New Brunswick shrimp fleet over 65' and 75% was henceforth to be shared within the Nova Scotia fleet under 65'. This sharing arrangement guaranteed us a permanent presence in this maritime territory. In 2001, this amounted to over 1,125 tonnes. This allocation is important to the profitability of the New Brunswick shrimpers but also to the two provincial plants that process this entire allocation, which amounts to 2.4 million pounds.

(ii) Special Status for Scotian Shelf PHSs

The principles of the sharing agreement include very pointed references to the intention to share the Scotian Shelf shrimp not only among individual fishermen but also among the provinces. It should be made clear that the Scotia-Fundy sector, referred to below, includes only the Nova Scotia fleet and that the Gulf sector includes only the New Brunswick fleet.

"Scotia-Fundy/Gulf sector Sharing Agreement re: 75:25 split of TAC re-confirmed for the duration of this plan." The new 1998-2002 agreement goes even further, providing, for the first time, for the sharing of temporary allocations and Aboriginal allocations on the basis of provincial shares. "Respect the Scotia-Fundy/Gulf sharing formula (75%-SF/25% Gulf). Apply the same SF/Gulf formula to the new (temporary) entrants. Native allocation is to be part of the Scotia-Fundy share." Furthermore, this is a resource where the temporary sharing arrangement respects provincial shares. Why was this recognition of provincial shares in terms of temporary allocations not applied in the other fisheries?

Finally, the *ITQ Guidelines for the less than 65' Scotian Shelf Shrimp Fleet* stipulate that licence transfers in Nova Scotia may be made only between Nova Scotia fishermen: "*Transfers will be permitted only among the Scotia-Fundy based licence holders who own a <65' LOA mobile gear vessel in the Scotian Shelf shrimp fishery for shrimp fishing areas (SFAs) 13, 14 and 15." This province therefore follows the same practices that have been put in place elsewhere since the introduction of individual transferable quotas.*

(iii) Decline in PHSs to the advantage of one partner of the agreement

The trap fishery allocation was subtracted from the shares of the two provinces and transferred to trap fishermen in Nova Scotia. This is equal to 2.5% of our provincial share, although the portion not caught by trap fishermen by the end of their fishing season is given back to the mobile fleets on a provincial-share basis.

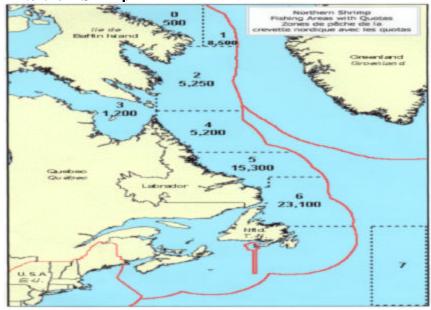
Although it has been possible to maintain this balance so far, the slippage that seems to be brewing in terms of the federal policy on quota transfers and purchases in order to integrate Nova Scotian Aboriginal communities into the Scotian Shelf shrimp fishery could have dramatic consequences for New Brunswick. This threat could even compromise our presence on these historical fishing grounds.

During the meeting of the Scotian Shelf Shrimp Advisory Committee in February 2002, we witnessed those responsible for the Aboriginal fishery make their first approach to New Brunswick shrimpers in order to see if they were interested selling their Scotian Shelf shrimp allocation to DFO for the purpose of transferring it to the Aboriginal communities of Nova Scotia. This was totally contrary to the policy of compliance with provincial shares. Former federal minister Herb Dhaliwal had made a commitment to respect provincial shares during transfers of snow crab allocations to Aboriginal communities. We might have expected that this commitment was valid and extended naturally and logically to the other species where purchases and transfers to Aboriginal communities were being considered.

The impact would be felt primarily in the processing sector, particularly in terms of the loss of hours of plant work, which would have a negative influence on the entire province. This would mean a net loss of up to 25% of the region's TAC, or more than 1,000 tonnes annually (see P.-M. Desjardins, *Economic Impact Assessment of the Fisheries Sector in New Brunswick: Crab and Shrimp*). The purchase price eventually offered to our shrimpers was reportedly higher than the Gulf's owing to this region's higher average shrimp size.

Recent statements by federal politicians regarding a processing plant experiencing difficulty in Canso, N.S., are very worrisome. These politicians are promising Scotian Shelf crab and shrimp quotas to make up for the federal minister's refusal to transfer a redfish PHS in Newfoundland to this Nova Scotian plant. We hope that our industry will not have to pay for these decisions. Our industry has suffered enough!

7-d PHSs – Northern Shrimp



We should be reminded that New Brunswick industry was present at the beginning of this new shrimp fishery, which developed along the east coast of Newfoundland and Labrador, up to the Davis and Hudson Straits, and as far as Greenland and Baffin Island.

When the federal government decided to issue harvesting licences to an offshore fleet in 1978, New Brunswick received two of them, one in Lamèque and the other in Caraquet. Several crew members from the Acadian Peninsula worked on these offshore shrimpers for months at a time under very trying conditions, and a portion of the shrimp was processed in two plants on the Acadian Peninsula.

(i) Establishment of PHSs for Northern Shrimp

In 1989, the TACs for northern shrimp stocks were distributed equally among the 17 offshore licences. It should be mentioned that 11 of the 17 licences were given to Newfoundland and to Aboriginal communities from Labrador and Quebec's North Shore, indicating that the principle of "adjacency" was already being respected. It is shocking to see how the fisheries minister at the time, a Newfoundlander (Mifflin), abused the principle of adjacency to award his province almost all of the temporary northern shrimp allocations in 1997.

However, we were satisfied to note that permanent transfers between fishing enterprises are not permitted, which ensures a more permanent share for the two licences in the province of New Brunswick. "Licence holders will have equal access to all northern shrimp stocks and fishing areas. The EA for each licence, for each SFA, is determined by dividing the TAC set for the SFA by seventeen, the number of offshore licences in the fishery. No permanent transfers of EAs between enterprises are permitted."

(ii) Decline in PHSs for northern shrimp

This share was considerably reduced in 1997, when DFO started distributing temporary allocations. Our PHSs therefore dropped from the 11.76% we had from 1989 to 1996 to 5.56% in 2000, depriving New Brunswick of substantial quantities of shrimp over a five-year period. We were particularly surprised to see the underhanded way in which DFO distributed the temporary shrimp allocations in some of these areas. In order to allow the midshore Gulf shrimpers from Newfoundland to participate in the northern shrimp fishery (outside the Gulf), it also allocated a share to shrimpers from Quebec's North Shore (1998 management plan): "The 4R/4S allocation will be split between Quebec and Newfoundland on the same basis as 1997, i.e., 88.89% allocated to Newfoundland based vessels and 11.11% allocated to Quebec based vessels." The respective share of each of these provinces was based on their respective share of shrimp in the Esquiman Channel, 75% of which is reserved for them. New Brunswick's midshore fleet holds the remaining 25% of this TAC in the Esquiman Channel. Why did the other New

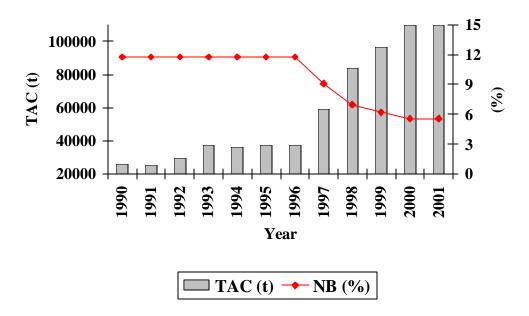
Brunswick fleets not receive their share of these temporary allocations as did the Newfoundland and Quebec fleets?

It is really surprising to see the arguments used to give a temporary allocation to one of the provinces. In order to award a very large portion of the temporary allocation to Newfoundland, the criterion of "adjacency" was used in 1997, 1998, and 1999 as if it were the only criterion that existed. However, in 2000, DFO decided to allocate 1,500 tonnes of this shrimp to Prince Edward Island, which had never invested or participated in this fishery. Here are the objectives of this allocation, as described in the 2000 fishing plan: "The allocation of 1,500 t to a consortium of PEI fishers and processors will provide funds for professionalization of fishers to build their capacity to take on a larger role for the management of their fisheries. It will also provide funding to augment shellfish research, which will benefit all Atlantic Canada and Quebec. In addition, this allocation will make funds available to processors to aid in market development and promotion of PEI seafood products." These arguments could have applied as well to the other fleets and the New Brunswick industry with which these allocations are competing.

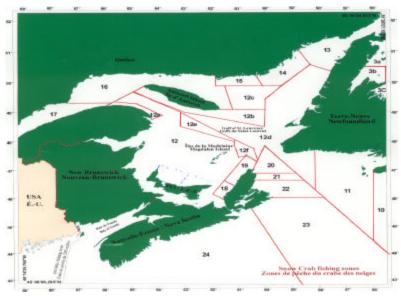
As with the other fisheries, New Brunswick was counting on the share of the TAC for this resource being shared initially among the provincial fleets and the provinces that had invested in this industry. In 1997, DFO decided otherwise on the basis of fairly random criteria using the criterion that best accommodated the anticipated decision.

The following graph shows the proportion and evolution of New Brunswick's share of northern shrimp.

Northern shrimp



7-e PHSs – Gulf of St. Lawrence Snow Crab



* Inshore fishing areas of Quebec (13 to 17) and Nova Scotia (18 and 19), and midshore areas (12 and 12 AB-C-D-E-F). N.B. participates in areas 12 and 12E only.

New Brunswick was a pioneer in this new fishery starting in 1965. Initially, the crab fishing activities of Acadian Peninsula fishermen extended throughout almost all the Gulf of St. Lawrence, i.e., from the Cape Breton coast to Quebec's North Shore. In 1983, the province landed and processed snow crab amounting to more than 20,000 tonnes. We were never able to reach that level of catch again. Gradually, during the 1980s, DFO established inshore areas in Quebec, Nova Scotia, and Prince Edward Island, restricting access to these areas to the fishermen of these provinces. The so-called midshore area within the Gulf therefore gradually shrank. From Gulf snow crab, we quickly moved on to area 12 snow crab and snow crab in a section of the southern Gulf. It is worrisome to have to speak about area 12 without really knowing what territory it actually covers since this area has been split up and cut back at the whim of successive ministers in Ottawa.

(i) Establishment of PHSs for Snow Crab

In 1989, after a period of makeshift, uneven management of this resource by DFO, this fishery suffered its first collapse, with catches dropping to their lowest level in 20 years of fishing, i.e., less than 7,000 tonnes to be shared among the participating provinces. The next year, 1990, after much negotiating between the provincial fleets and interventions by the provinces involved, DFO went ahead with an historic sharing of the resource: 80% of the TAC was shared equally among all the participants, and 20% was based on the historical fishing pattern of each fisherman in each of the provincial fleets over the previous five years. This historic sharing meant that the New Brunswick fleet received 62.74% of the snow crab resource in area 12, which at the time covered all of the Gulf except the nine already

established inshore areas. The individual quota of each licence holder in the New Brunswick fleet was expressed as a percentage of the total allowable catch (TAC). It was therefore reasonable to think that these new sharing arrangements would firmly establish a provincial share of the negotiated resources and that any future increase or decrease in stock levels would be distributed in accordance with this historic sharing. That is what actually happened until the mid 1990s in area 12 outside the nine coastal areas of the Gulf of St. Lawrence.

New Brunswick, which accounted for, on average, more than 70% of the catches over the preceding 10 years, was worse off under these new arrangements but agreed to them because we believed that they gave New Brunswick a permanent share of this resource (our PHS at last), i.e., stability of access that we believed the province and our industry would be able to count on. We were therefore counting on a PHS of 62.364% starting in 1990, which was adjusted to 59.394% in 1997 with the integration of P.E.I. and TACs in coastal areas 25 and 26 within midshore area 12.

The five-year co-management and integrated snow crab fisheries management plan for areas 12, 25 and 26 contains some fairly eloquent statements about the role of fishing plans in communities that have historically depended on this resource.

The long-term fishing objective targets economic and employment stability for the traditional snow crab industry. In this co-management agreement, DFO recognizes unequivocally that "the issue transcends the harvesting sector in that some of the processing sector has built up an almost complete dependence on this fishery to survive. Any change in providing access affects not only the licence holders, but their crew members, plant owners and plant workers."

Unlike certain other agreements concerning the sharing of the TAC among the provincial fleets, the snow crab agreement does not provide for permanent transferable quotas from one individual to another. It was therefore not necessary to include a section prohibiting the permanent transfer of quotas among provinces.

However, as in each of the other agreements or fishing plans to which we refer in the other fisheries, the snow crab agreement does refer specifically, with regard to the issuing, renewal, and replacement of licences, to the Commercial Fishing Licensing Policy for Eastern Canada. This policy states unequivocally that licences shall not be transferred from one DFO administrative area to another; since these areas respect provincial boundaries, they should respect provincial shares as well.

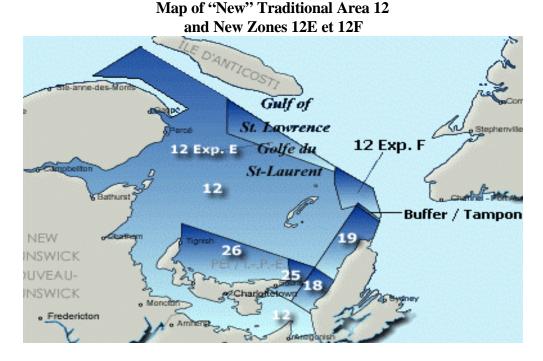
(ii) Decline in PHSs for Snow Crab

Starting in 1995, the DFO ministers decided to change the rules in this fishery as well by introducing exploratory zones and temporary allocations. DFO made the decision to establish other so-called "exploratory" zones in order to provide access

for cod fishermen affected by the moratorium on Gulf groundfish. Until then, New Brunswick had access to only one (zone 12E) of the four exploratory zones established along the edge of the Laurentian Channel and the traditional concentrations of snow crab around Anticosti Island. If these six inaccessible exploratory zones are taken into account, New Brunswick's share dropped to 51.1%.

The province of New Brunswick did not receive special treatment during the last decade in the various Atlantic shellfish fisheries since it went from third to last place. Atlantic landings of snow crab in New Brunswick dropped, going from 20.6% in 1994 to 9.1% in 2000.

The graphs below illustrate this major decline in New Brunswick's share of catches not only throughout the Gulf but also in traditional area 12 following the establishment of inshore areas and exploratory zones within area 12. Quebec and Nova Scotia in particular have access to several inshore areas, which, for the past five years, has enabled them to increase their supply significantly, to the point where, in 2001, the accumulated quota of the seven inshore areas of Quebec and Nova Scotia exceeded that of midshore area 12 to which New Brunswick is restricted but where those provinces participate as well.



Note: Zones 12E and 12F are now permanent in order to provide access for cod fishermen affected by the moratorium, causing New Brunswick's share to drop even further. Only 6 of the 24 licences available for these areas were distributed to New Brunswick cod fishermen.

Table Showing Evolution of New Brunswick's Share of Area 12 Snow Crab, Including New Zones 12 A-B-C-D-E-F

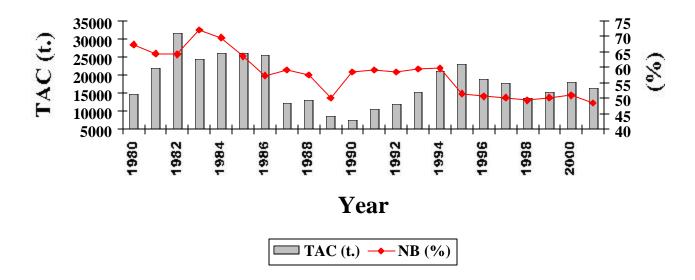
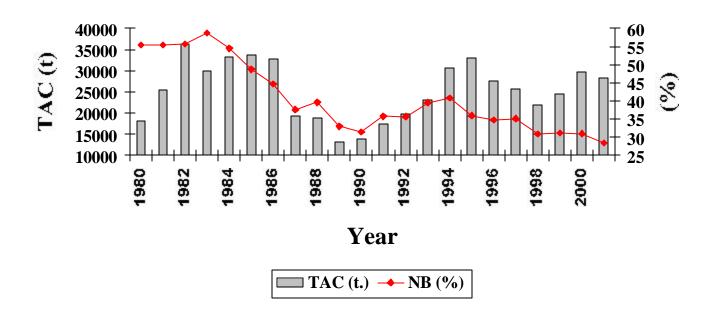
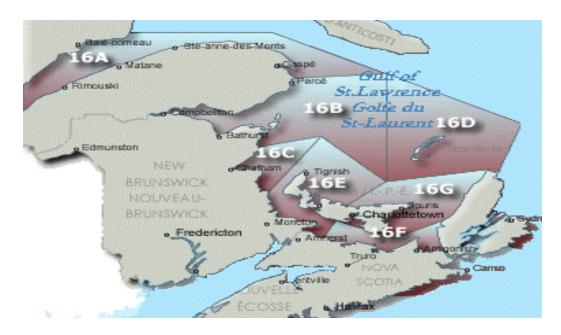


Table Showing Evolution of New Brunswick's Share of Snow Crab throughout the Gulf of St. Lawrence Including All Inshore (Z13 to Z19) and Midshore (Z12 and Z12 A-B-C-D-E-F) Areas







Until the 1980s, the fleet of seiners from Nova Scotia and southwestern New Brunswick came to fish herring in the Gulf. The Acadian Peninsula and Newfoundland fleets did the same in the Bay of Fundy and on the Scotian Shelf. At that time, the seiner fleets held 80% of the TAC for Gulf herring. A share proportional to the number of vessels was therefore caught by the New Brunswick seiner fleet in the Gulf and the Bay of Fundy.

In 1983, DFO decided to limit the activity of Gulf seiners in the Gulf and of Bay of Fundy seiners in the Bay of Fundy. Both fleets were therefore supposed to end up, eventually, with a roughly equivalent share. The pressure put on DFO in the Gulf Region led it to reverse the sharing between the Gulf seiner fleets and the inshore fleets that used gillnets. From then on, 80% of the TAC in the southern Gulf was reserved for the inshore fleet compared with 20% for the seiner fleet. The Gulf seiner fleet is divided into two fleets, one based on the Acadian Peninsula and the other based in Newfoundland, which share the TAC for the southern and northern Gulf reserved for this fleet.

(i) Establishment of PHSs for Herring Seiners

Also in 1983, the share of the Gulf herring TAC reserved for the seiner fleet was divided equally among the herring seiner licences on the Acadian Peninsula and in Newfoundland. The 10-year agreement provided that the transfer of licences had to comply with the Commercial Fishing Licensing Policy for Eastern Canada.

When the 1993 agreement was renewed for a another 10-year period, the wording was more explicit in the section on inter-provincial transfers: "No new licences for

large purse seiners greater than 65' LOA will be issued and no inter-provincial transfers of purse seiner licences will be authorized."

The sum of these individual quotas therefore provided the province and the Acadian Peninsula with their first share of the Gulf of St. Lawrence herring TAC. Owing to federal management and decisions prejudicial to seiners, these vessels have almost never caught their share of the TAC, depriving the provincial industry of a major supply mainly for the purposes of value added processing (for human consumption.) Thus, the province was unable to benefit from its official share of the TAC. In 2000, of a TAC of 18%, we landed only 9.8%. Since then, the situation has improved significantly.

(ii) Competitive Inshore Share of Gulf Herring

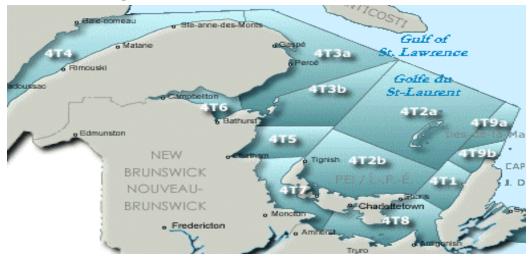
Together, the inshore fleets from the Acadian Peninsula and southeastern New Brunswick were able to be aggressive enough to obtain a reasonable share of the 80% TAC allocated to the inshore fleets of the different provinces on a competitive basis. The contribution of the region's inshore fishermen in terms of landings and value today exceeds that of the seiners. This fishery's management and seasonal zoning measures make it possible to secure to some extent a certain proportion for the province and the Acadian Peninsula. However, it will be necessary to do a detailed calculation to measure the impact on New Brunswick of this change in the management regime, taking into account the contribution of the inshore and midshore fleets. As long as this fishery remains competitive for the inshore fishermen, we will not be able to ensure a permanent share for ourselves.

(iii) Compliance with PHSs

The province agreed to accept this historic sharing. However, it is important to note that the province wants us to retain what we consider gains to protect the interests of New Brunswick's industry. The provincial share held by the Acadian Peninsula seiner fleet has remained intact since ITQs were established in 1983. This fleet consists of six vessels over 65' that can be sold to New Brunswick processing companies. Since certain companies in this sector are controlled by outside interests, the province has to make sure that the licences stay in New Brunswick, no matter who the owners are.

7-g PHSs – Gulf of St. Lawrence Groundfish

Groundfish Fishing Areas in the Southern Gulf of St. Lawrence



It should be recalled that the Acadian Peninsula inshore and midshore fleets have been fishing groundfish for 400 years but that this fishery has been under a partial moratorium since 1993.

(i) Establishment of PHSs

In 1989, provincial shares for cod and other groundfish species were confirmed for each of the fishing areas in the Gulf of St. Lawrence. Here are some excerpts from the Administrative Rules for the ITQ Program for trawlers <65' in the Gulf of St. Lawrence: 'Each of the 3 groups will be granted, for the duration of the Program, an overall percentage of the Canadian quota for each stock under Individual Transferable Quota (ITQ). Group B based in Zone 4T receives 43.44% of the Southern Gulf Cod, 5.257% of the Northern Gulf Cod and 45.68% of the American Plaice." Group B includes the Acadian Peninsula cod fleet.

Each of the Group B fishing enterprises is allocated an ITQ expressed as a percentage of the fleet's quota for each of the three stocks. The Administrative Rules specify that 'licence reissuances will be in accordance with the Commercial Fisheries Licensing Policy for Eastern Canada." The agreement also stipulates that 'No permanent transfers will be authorized between the different DFO administrative areas," which are established on the basis of provincial boundaries. For Quebec, the administrative rules go even further: 'In Quebec, all transfers are to offered within the same economic sector (courtesy notice) before being offered to another economic sector. The following economic sectors are defined for enterprises based in Quebec: Gaspé-North, Gaspé-South, Magdalen Island." In Quebec, not only it is prohibited to sell a licence to another province, but there is also a supply mechanism within provincial economic sectors, reinforcing the provincial nature of the allocations.

In addition, we must recall the firm commitment made by successive federal fisheries ministers in Ottawa since the announcement of the groundfish moratorium in the Atlantic and the Gulf of St. Lawrence. In a letter to the Premier of New Brunswick in October of 1994, requesting the province's financial cooperation in the federal Fleet Rationalization Program, the Hon. Brian Tobin made the following commitment: "I want to repeat that a fundamental principle underlying this exercise is that no province or sector will be advantaged or disadvantaged regarding their access to the resource as a result of their participation in the capacity reduction process. The only consequence for those who participate will be the benefits of greater efficiency." In December 1999, during a conference on the southern Gulf of St. Lawrence midshore fisheries, the Hon. Herb Dhaliwal reiterated these firm commitments: "One thing I do want to assure you about is that, like my predecessors, I will continue to respect the existing fleet sector shares in the Atlantic groundfish. Historic fleet shares reflect past participation in and dependency on a fishery and I agree that it's appropriate that they be respected." Whether explicit or implicit, whether the expression used is "provincial shares" or "existing fleet sector shares," no one today can deny this recognition of the attachment to the provinces of quotas for the fleets of the different provinces.

(ii) Respect for PHSs

Despite the groundfish moratorium, the historic sharing of 1989 among the provinces has been maintained. In the circumstances, it is quite interesting to note that the quotas purchased by DFO from the cod fishermen under ITQ have been maintained and given to the inshore fleet in the province from which the ITQ was purchased. We are surprised to see how certain principles are scrupulously respected in one fishery and just as easily disregarded in another one.

(iii) Competitive Inshore Share

Except for this share of individual quotas purchased and transferred to the inshore fleet, the share of the TAC of inshore fishermen is competitive, and the provincial share caught is impossible to predict.

7-h PHSs – Atlantic Groundfish (Offshore)

Also during the 1980s, DFO went ahead with the sharing of the TAC share for several Atlantic groundfish species reserved for the different provincial offshore fleets on the basis of individual quotas.

The few offshore vessels from the Acadian Peninsula therefore inherited an individual share of the TAC for the main groundfish species, namely cod and redfish in the Atlantic and the Gulf.

The moratorium on the principal groundfish species did not eliminate these shares of the resource, which we hold under this sharing formula. The previously mentioned commitments of federal ministers are very clear on this point. We must remain vigilant, and when the cod returns, we should then be in a position to reestablish our privileges and rights.

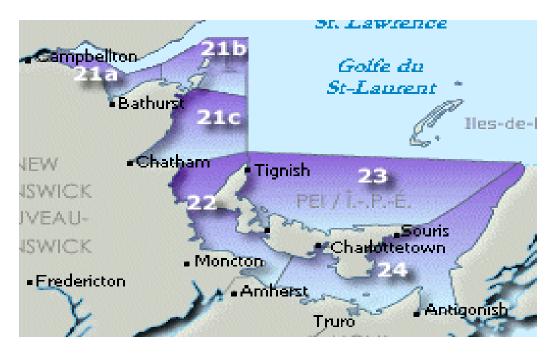
7-i Inshore Fisheries and PHSs

We noted earlier how historic lobster catches represented the first provincial historic shares. The natural geographic distribution of sedentary species near the coast dictates the provincial historic shares for certain inshore species. Some species fished by inshore fishermen are generally located in fishing territories where the licences issued by DFO are exclusive to the bordering provinces. The lobster fishing area surrounding the Acadian Peninsula is one example of this. This area, located near the Acadian coast, also serves to define the fishing territory for other species fished by inshore fishermen. Generally, these fishermen do not have individual quotas and are not subject to competition with the other provinces. Their total catches in these areas therefore become permanent provincial shares. The main inshore fisheries are identified in the summary table.

However, there are major exceptions, such as when two provinces are very close to each other and there is ongoing competition with the neighbouring provinces. The share of the annual catches is then harder to predict. Yet the province has requested the redefinition of certain inshore fishing areas that extend very far off the coasts in order to allow for the establishment of a neutral zone in the middle of the Gulf of St. Lawrence to facilitate more equitable access by the provinces to emerging or developing fisheries.

Gaspe Percé Gulfaf Campbellton St. Lawrence Bathurs Golfe du St-Laurent les-de-la-Madeleine Chatham Tignish VEAU-Souns Charlottetown Moncton Fredericton

Lobster Fishing Areas – Gulf Region



Scallop Fishing Areas – Gulf Region

With regard to recognition of PHSs, there is sufficient evidence enabling us to believe that federal negotiators knew that they were becoming involved in a process that would tacitly, and quite explicitly in some cases, lead to recognition of provincial shares of the resources and were giving the industry and the provinces this impression.

8. TWO PERTINENT STUDIES: MACROECONOMIC PROFILE OF THE GULF REGION AND ECONOMIC IMPACT ASSESSMENT OF THE FISHERIES SECTOR IN NEW BRUNSWICK: CRAB AND SHRIMP.

There are consequences to robbing Peter to pay Paul.

The danger of the practice of transferring temporary allocations to communities that have not developed a historic dependence is that it creates expectations and a temporary dependence, promoting, in certain cases, an artificial increase in the processing capacity of one region or province and decreasing this capacity in another.

The recent study (October 2001) of the Policy and Economics Branch, Gulf Region, DFO, entitled *Macroeconomic Profile of the Gulf Region*, provides some interesting data on the dynamics of our industry since 1995, a period that corresponds with the decline in PHSs. This study provides two fascinating pieces of information concerning changes in the number of plants and plant employees in each of the

three provinces covered by the Gulf Region. We can see an increase in the number of plants in the Gulf sector, Nova Scotia, and Prince Edward Island, and a very substantial decrease in eastern New Brunswick. From 1995 to 2000, the number of plants dropped from 103 to 86, including 9 in the shellfish sector alone. The figures pertaining to plant employees are just as discouraging. While the number more than doubled (102%) between 1992 and 2000 in Nova Scotia and increased by 52% on Prince Edward Island, it declined by 12% on New Brunswick's east coast during the same period. From 1995 to 2000, the decline is more dramatic, i.e., 22%, with a loss of 2,018 employees in this region alone.

In a way, the DFO study reinforces DAFA's natural concerns of the past five years. These are the concerns that prompted DAFA and the Acadian Peninsula Fisheries Council to commission an economic impact study. The Economic Impact Assessment of the Fisheries Sector in New Brunswick – crab and shrimp, by economist Pierre-Marcel Desjardins (April 2001), made it possible to assess the impact of each 1,000 tonnes of snow crab on the direct and indirect jobs generated and its contribution to gross domestic product (GDP). Each 1,000 tonnes results in a direct loss of 41.7 person years and an indirect loss of 81.9 person-years. The lack of supply caused by the loss of each 1,000 tonnes also results in a direct salary loss of \$640,000 and \$14 million in sales, as well as \$10 million in lost provincial GDP. The study gives the same kind of figures for shrimp. The two studies complement each other and confirm that something is being taken away from one province and given to another, with the obvious consequences.

9. ROLE OF THE OTHER PROVINCES IN PHSs

It is obvious that, if one province loses a portion of its PHS for a given species, then another province will benefit. It is amusing, or more accurately, alarming, to see certain provinces vigorously and aggressively defending their PHSs for certain stocks while at the same time mounting a powerful lobby to grab a greater share of certain other resources. Our complaints about federal confusion and lack of transparency also stem from the lack of consistency of the provinces. We can truthfully claim that New Brunswick has always been consistent in its defence of PHSs for each of its fisheries with each of the provinces.

The provinces seem to prefer to wage war one-on-one with the federal government, either to protect PHSs or to increase them. Each plays politics in order to tip the Minister's discretionary power in its favour, according to the annual fishing plans, sometimes going as far as the Prime Minister's office to gain the advantage. We do not believe this is the best way to manage the stability of the fisheries at the beginning of the 21st century.

However, it is worthwhile to add to the analysis of some of the provinces' vigorous interventions a few excerpts from statements and typical cases that reveal their firm commitment to retaining their share of the resources. The content of these

interventions shows the need for a firm policy attaching these shares to the communities that have historically depended on them.

9-a Quebec's Position

Position of the Ministère de l'Agriculture, des Pêches et de l'Alimentation du Québec: [Translation] "Since 1980, Quebec has regularly and officially asked the federal government to limit its discretionary power when it comes to allocating Canadian resources among the provincial fleets, while respecting the principle of a provincial share or quota. Since the forums of 1995 and 1996, Quebec, supported by its unanimous partners, has continued to demand that the federal government guarantee the Quebec fleets a quota of the Canadian fishery resources calculated on a historical basis. This calculation of provincial quotas was done for the different groundfish species over the past two years by a working group of the Federal-Provincial Atlantic Fisheries Committee (FPAFC), whose report was ratified by the Atlantic Council of Fisheries Ministers (ACFM)" (MAPAQ, 2001).

Réseau pêche et aquaculture du Québec: [Translation] "The Comité de défense des intérêts du Québec of the Réseau pêche et aquiculture reports a disappointing assessment for 2001. The Quebec industry's share of the spring cod fishery dropped from 20% to 10%, and it was refused access to northern shrimp. The committee therefore concludes that its intervention strategy with Ottawa needs to be reviewed in order to ensure respect for Quebec's historic share in the traditional fisheries. To better organize its lobbying efforts with respect to the federal government, a coordinator will be hired specifically for this purpose very soon. Furthermore, the Comité de défense des intérêts du Québec will soon commission an independent study on the socioeconomic impact of federal government decisions on Quebec fishermen's access to the different fisheries to which they should have access" (Le Soleil, January 15, 2002).

9-b Newfoundland's Position

Statement of the Minister of Fisheries and Aquaculture of Newfoundland, Mr. Gerry Reid: 'Our concern is that whatever happens to the company (FPI), or you know, with this shareholder bid to take over the board of the company ... we must ensure that the resources attached, and what I mean by resources is the quota allocations attached to FPI, remain with the province and for the people who are associated with that plant. And what I mean by that is the community and the plant workers and the fisherpeople attached to that plant (St. John's VOCM-AM Radio, March 31, 2001).

Statement of former Newfoundland fisheries minister, Mr. John Efford: "Former Newfoundland fisheries minister John Efford is speaking out against a proposal by the federal Department of Fisheries and Oceans (DFO) to transfer a quota of redfish from Newfoundland to a plant in Canso, N.S. Mr. Efford, who recently declared his candidacy for the federal riding of Bonavista-Trinity-Conception, was

responding to a report DFO is considering transferring 3,000 tonnes of redfish to a plant operated by the Corner Brook-based Barry Group of Companies. He said "No more transfers of fish from Newfoundland to any other province or any other company." He alluded to a previous transfer of redfish from Burgeo to Canso as evidence of the devastation that results from a loss of resources" (St. John's Telegraph, February 16, 2002). Mr. Efford was elected in a by-election held on May 13, 2002 and is now a member of the influent House of Commons Standing Committee on fisheries.

9-c PHSs: Unfinished Business Between the Provinces and DFO

It is worth recalling here the epic battle between Newfoundland and Nova Scotia during the restructuring of the processing sector in the early 1980s. The federal fisheries minister had to step in and set, for each province, quotas for the licences attached to Fisheries Products International, based in Newfoundland, and those attached to National Sea Products, based in Nova Scotia. Recognition of provincial historic shares had definitely begun more than 20 years ago.

A more recent battle of this type, which very clearly calls into question recognition of provincial historic shares, was the Gulf of St. Lawrence turbot war waged by Quebec and Newfoundland. In the end, it was umpire Gérald LaForest who settled the dispute, and the federal government officially recognized that each province was entitled to a percentage of the resource. Another unequivocal precedent!

The latest saga involving PHSs is quite recent that is at the beginning of year 2002. It was actually the first official decision concerning fishery resources management and sharing that the new federal minister, who comes from Nova Scotia, had to make. At stake was a 3,000-tonne allocation of redfish that had been given to the Newfoundland fleet but had not been fished. Nova Scotia was claiming it in order to prevent the closure of a plant in Canso and the layoff of 315 employees. The governments of Nova Scotia and Newfoundland both passed resolutions at their respective legislative assemblies, one demanding that the federal minister give it the allocation and the other opposing this measure. The minister eventually made a decision on March 15, 2002, in favour of Newfoundland.

To our great disappointment, the very next day, we read in the Canadian Press that DFO was considering giving Scotian Shelf shrimp and crab quotas to help the town of Canso! From whom will these quotas be taken? If the federal government is unable to resist the powerful Newfoundland lobby, will the axe fall on those that seem more vulnerable? Who will the next victim be? Considerable political vigilance is necessary.

9-d Preliminary Statement on PHSs by Fisheries and Oceans Minister, the Hon. Robert Thibault

In February 2002, the minister was interviewed by a journalist with Quebec's specialized fisheries journal *Pêches-Impact*, mostly with regard to provincial historic shares. Here are his comments and preliminary observations, which clearly indicate an openness and a willingness to engage in dialogue. The new Minister recognises that "provincial historic shares or the attachment of coastal communities to the resource will definitely be factors that will have to be considered in the allocation of fishery resources." With the debates on this issue that are raging elsewhere in the Atlantic region, he may believe that the time has come to settle this unfinished business from the 20th century. The sooner the better!

"On the very explosive issue of respect for provincial historic shares, Robert Thibault remained cautious. 'I have to familiarize myself with this issue and ensure that I personally make decisions that are not too hasty, even though it could be politically favourable. My decisions will have to be fair and justifiable in the long term, and fair to everyone.' Over the past few years, Robert Thibault's predecessors have often used the concept of provincial historic shares merely as a reference tool in terms of access and sharing of the resource. Does he intend to adopt the same approach? 'I am willing to listen to all arguments. I believe that it is important for my decisions to be predictable, i.e., that people can see how I made these decisions, and why. The industry must be able to count on decisions being made in the same way in the future.' said the new Minister of Fisheries and Oceans' [Translation] (From an interview with Minister Robert Thibault, Pêche Impact, February-March 2002, p. 13).

10. DAFA'S ROLE IN THE RE-ESTABLISHMNT OF PHSs

10-a DAFA and Annual or Multi-year Integrated Fisheries Plans or Other Co-Management Agreements

Since the first changes to provincial historic shares were made in 1995, DAFA has been closely monitoring each of the annual and multi-year fishing plans that could change our participation in our inshore, midshore, and offshore fisheries. DAFA intervenes in an ongoing, consistent manner at each stage of the decision-making process and in each relevant forum, including bilateral communications with DFO. Previous provincial ministers reacted vigorously and harshly to federal decisions harmful to the province's historic claims. The New Brunswick government and DAFA have made defending their PHSs a priority. As long as the issue of provincial share is not properly addressed any future Integrated Fisheries Management Plan will be conflicting and will seriously affect co-operative management.

In May 1996, in a letter to his DAFA counterpart, the Hon. Fred J. Mifflin, then minister of Fisheries and Oceans Canada, recognized that New Brunswick's

traditional shares had been "temporarily reduced" and made the following commitment: "At the end of 1996 fishing season, traditional provincial shares will be restored." DAFA has not forgotten this and is today calling for this commitment to be fulfilled.

DAFA staff continue to demand that DFO correct earlier decisions that were prejudicial to respect for provincial historic shares in the various forums available for this purpose. It will probably be necessary to revive the working group of the Federal-Provincial Atlantic Fisheries Committee (FPAFC), which "officially" examined the fundamental issue of provincial historic shares. This matter absolutely must be put back on the political agenda by any means possible, with the objective of convincing the partners that official recognition of PHSs is the first step towards settling the endless federal/provincial disputes over the fisheries.

10-b DAFA and DFO's National Policy on Managing and Sharing Atlantic Fishery Resources Allocations

In 2001, DFO initiated two major consultations with the fishing industry and the Atlantic Provinces.

Atlantic Fisheries Policy Review (AFPR) – The aim of this first consultation was to modernize all Atlantic fisheries management policies. This review would affect the four main sectors, i.e., resource conservation, economic and social viability of the industry and communities, resource access and distribution, and fisheries governance. For DAFA, security of resource access by the provincial fleets and stability of the distribution of these resources among the provinces are at the heart of this debate on the new fisheries policy of the future.

Independent Panel on Access Criteria (IPAC) – The second consultation focused more specifically on the issue of the sharing of the Atlantic resources. The terms of reference of this independent panel were to propose criteria for new access to a commercial fishery that has experienced a substantial increase in abundance or landed value or to a new or emerging fishery. It was precisely when DFO identified a increase in the abundance or landed value of the stock that the federal minister decided to change the provincial historic shares for crab and shrimp in 1995. DAFA took advantage of this exercise to take stock of its historic shares and to propose ways of making some adjustments. DAFA tried to convince the panel of the relevance of respect for provincial historic shares as the first criterion for access to the identified temporary surpluses, arguing that these shares corresponded to the provincial fleet shares that had already been negotiated and approved by DFO more than a decade before. DAFA also suggested transparency and clear criteria for the activating of temporary surpluses, paving the way for temporary allocations. During the exercise, DAFA stressed the need to consolidate and find ways of making provincial shares secure in the long term. The Panel has completed its In our preliminary analysis, the criteria that it recommended took into account some concerns expressed by the province. The IPAC looked at the criteria

of adjacency, historic dependence, and economic viability of the current participants, including employment stability in the processing sector and economic viability for dependent coastal communities. The IPAC concluded that using adjacency as the sole criterion in the midshore or offshore fisheries was hard to justify. The report does not limit the historic dependence to the fishers but extend it to the coastal communities from which they come, which are provinces. This recognition is of major importance. It also examined the decision-making process and concluded that, in addition to leading to inequities, poorly defined criteria for granting access pose a threat to effective resource management. But the outcome will depend on the various interpretation and final decision by DFO.

10-c DAFA and Attempts to Sell Licences and Fishing Enterprises Outside the Province

"Private" interests outside the province have effectively taken control of four snow crab fishing enterprises belonging to New Brunswick fishermen (licence, quota, and vessel) over the past three years, and the threat of similar actions will persist unless DFO clarifies the situation. Control is gained through private contracts. The intention in the medium term is to transfer these licences outside the province by getting around existing federal policies. Transfers from one administrative area to another are not permitted, and the administrative area concerned is limited to New Brunswick's east coast. Fearing that a transfer could occur by circumventing the policy and concerned that attempts to gain control would continue, DAFA took rigorous action.

On February 28, 2001, at the request of the community and the industry, Minister Paul Robichaud wrote to the Hon. Herb Dhaliwal, imploring him to use his discretionary power to prevent any transfer of our province's harvesting licences to another province and asking him to review the secret transactions leading to effective control over our fisheries enterprises. These transactions appeared to get around the objectives and rules of the Atlantic Fisheries Management Policy and the Commercial Fishing Licensing Policy for Eastern Canada. Front men and fake owner-fishermen, fictitious residences, irregular substitute operators, and other tricks appear to be used to do indirectly what cannot be done directly. The federal minister's reply, which was already quoted in an earlier section (residence) was quite firm, but we are still waiting for the final result in order to correct the current situation and discourage any new attempts. We believe that, if the policy is not clear enough, we will have to demand its modification to ensure that such transactions and transfers are not possible. DAFA repeated its efforts in February 2002, when it asked the new federal fisheries minister to see that the letter and spirit of his policy were respected. DFO reissued the licences in 2002 under strict conditions, but we are starting to have doubts about DFO's real intentions.

The province let it be known that the outcome of this matter was critically important and that no such transfers would be tolerated. Tempers could flair if the obviously underhanded practices win out in the end.

10-d Federal Aboriginal Fisheries Strategy and PHSs

The province supported the federal program designed to integrate Aboriginals into the Atlantic fisheries, while insisting on compliance with certain broad principles, including the principle of provincial historic shares.

DAFA supported the program set up by the federal government in response to the decisions of the Supreme Court of Canada regarding the access rights of Aboriginal communities to the Atlantic fisheries. DAFA also insisted on compliance with the program's guiding principles. These principles are resource conservation, respect for treaty rights, recognition of non-native fishermen's interests, and orderly, regulated fisheries. DAFA asked the federal government to take into account the impact and consequences of this program on communities that had developed an economic and historical dependence on the resources that are transferred to meet treaty obligations.

DAFA also asked DFO to ensure that the transfer of all quotas to Aboriginal communities in the province respects the province's historic shares.

In August 2001, in response to an express request made by Minister Robichaud, federal Fisheries and Oceans Minister responded as follows: "At the present time, native communities who have access to snow crab receive allocations through the share historically provided to the province in which the First Nations are located. I am committed to continue to provide access on that basis."

DAFA will ensure that these additional purchases and these transfers respect provincial historic shares, i.e., that purchases from New Brunswick fishermen, regardless of the resource, are transferred to Aboriginal persons on New Brunswick reserves.



11. ROLE OF THE ACADIAN PENINSULA IN THE RE-ESTABLISHMENT OF PHSs

On March 7, 2001, the headline of the newspaper L'Acadie Nouvelle read [Translation] "Loss of historic shares in crab fisheries: community must take charge." Maurice Beaudin added [Translation] "the fishery is the backbone of the Acadian Peninsula...the principal actors in the industry, the communities and the municipalities, as well as the leaders must get together and discuss this issue."

It is really up to the community to write this page for the current generation and all future generations. A renewable resource means continuity. The forum on provincial historic shares organized by the Acadian Peninsula Fisheries Council provided an opportunity to reflect upon these issues and to mobilize the community, the industry, and municipal governments around them. It was agreed that a working group dedicated to this task would be set up.

CONCLUSION

The reason we looked so far back into the past in this document was to provide a solid historical foundation for the provincial and Acadian Peninsula fisheries. The main objective of this historical overview was to encourage us to take more pride in our history and our preponderant role in the provincial fisheries in the hope of gaining support for our line of argument and fostering a willingness to defend what was so laboriously earned.

The study of the modern period, which starts in 1947, is memorable and necessary for two reasons. During that half-century, the province, the industry, and the community played a determining role in the acquisition of development tools as well as maritime space in the Gulf of St. Lawrence and the Atlantic. The resource – a common property – moved towards becoming a quasi-property right, not so that licences would be treated as an anonymous financial transaction, but so that they would continue, even in the hands of individual fishermen, to contribute to the enrichment of communities.

The second objective was to convince federal decision makers, who were quickly losing their corporate memory, that the criteria used in establishing PHSs were for the most part anchored in the history of our fisheries. We mentioned the federal government's support for various programs, infrastructures, and management measures that made it possible to build capacity and mobility, enabling us to seek a reasonable share of the fishery resources in the Gulf of St. Lawrence and the Atlantic. That is why, while calling for consistency, we emphasized the concept of mobility, economic and historical dependence of individual fishermen and their communities, and fleet viability. We pointed out the importance of the principle recognized by DFO of respecting province-based licences, which principle forms the basis of its licensing policy in terms of residence, home port, and areas of historical fishing.

The overview of each of the main species in which we have a significant interest was necessary to illustrate the origin of PHSs and gain an understanding of the process that led to the decline in some of them. This was important as well to illustrate our very reasonable, and sometimes minimal, share in comparison with the other Gulf and Atlantic provinces.

Furthermore, we wanted to bring to light the debate over PHSs, not only in New Brunswick but in the other provinces too, some of which would like to see their PHSs afforded more protection or even increased at the expense of the other provinces. We were disgusted when we recently heard one province compare itself to Aboriginal peoples in order to justify an increase in resources at the expense of the other provinces' PHSs. Although it is true that corrective action needs to be taken to ensure respect for Aboriginal rights, as supported in this document, it would be unfair to place in the same boat a province that was unable to carve out a place for itself at the proper time.

We amply recognized the determining role of fishermen in the establishment of historic catches on the Acadian Peninsula and in the province and the exceptional contribution of fishermen's organizations to the establishment of PHSs a decade ago. They do it to assure their long term viability and DFO must respect that principle. We understand that some may today be pulled towards the individual, and sometimes extreme, interests that support unrestricted free trade, but many are obviously concerned about the province's communities and are prepared to follow the established game rules. The principal rule was to ensure that licences were resold within the local communities to ensure the future of the fishery. That was the main reason for the establishment of Individual Quotas, i.e., to prohibit interprovincial transfers of permanent allocations in an effort to ensure that this rule is followed.

As was demonstrated in this document, the concept of provincial historic shares is relatively new, but one that took shape over the years in recognition of the gains of the coastal communities that have shaped today's fishing industry. Some maintain that "provincial shares" are not an officially recognized fisheries management tool. We wanted to demonstrate, by tracing the development of management and licensing policies and their application in the many fishing plans, that provincial shares of fishery resources have been recognized under different forms and that the sharing of harvesting licences among the provinces is rigorously applied; in short, that the customs and practices pertaining to the sharing and management of Canadian fishery resources gradually created the right to, or at least laid the foundation for a legitimate line of argument, without compromising federal jurisdiction over the fisheries, for recognition of, provincial historic shares in the form of a percentage of the total allowable catch (TAC).

Looking back at the evolution of some provincial fisheries, we supported the validity of the concept of provincial shares as a means of measurement and recognition in the Atlantic Provinces arena, convinced it is the only one capable of providing the province and the Acadian Peninsula with lasting, reasonable access to this valuable renewable resource.

This heritage, which is both very rich and very fragile, is important economically, socially, and culturally, hence the importance of taking an interest in the issue, understanding the stakes – even the intrigue – involved, and defending it. We also feel that the new federal Minister of Fisheries and Oceans will address this issue in a more tangible manner in the coming months and years because he understands that it is becoming more difficult to settle disputes between two provinces arbitrarily or even politically and that he cannot continue to play one province off against another.

BIBLIOGRAPHY

- Beaudin, M. (1998). L'industrie des pêches dans la péninsule acadienne: son profil, sa dynamique et sa capacité à soutenir l'économie régionale.
- Beaudin, M., & Savoie, D.J. (1992). Les défis de l'industrie des pêches au Nouveau-Brunswick. Moncton: Éditions d'Acadie.
- Chaussade, J. (1983). *La pêche et les pêcheurs des provinces maritimes du Canada*. Montréal: Presses de l'Université de Montréal.
- Chenard, L. (1982). *Notes historiques sur le Ministère des Pêches du Nouveau-Brunswick*.
- Clarke, P.D. (1998). "Pêche et identité en Acadie: Nouveaux regards sur la culture et la ruralité en milieu maritime." *Recherche sociographique XXXIX*, *1*, pp. 59-101.
- De La Morandière, C. (1957). Histoire de la pêche française de la morue dans L'Amérique septentrionale. Tome I, II, III. Paris: G.P. Maisonneuve et Larose.
- Denys, Nicholas, *Description géographique et historique des costes septentrionales: avec l'histoire du pais*, Paris 1972 and translated in english and edited by W.F. Ganong, Toronto, The Champlain Society, 1908.
- Desjardins, P.-M. (2001). Économic Impact Assessment of the Fisheries Sector in New Brunswick Crab and Shrimp, Acadian Peninsula Fisheries Council.
- Landry, N. (1994). Les Pêches dans la Péninsule acadienne 1850-1900. Moncton: Les Éditions d'Acadie.
- LeBlanc, R. (1963). *La première compagnie de Miscou, 1635-1645*, Revue Historique de l'Amérique Française, Vol. 17, No. 3.
- Fisheries and Oceans Canada (2001). *Macroeconomic Profile of the Gulf Region*, Policy and Economics Branch.
- Robichaud, H. (1991). Un politicien acadien au service des pêcheries (Mémoires de l'Honorable Hédard Robichaud, C.P., O.C. Shippagan: La Société historique Nicolas-Denys.
- Saint-Cyr, G. (1998). L'École et l'industrie des pêches du Nouveau-Brunswick. Lévis, QC: Les Éditions Jaye.

SUMMARY TABLE OF STATUS OF PROVINCIAL HISTORIC SHARES Principal species attached to Acadian Peninsula: volume in tonnes and landed value in 2000

| SPECIES Midshore and | START | PHS BASIS FOR CALCU- LATION | PHS YEAR INTRO D. | PHS % TAC | FISHING AREA | CHANGE PHS TEMP. ALLOC. EXPL. ZONES OTHER | 2000 % TAC FISHING AREA | 2000 LAND- INGS IN T NB-AP | 2000 % GULF | 2000 % ATL. | 2000 \$ LANDED VALUE NB-AP |
|----------------------------|--------------|--|----------------------------|-----------------|-------------------------------|--|----------------------------------|--|-------------------|-------------------|-------------------------------------|
| offshore: | | | | | | | | | | | |
| Gulf shrimp | 1965 | 3 yr. 87-89 | 1991 | 21.92 | Gulf A 8 – 11 | 1998-TA | 21.76 | 5,652 | 21.76 | 4.36 | 8,598,000 |
| S/F shrimp | 1970 | 3 yr. 89-91 | 1993 | 25 | Sc. Shelf A13-14- 15 | 1998-traps | 22.50 | 1,125 | | .87 | 1,736,000 |
| Northern shrimp (offshore) | 1978 | Equally shared | 1989 | 11.76 | Nfld-Lab A1 – 7 | 1997-TA | 5.56 | 6,166 | | 4.76 | 24,664,000 |
| Snow crab | 1966 | 80% eq. shared / 20% hist. 5 yrs. | 1990 | 59.394 | Gulf A 12, 25, 26 | 1995-TA 1995-EZ | 51.5 | 9,328 | 31.3 | 9.97 | 56,029,000 |
| Gulf herring – seiners | 1960 | Equally shared | 1983 | 17.19 | Gulf 4RSTVn | Restriction Area management | 17.19 | 8,337 | 9.75 | 4.12 | 1,400,000 |
| Gulf cod (midshore) | 1625 1760 | Historic | 1989 | 20.15 | Gulf 4T | Purchase ITQ Transcoastal | 18.36 | 688 | 5.36 | 1.5 | 1,060,000 |
| Redfish (offshore) | 1970 | Historic | 1983 | Morator- ium | Atlantic | | | | | | |
| | | | | | | | | 31,296 | | | \$93,487,000 |

| Inshore: | | | | | | | | | | |
|-----------------|------|--------------|------|------|---------|-------|------------|-------|-------|---------------|
| Herring | 1850 | Competi-tive | | | Z4T-16B | 91.38 | 22,438 | 26.25 | 11.09 | 4,450,000 |
| Cod | 1760 | Competi-tive | | | Gulf | 2.32 | <u>297</u> | 2.32 | | 846,000 |
| | | IQ transfer | 1999 | 1.81 | 4RSTVn | 1.81 | 252 | 1.96 | 1.2 | |
| Lobster | 1875 | Competi-tive | | | Z23 | 100 | 2,874 | 12.55 | 6.8 | 28,872,000 |
| Rock crab | 1975 | Competi-tive | | | Z23 | 100 | 1,057 | | | 884,000 |
| Scallops (meat) | 1960 | Competi-tive | | | Z21 | | 313 | 11.38 | 0.94 | 523,000 |
| Gaspareau | 1900 | Competi-tive | | | Coast | | 274 | | | 75,000 |
| Mackerel | 1850 | Competi-tive | | | Z16 | | 450 | | | 431,000 |
| Other species | | Competi-tive | | | Coast | | 824 | | | 1,545,000 |
| | | | | | | | 28,779 | | | \$37,626.000 |
| Total \$ | | | | | | | 60,075 | | | \$131,113,000 |

Table prepared by DAFA, using DFO statistics and historical data. For northern shrimp attached to the Acadian Peninsula but landed in Nova Scotia, this is part of the market value. The landed value of provincial inshore, midshore, and offshore catches attached to the Acadian Peninsula in 2000 is \$131 million. If the inshore landings (15,800 t) and the landed value (\$36 million) for southeastern N.B. are included, the harvested volume for the entire east coast rises to 76,009 t, and the total landed value climbs to \$167 million in 2000.

Profile of Fishing Enterprises and Fishermen on the Acadian Peninsula

| Inshore fishermen | | Midshore fishermen | | |
|-----------------------------------|--------------------------------------|------------------------------|--------------|---------------------------|
| 537 fishing enterprises | Crab fishing vessels | Shrimp fishing vessels | Herring | Cod fishing vessels |
| holding licences attached to | 81 fishing enterprises | 20 fishing enterprises | fishing | 15 fishing enterprises |
| vessels under 45 feet whose | (including 2 in the southeast and 5 | holding shrimp licences | vessels | holding groundfish |
| principal activity, i.e., that of | transferred to Aboriginal | with individual transferable | 5 seiners | licences with individual |
| the vast majority, is lobster | communities) holding snow crab | quotas (vessels ranging in | whose only | transferable quotas (14 |
| fishing. This is followed by | licences with individual quotas | length from 65' to 100'), 19 | activity is | attached to vessels under |
| herring (roe), scallops, | (vessels ranging in length from 45' | of which also hold | fishing | 65' and 1 attached to a |
| groundfish, rock crab, and | to 85', with the vast majority being | groundfish licences | herring for | vessel between 65' and |
| other species, such as smelt | 65'); 3 also hold shrimp licences, | 2 factory shrimpers | the meat | 100') whose principal |
| and eels. | and 50 have groundfish licences. | fishing northern shrimp | | activity is groundfish |
| | | | | fishing |
| | | | | |
| 1,070 fishermen (including | 395 fishermen (including | 90 fishermen (including | 40 fishermen | 60 fishermen |
| captains) | captains) | captains) | (including | (including captains) |
| - ' | - : | • | captains) | |

Total number of fishermen: 1,655 (calculation based on an estimated average number of fishermen per vessel)

Source: CPPA info. (based on the combined data of DAFA, DFO, FRAPP, MFU, and APPFA)

Economic Impact Assessment of the

Fisheries Sector in

New Brunswick

CRAB SHRIMP

For: Le Conseil des Pêches de la Péninsule acadienne

By:

Pierre-Marcel Desjardins, Economist

June 2001

Introduction

The purpose of this assessment is to quantify the economic impact of two sectors of the fishing industry on the New Brunswick economy. More specifically, an analysis is done of the economic importance of crab and shrimp to the various regions of New Brunswick.

Objective of the Study

The objective of the study is twofold. First, we evaluate the total economic contribution of each species both at the provincial and the county level. The analysis incorporates the impact of the fishery itself (primary production) as well as the impact of the processing of these species (secondary production). The reference year used is 1997, the last year for which all data were available at the time the analysis was carried out. Second, we estimate the economic impact of a variation in the landed quantity (1,000 tonnes in our scenario).

Methodology

This type of analysis must be carried out with the help of a proven economic model, in this case, the input-output model. We got our baseline data from various representatives of the sector (Fisheries and Oceans Canada, Agriculture, Fisheries and Aquaculture, processing plant managers, industry representatives, and so forth.) We therefore obtained information about the crab and shrimp fisheries as well as about the processing of these two species.

We then used an input-output model to quantify with relative accuracy the total, detailed economic impact of the two sectors. The baseline data used in this analysis were obtained during our consultations. The principle of the input-output model is that it basically tracks the money spent by the sector. For example, a processing plant may purchase packaging from a factory in Moncton or Saint John which, as a result of this, hires employees, buys raw materials, etc. These expenditures in turn lead to more expenditures, i.e., the employees spend their wages, pay their taxes, and so on. The input-

output model takes into account the different facets of the economy and has a special characteristic in that it is based on the inputs (purchases) and outputs (production) of various large sectors of the economy. Our model has the added advantage of breaking these down geographically, by county.

Obviously, a study such as this one is based on certain general hypotheses. In other words, averages are used at various levels. By definition, averages provide a general picture and do not reflect specific cases. For instance, not all plants and boats have the same cost structure. The baseline data used therefore provide an overall profile of the sector rather than a snapshot of one case in particular.

Economic Impact of Crab on the New Brunswick Economy

Direct wages (jobs related directly to the sector):

We estimated the direct wages generated by persons directly involved in this sector as follows:

Table 1: Direct wages in the New Brunswick crab sector, 1997

| | Gloucester | Westmorland | Total |
|--------------------|--------------|-------------|--------------|
| Plants | \$5,210,000 | \$520,000 | \$5,730,000 |
| Fishermen | \$16,930,000 | \$0 | \$16,930,000 |
| Other ¹ | \$3,910,000 | \$0 | \$3,910,000 |
| Total | \$26,050 000 | \$520,000 | \$26,570,000 |

It should be noted that all crabbers in New Brunswick fish out of ports on the Acadian Peninsula, which is in Gloucester County. Consequently, fishermen and those in the "Other" category (marine observers, dockside monitors, etc.) are found only in this county. There are crab processing plants in two counties: Gloucester and Westmorland.

For a year with conditions similar to those in 1997, the total payroll for persons directly involved in crab sector activities would therefore be about \$26.5 million.

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¹ This category includes marine observers, dockside monitors, etc.

Jobs related directly to the sector (person-years):

We estimated the number of jobs (calculated in person-years) held by individuals directly involved in crab sector activities as follows:

Table 2: Direct jobs in the New Brunswick crab sector, 1997

| | Gloucester | Westmorland | Total |
|------------------------|--------------------|-------------------|--------------------|
| Plants | 339.2 person-years | 33.9 person-years | 373.1 person-years |
| Fishermen ² | 364.5 person-years | 0 | 364.5 person-years |
| Other | 141.9 person-years | 0 | 141.9 person-years |
| Total | 845.6 | 33.9 | 879.5 |

These data were obtained using the following hypotheses:

- Fishermen: an average of 4.5 persons per boat.
- Plants and "Other" category: the total payroll was calculated on the basis of an estimated average wage of \$10 per hour and 48 weeks of work per year.
 - → If, for example, the number of weeks worked were 12, then the number of person-years would have to be multiplied by 4, giving the following results:
 - Persons, Plants Gloucester: 1357 persons
 - Persons, Plants Westmorland: 260 persons
 - Persons, Other Gloucester: 568 persons.

Direct economic impact, 1997:

The following data show the economic impact of the crab sector, by county and for New Brunswick as a whole, excluding the impact of the direct jobs presented above.

² In the "Fishermen" category, rather than person-years, an approximation of the total number of fishermen is used.

Sales generated:

Table 3: Sales generated

| Region | Sales (\$) |
|----------------|---------------|
| Gloucester | \$82,120,000 |
| Westmorland | \$15,350,000 |
| Saint John | \$7,270,000 |
| York | \$7,150,000 |
| Northumberland | \$6,990,000 |
| Restigouche | \$5,160,000 |
| Carleton | \$2,220,000 |
| Madawaska | \$1,830,000 |
| Victoria | \$1,460,000 |
| Other counties | \$4,200,000 |
| New Brunswick | \$133,730,000 |

This table shows the geographic distribution in New Brunswick of the sales generated by the crab sector, which total approximately \$134 million.

• *Jobs generated (in addition to jobs related directly to the sector):*

Table 4: Jobs generated (in addition to jobs related directly to the sector)

| Region | Person-years |
|----------------|--------------|
| Gloucester | 335.1 |
| Westmorland | 115.5 |
| Saint John | 60.0 |
| York | 63.7 |
| Northumberland | 58.9 |
| Restigouche | 43.7 |
| Carleton | 15.5 |
| Madawaska | 13.7 |
| Victoria | 13.0 |
| Other counties | 16.3 |
| New Brunswick | 735.4 |

The jobs generated by this sector, in addition to the jobs related directly to the sector, are presented in the table above. It shows that jobs equivalent to about 735 person-years are generated by the crab sector.

• *Contribution to gross domestic product (GDP):*

Table 5: Contribution to gross domestic product (GDP)

| Region | GDP |
|----------------|--------------|
| Gloucester | \$66,110,000 |
| Westmorland | \$6,560,000 |
| Saint John | \$2,830,000 |
| York | \$2,760,000 |
| Northumberland | \$2,730,000 |
| Restigouche | \$2,020,000 |
| Carleton | \$890,000 |
| Madawaska | \$730,000 |
| Victoria | \$570,000 |
| Other counties | \$1,650,000 |
| New Brunswick | \$86,860,000 |

The preceding table shows the crab sector's contribution to the gross domestic product. This contribution totals nearly \$87 million in production value.³

■ *Tax revenue generated:*

Table 6: Tax revenue generated

| Region | Federal | Provincial | Total |
|----------------|--------------|--------------|--------------|
| Gloucester | \$12,910,000 | \$9,100,000 | \$22,010,000 |
| Westmorland | \$1,160,000 | \$900,000 | \$2,060,000 |
| Saint John | \$490,000 | \$360,000 | \$850,000 |
| York | \$450,000 | \$340,000 | \$800,000 |
| Northumberland | \$450,000 | \$340,000 | \$800,000 |
| Restigouche | \$330,000 | \$250,000 | \$580,000 |
| Carleton | \$160,000 | \$110,000 | \$260,000 |
| Madawaska | \$130,000 | \$80,000 | \$210,000 |
| Victoria | \$100,000 | \$70,000 | \$170,000 |
| Other counties | \$240,000 | \$20,000 | \$440,000 |
| New Brunswick | \$16,420,000 | \$11,760,000 | \$28,180,000 |

³ An earlier table presented the value of the sales generated by the sector whereas this table presents the value of production.

The economic activity related directly or indirectly to the crab sector generates annual revenues of over \$16 million for the federal government and over \$11 million for the provincial government, for a total in excess of \$28 million.

Economic impact of a 1000-tonne variation in crab landings on the New Brunswick economy

The section that follows describes the economic impact of a 1000-tonne increase in the quantity of crab that is landed and processed. It should be noted that these results were not extrapolated from the results in the preceding section but were calculated exclusively on the basis of an analysis of variable factors as opposed to fixed factors.

Direct wages (jobs related directly to the sector) associated with a 1000-tonne variation:

Table 7: Direct wages in the New Brunswick crab sector associated with a 1000-tonne variation

| Plants | \$640,000 |
|-----------|-----------|
| Fishermen | \$0 |
| Other | \$0 |
| Total | \$640,000 |

It can therefore be seen that the impact of a 1000-tonne increase on the "Plants" category is a \$640,000 increase in the total payroll. In the "Fishermen" and "Other" categories, we hypothesized that the impact would be nil.

Jobs related directly to the sector (person-years):

We estimated the number of jobs (calculated in person-years) resulting from a 1000-tonne variation as follows:

Table 8: Direct jobs in the New Brunswick crab sector following a 1000-tonne variation

| Plants | 41.7 person-years |
|-----------|-------------------|
| Fishermen | 0 |
| Other | 0 |
| Total | 41.7 person-years |

Direct economic impact:

The data below show the economic impact of the crab sector, by county and for New Brunswick as a whole, excluding the impact of the direct jobs presented above.

• Sales generated:

Table 9: Sales generated

| | Sales (\$) |
|---------------|--------------|
| New Brunswick | \$14,130,000 |

From this table, we can see that the sales generated by the variation in the quantity of crab represent about \$14 million.

• *Jobs generated (in addition to jobs related directly to the sector):*

Table 10: Jobs generated (in addition to jobs related directly to the sector)

| | Person-years |
|---------------|--------------|
| New Brunswick | 81.9 |

The jobs generated by the sector following a variation in the quantity of crab, in addition to the jobs related directly to the sector, are presented in the table above. It shows that additional jobs equivalent to about 81.9 person-years are generated by the crab sector.

• *Contribution to gross domestic product (GDP):*

Table 11: Contribution to gross domestic product (GDP)

| | GDP |
|---------------|--------------|
| New Brunswick | \$10,580,000 |

The sector's additional contribution to the gross domestic product is over \$10 million.

■ *Tax revenue generated:*

Table 12: Tax revenue generated

| | Federal | Provincial | Total |
|---------------|-------------|-------------|-------------|
| New Brunswick | \$1,760,000 | \$1,260,000 | \$3,020,000 |

The 1000-tonne increase in the quantity of crab generates revenues of more than \$1.7 million for the federal government and more than \$1.2 million for the provincial government, for a total in excess of \$3 million.

Economic impact of shrimp on the New Brunswick economy

The next section presents the analysis of the shrimp sector. Here again, all of the boats are located on the Acadian Peninsula, i.e., in Gloucester County. Furthermore, all of New Brunswick's shrimp processing plants are located in Gloucester County as well.

Direct wages (jobs related directly to the sector):

We estimated the direct wages generated by persons directly involved in this sector as follows:

Table 13: Direct wages in the New Brunswick shrimp sector, 1997

| Plants | \$1,000,000 |
|-----------|-------------|
| Fishermen | \$2,550,000 |
| Other | \$110,000 |
| Total | \$3,660,000 |

For a year comparable to 1997, the total payroll for persons directly involved in shrimp sector activities would therefore be about \$3.6 million.

Jobs related directly to the sector (person-years):

We estimated the number of jobs (calculated in person-years) held by individuals directly involved in shrimp sector activities as follows:

Table 14: Direct jobs in the New Brunswick shrimp sector, 1997

| Plants | 65.1 person-years |
|------------------------|-------------------|
| Fishermen ⁴ | 80 persons |
| Other | 4 person-years |
| Total | 179.1 |

These data were obtained according to the following hypotheses:

- Fishermen: an average of 4 persons per boat.
- Plants and "Other" category: the total payroll was calculated on the basis
 of an estimated average wage of \$10 per hour and 48 weeks of work per
 year.
 - → If, for example, the number of weeks worked were 16, then the number of person-years would have to be multiplied by 3, giving the following results:

Persons, Plants: 195 persons

• Persons, Other: 12 persons.

Direct economic impact, 1997:

The following data show the economic impact of the shrimp sector, by county and for New Brunswick as a whole, excluding the impact of the direct jobs presented above.

Sales generated:

⁴ In the "Fishermen" category, rather than person-years, an approximation of the total number of fishermen is used.

Table 15: Sales generated

| Region | Sales (\$) |
|----------------|--------------|
| Gloucester | \$13,050,000 |
| Westmorland | \$2,050,000 |
| Saint John | \$620,000 |
| York | \$1,050,000 |
| Northumberland | \$890,000 |
| Restigouche | \$1,090,000 |
| Carleton | \$280,000 |
| Madawaska | \$20,000 |
| Victoria | \$20,000 |
| Other counties | \$1,470,000 |
| New Brunswick | \$20,550,000 |

This table shows the geographic distribution in New Brunswick of the sales generated by the shrimp sector, which total just over \$20 million.

• *Jobs generated (in addition to jobs related directly to the sector):*

Table 16: Jobs generated (in addition to jobs related directly to the sector)

| Region | Person-years |
|----------------|--------------|
| Gloucester | 52.1 |
| Westmorland | 19.0 |
| Saint John | 10.8 |
| York | 8.1 |
| Northumberland | 8.6 |
| Restigouche | 6.1 |
| Carleton | 0.7 |
| Madawaska | 0.2 |
| Victoria | 0.5 |
| Other counties | 2.8 |
| New Brunswick | 109.0 |

The jobs generated by the shrimp sector, in addition to the jobs related directly to the sector, are equivalent to about 109 person-years.

Contribution to gross domestic product (GDP):

Table 17: Contribution to gross domestic product (GDP)

| Regions | GDP |
|----------------|--------------|
| Gloucester | \$9,540,000 |
| Westmorland | \$800,000 |
| Saint John | \$250,000 |
| York | \$410,000 |
| Northumberland | \$350,000 |
| Restigouche | \$430,000 |
| Carleton | \$110,000 |
| Madawaska | \$10,000 |
| Other counties | \$590,000 |
| New Brunswick | \$12,480,000 |

The shrimp sector therefore generates about \$12.5 million in production value.⁵

■ *Tax revenue generated:*

Table 18: Tax revenue generated

| Region | Federal | Provincial | Total |
|----------------|-------------|-------------|-------------|
| Gloucester | \$2,090,000 | \$1,390,000 | \$3,480,000 |
| Westmorland | \$130,000 | \$100,000 | \$230,000 |
| Saint John | \$40,000 | \$40,000 | \$80,000 |
| York | \$80,000 | \$50,000 | \$130,000 |
| Northumberland | \$60,000 | \$50,000 | \$110,000 |
| Restigouche | \$70,000 | \$60,000 | \$130,000 |
| Carleton | \$20,000 | \$20,000 | \$30,000 |
| Other counties | \$90,000 | \$80,000 | \$170,000 |
| New Brunswick | \$2,580,000 | \$1,790,000 | \$4,370,000 |

The economic activity related directly or indirectly to the shrimp sector generates annual revenues of over \$2.5 million for the federal government and nearly \$1.8 million for the provincial government, for a total in excess of \$4 million.

⁵ Here again, an earlier table presented the value of the sales generated by the sector whereas this table presents the value of production.

Economic impact of a 1000-tonne variation in shrimp landings on the New Brunswick economy

The section that follows describes the economic impact of a 1000-tonne increase in the quantity of shrimp that is landed and processed. Again, it should be noted that these results were not extrapolated from the results in the preceding section but were calculated exclusively on the basis of an analysis of variable factors as opposed to fixed factors.

Direct wages (jobs related directly to the sector) associated with a 1000-tonne variation

Table 19: Direct wages in the New Brunswick shrimp sector associated with a 1000-tonne variation

| Plants | \$200,000 |
|-----------|-----------|
| Fishermen | \$0 |
| Other | \$0 |
| Total | \$200,000 |

It can therefore be seen that the impact of a 1000-tonne increase on the "Plants" category is a \$200,000 increase in the total payroll. As with crab, in the "Fishermen" and "Other" categories, we hypothesized that the impact would be nil.

Jobs related directly to the sector (person-years):

We estimated the number of jobs (calculated in person-years) resulting from a 1000-tonne variation as follows:

Table 20: Direct jobs in the New Brunswick shrimp sector following a 1000-tonne variation

| Plants | 13 person-years |
|-----------|-----------------|
| Fishermen | 0 |
| Other | 0 |
| Total | 13 person-years |

Direct economic impact:

The data below show the economic impact of the shrimp sector, by county and for New Brunswick as a whole, excluding the impact of the direct jobs presented above.

• *Sales generated:*

Table 21: Sales generated

| | Sales (\$) |
|---------------|-------------|
| New Brunswick | \$4,840,000 |

From this table, we can see that the sales generated by the variation in the quantity of shrimp represent about \$5 million.

• *Jobs generated (in addition to jobs related directly to the sector):*

Table 22: Jobs generated (in addition to jobs related directly to the sector)

| | Person-years |
|---------------|--------------|
| New Brunswick | 27.8 |

The jobs generated by the sector following a variation in the quantity of shrimp, in addition to the jobs related directly to the sector, are presented in the table above. It shows that additional jobs equivalent to about 27.8 person-years are generated by the shrimp sector.

• *Contribution to gross domestic product (GDP):*

Table 23: Contribution to gross domestic product (GDP)

| Region | GDP | |
|---------------|-------------|--|
| New Brunswick | \$3,700,000 | |

The sector's additional contribution to the gross domestic product is over \$3.5 million.

■ *Tax revenue generated:*

Table 24: Tax revenue generated

| Region | Federal | Provincial | Total |
|---------------|-----------|------------|-------------|
| New Brunswick | \$610,000 | \$440,000 | \$1,050,000 |

The additional economic activity generated directly or indirectly by a 1000-tonne variation in shrimp landings represents revenues of over \$600,000 for the federal government and over \$400,000 for the provincial government, for a total in excess of \$1 million.

Conclusion

The economic impact of these two sectors on the New Brunswick economy is very significant. The table below presents a synthesis of the results:

Table 25: Synthesis of principal results

| | Crab | Crab: 1000- tonne variation | Shrimp | Shrimp: 1000- tonne variation |
|--------------------------------|--------|--------------------------------|--------|----------------------------------|
| Direct jobs (person-years) | 879.5 | 41.7 | 179.1 | 13.0 |
| Sales (\$000) | 133.73 | 14.13 | 20.55 | 4.84 |
| Additional jobs | | | | |
| (person-years) | 735.4 | 81.9 | 109.0 | 27.8 |
| Gross domestic product (\$000) | 86.86 | 10.58 | 12.48 | 3.7 |
| Government revenues (\$000) | 28.18 | 3.02 | 4.37 | 1.05 |

One element that the study brings out is the relatively large economic impact of variations in quantity. This merely shows that variable factors have a greater impact on the provincial economy than fixed factors.