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The Fishing Industry in Quebec

Socio-economic profile

2015

Strategic Services

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Acronyms

DFO: Fisheries and Oceans Canada
MAPAQ: Ministère de l'Agriculture, des Pêcheries et de l'Alimentation du Québec [Quebec Department of Agriculture, Fisheries and Food]
MERN: Ministère de l'Énergie et des Ressources naturelles (Energy and Natural Resources)
SS: Strategic Services

Symbols and abbreviations

$M: millions of dollars
p: preliminary
t: tonnes (metric tons)

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Introduction

This document presents a portrait of the fishing industry in maritime Quebec. The first section provides an overview of the socio-economic situation in maritime Quebec and of the relative importance of the fishing industry in relation to other industries.

The second section gives a detailed description of the primary maritime fishing sector in Quebec: evolution of catches, the main species landed, the principal ports and the workforce (fishers, licences and boats). It also addresses the topic of fisheries management plans that govern the various fishing fleets, as well as the types of fishing gear used. A subsection is also devoted to commercial fishing by Indigenous communities.

The third section deals with the processing of marine products. It presents data on the composition and value of factory production, the number of jobs and sales destinations.

The fourth section discusses the ecocertification of marine products from both fishing and aquaculture. The demand for ecocertified products is growing in Canada and around the world, which is why we have devoted a specific section to this topic.

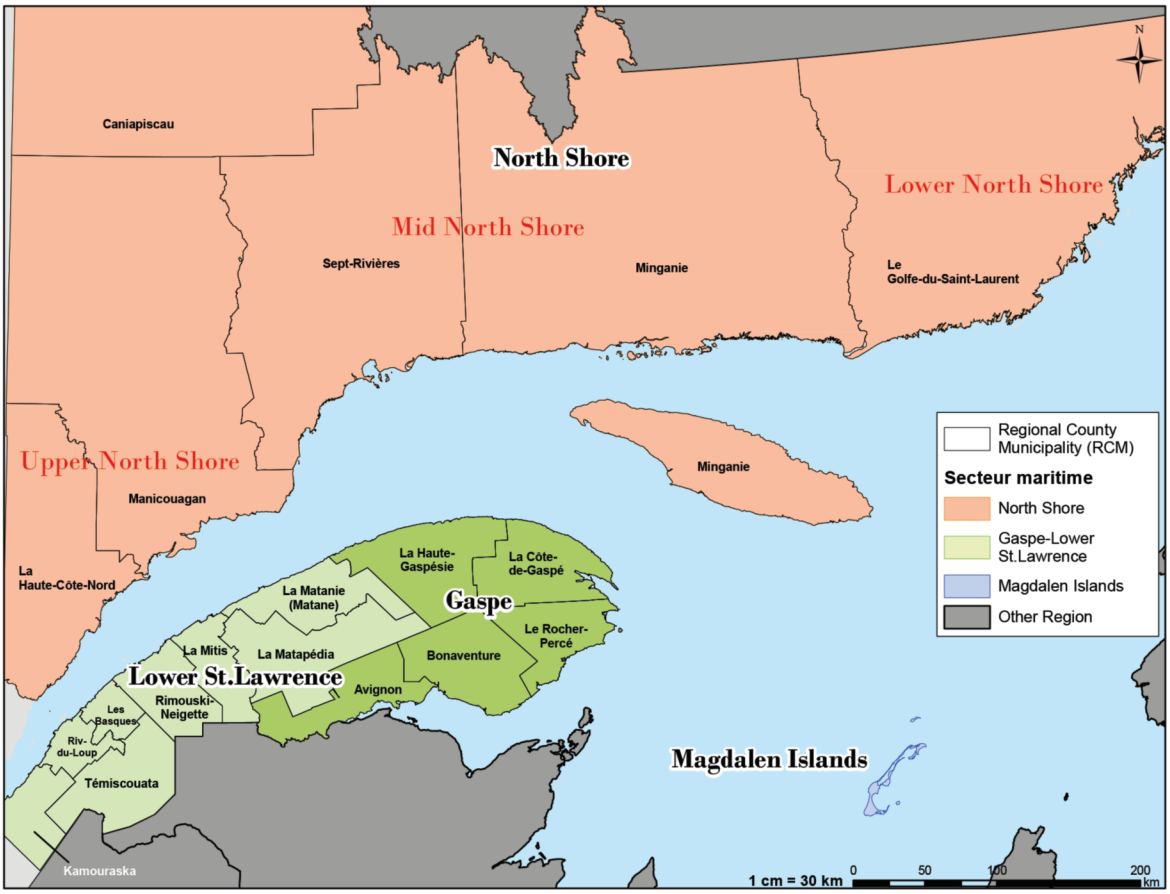
Finally, the last five sections present brief overviews of the harp seal hunt, aquaculture, commercial freshwater fishing, sport fishing of marine species in maritime areas and fishing and marine hunting in Nunavik.

1 Socio-economic profile of maritime Quebec

1.1 Demographic context

In 2015, maritime Quebec had 381,122 inhabitants, which was 5% of the population of Quebec. They were distributed over three areas (Map 1): Gaspé-Lower St. Lawrence, the North Shore and the Magdalen Islands.[1] The Gaspé-Lower St. Lawrence area was the most populated by far with 279,019 inhabitants (73%), followed by the North Shore with 89,759 inhabitants (24%). The Magdalen Islands, with 12,344 inhabitants, accounted for only 3% of the population of maritime Quebec (Graph 1).

Map 1: Maritime areas in Quebec

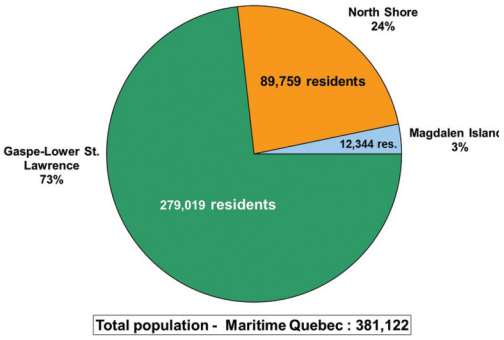


Source: MERN, DFO, Quebec Region

In contrast to Quebec as a whole, the population of the maritime areas has decreased over the last twenty-five years. It went from 422,507 in 1986 to 381,122 in 2015, a decrease of 15% (Graph 2). Over the same period, Quebec's population grew by 27%, from 6.5 to 8.3 million inhabitants. This means that the demographic weight of maritime Quebec relative to Quebec as a whole has decreased from 6.5% to 4.6% since 1986.

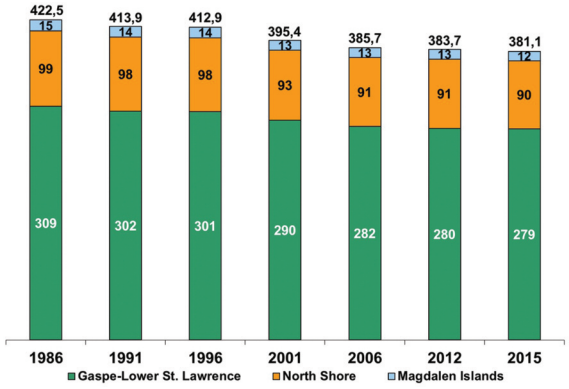
[1] The Gaspé-Lower St. Lawrence area corresponds to the Lower St. Lawrence administrative region, joined with the Gaspé section of the Gaspé-Magdalen Islands administrative region. The Magdalen Islands area corresponds to the RCM of the same name. The North Shore corresponds to the administrative region of the same name.

Graph 1: Distribution of the population in maritime Quebec by area, 2015



Source: Statistics Canada

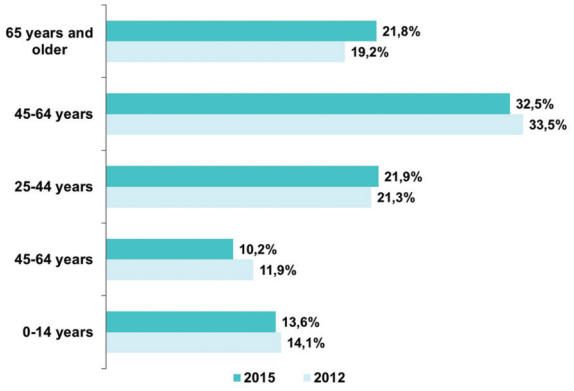
Graph 2: Evolution of the population in maritime Quebec by area, 1986-2015 (in thousands of residents)



Source: Statistics Canada

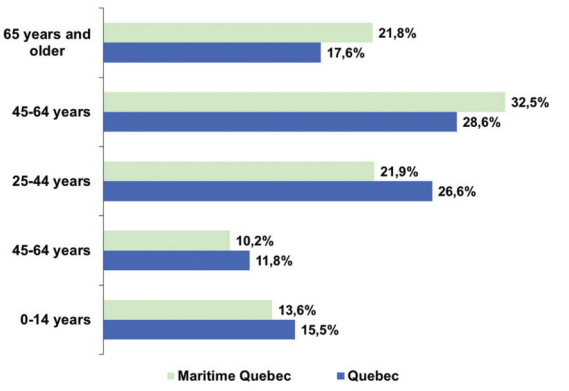
During the period from 1986 to 2015, the Magdalen Islands area experienced the largest population decline, at 15% (2,188 inhabitants), followed by Gaspé-Lower St. Lawrence with a decrease of 9.6% (29,738 inhabitants). The population of the North Shore decreased by 9.5% (9,459 inhabitants). It should be noted, however, that the North Shore population increased slightly, by 0.6% (523), between 2006 and 2012. The increase of jobs in mining and constructing hydroelectric dams (La Romaine and Gros-Mécatina) during this period contributed to attracting a number of labourers to the Middle North Shore.

Graph 3: Distribution of the population in maritime Quebec by age group, 2012 and 2015



Source: Statistics Canada

Graph 4: Comparison of the distribution of the population in maritime Quebec and all of Quebec by age group, 2015



Source: Statistics Canada

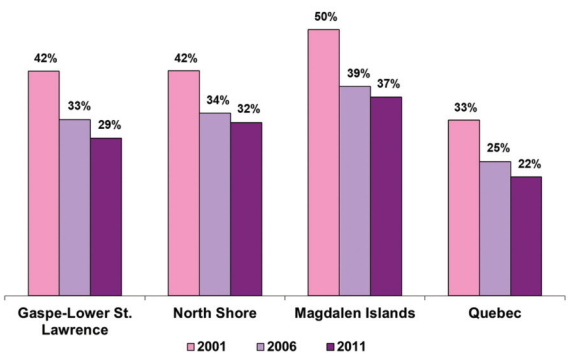
As illustrated in Graph 4, the proportion of those under 45 years old was higher in Quebec as whole (54%) than in the maritime areas (46%) in 2015.

1.2 Education levels

Between 2001 and 2011, the level of education in all of maritime Quebec increased, but still below Quebec average. During this period, the proportion of the population without a diploma fell from 42% to 29% in the Gaspé-Lower St. Lawrence area, from 42% to 32% on the North Shore, from 50% to 37% in the Magdalen Islands, and from 33% to 22% for Quebec as a whole (Graph 5).

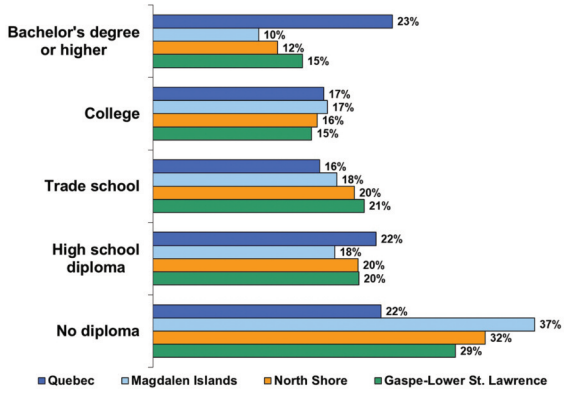
Furthermore, the proportion of the population by highest level of education achieved (high school diploma, trade school, cegep, university degree) is higher for Quebec as a whole than in the maritime areas (Graph 6). As for the proportion of the population with a university degree, it is also much higher for Quebec as a whole (23%) than in the maritime areas (10% in the Magdalen Islands, 12% on the North Shore and 15% in Gaspé-Lower St. Lawrence). In addition, the population in maritime areas with a trade school diploma is slightly higher than for the population of Quebec as a whole.

Graph 5: Change in the proportion of the population without a degree, in the maritime areas and in Quebec, 2001, 2006 and 2011[2]



Source: Statistics Canada

Graph 6: Distribution of the population by highest level of education achieved in the maritime areas and in Quebec, 2011



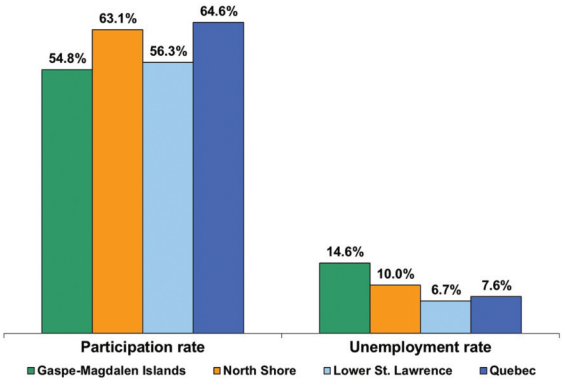
Source: Statistics Canada

[2] The 2001, 2006 and 2011 censuses used different methods to record data on the level of education. The data must therefore be interpreted cautiously.

1.3 Labour force participation rates and unemployment rates

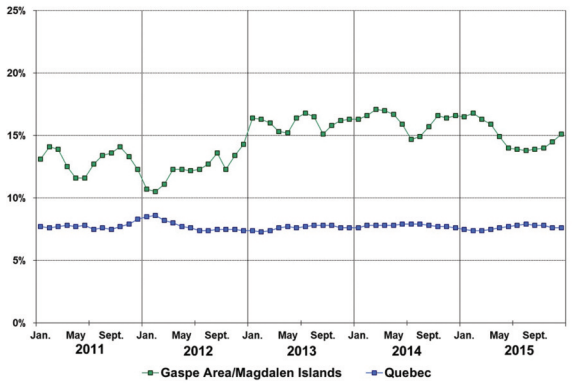
In 2015, the labour force participation rate[3] for the North Shore area was similar to that of Quebec as a whole (63.1% or just one percentage point lower than that of Quebec). The labour force participation rates in the Lower St. Lawrence and Gaspé-Magdalen Islands were 56.3% and 54.8%, respectively (~10 percentage points below the Quebec average).

Graph 7: Participation and unemployment rates in the maritime areas and in Quebec, 2015



Source: Statistics Canada

Graph 8: Evolution of the monthly unemployment rate, Gaspé/Magdalen Islands and Quebec, 2011-2015



Source: Institut de la Statistique du Québec

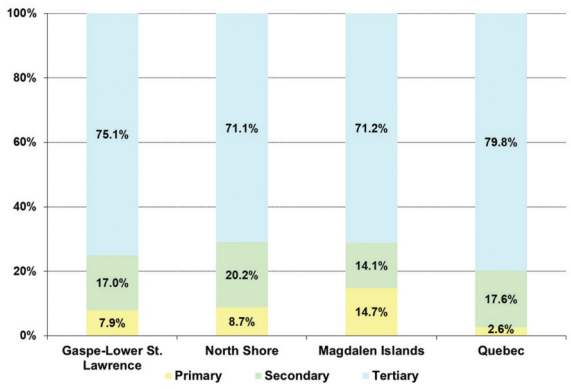
The unemployment rate of the maritime areas was always higher than the Quebec average, except for the Lower St. Lawrence, as illustrated in Graph 7. Graph 8 clearly illustrates the monthly variations in the unemployment rates for Gaspé-Magdalen Islands and Quebec from 2011 to 2015. It is possible to see that this margin was lower in the beginning of 2012 comparatively to 2015.

[3] The participation rate represents the proportion of people aged 15 or older, i.e. of working age, who were employed and unemployed during the base year. A high participation rate indicates that a significant proportion of the working-age population is employed or actively seeking employment.

1.4 Industry sectors and income pattern

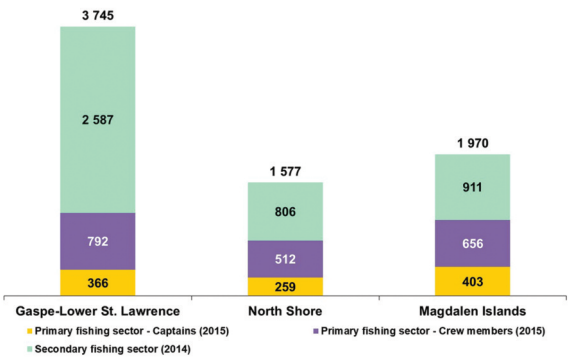
In maritime Quebec, as illustrated in Graph 9, the primary sector generated 7.9% of jobs in Gaspé-Lower St. Lawrence, 8.7% on the North Shore, and 14.7% in the Magdalen Islands in 2011. This is three to six times higher than the proportion observed for all of Quebec (2.6%). In the secondary sector, there was no significant difference between the maritime areas and Quebec as a whole, as illustrated in Graph 9.

Graph 9: Distribution of the population of maritime areas and Quebec by activity sector, 2011



Source: Statistics Canada

Graph 10: Number of jobs in the maritime areas by primary (2015) and secondary (2014) fishing sectors



Source: DFO, Quebec Region

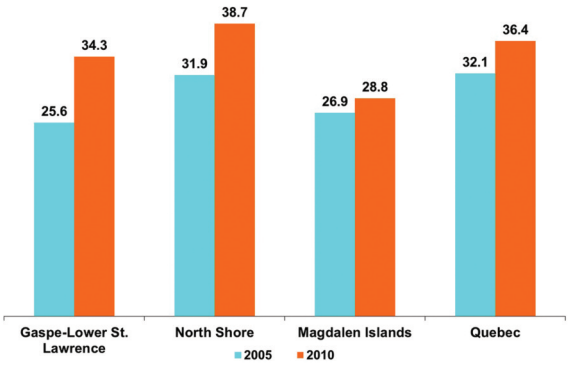
Approximately 7,300 people worked in the primary (2015) and secondary (2014) commercial fishing sectors in maritime Quebec (Graph 10). Nearly half of these jobs were located in Gaspé-Lower St. Lawrence (3,745). In the Magdalen Islands, 1,970 jobs in the fisheries sector accounted for 29.2% of total jobs in the region. The proportion of total jobs related to the fisheries sector was much more modest in the other maritime areas, 2.8% in Gaspé-Lower St. Lawrence and 3.3% on the North Shore.

As illustrated in Graph 11, the average per-capita income[4] in the Magdalen Islands ($28,796) and Gaspé-Lower St. Lawrence ($34,303) was lower than the Quebec average ($36,352) in 2010. The difference reached $7,556 in the Magdalen Islands and $2,049 in the Gaspé-Lower St. Lawrence area. Furthermore, a larger proportion of their income came from government transfers[5]. While government transfers represented only 15% of average total revenue in Quebec as a whole, the proportion was 23% in Gaspé-Lower St. Lawrence and 29% in the Magdalen Islands. On the North Shore, the average total income ($38,655) was above the Quebec average, while the share contributed by government transfers (15%) was the same (Graph 12).

[4] Average total revenue includes employment revenue, government transfers and all other revenue.

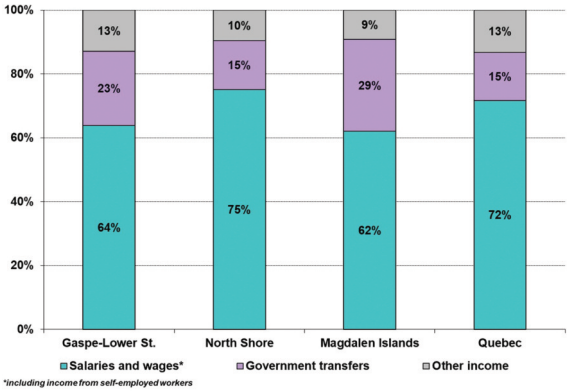
[5] Government transfers include the Old Age Security pension and Guaranteed Income Supplement, Québec Pension Plan or Canada Pension Plan benefits, Employment Insurance benefits, family allowances, federal child tax credits and other revenue from public sources.

Graph 11: Evolution of the average income in the maritime areas and in Quebec, 2005 and 2010 (thousands of $)



Source: Statistics Canada

Graph 12: Distribution of the population in the maritime areas and in Quebec by composition of average income, 2010



Source: Statistics Canada

2 Commercial maritime fisheries

2.1 Fisheries management regimes

Commercial fisheries are managed differently based on species and area. The types of management regimes used in Quebec can be classified into two broad categories: fisheries managed with or without a quota[6]. Graphs 13 and 14 illustrate the evolution of the total value of landings in Quebec according to management regimes and the distribution of management regimes by main species' landed value.

Quota-managed fishery (global or individual quotas)

Under this fishery regime, DFO sets a **global quota**. This means that every fisher's catches must be weighed upon landing and quickly recorded. There are still limits on the fishing effort (e.g., on fishing gear and fishing time), but these limits are less decisive than the quota in limiting catch quantity.

Competitive fishery

Under this regime, fishers compete for a same global quota. Once it is reached, fishing activity must stop. Several pelagic fish and groundfish fisheries are practised under the competitive regime with a global quota.

Some competitive fisheries may be subject to additional control measures such as an individual maximum catch limit (IMCL). With the IMCL, every fisher is authorized to harvest a predetermined quantity of fish (in kilograms or units). IMCLs are temporary and can in no way be transferred, cumulated or reconciled. In Quebec, some competitive groundfish and Rock Crab fisheries use IMCLs.

Moreover, in the tuna fishery, per unit IMCLs set the number of tunas that every participating fisher is authorized to harvest (one to two tunas per fisher).

Individual quota (IQ) fishery

The individual quota (IQ) fishery regime assigns each participating fisher a fish quantity expressed in tonnes or kilograms. This quota is a percentage of the global quota determined by Fisheries and Oceans Canada. All fishers must therefore have their landings weighed by a dockside monitoring company. In most cases, licence holders with individual quotas can permanently or temporarily transfer all or part of their quota to other fishers. This is the ***individual transferable quota (ITQ)***.

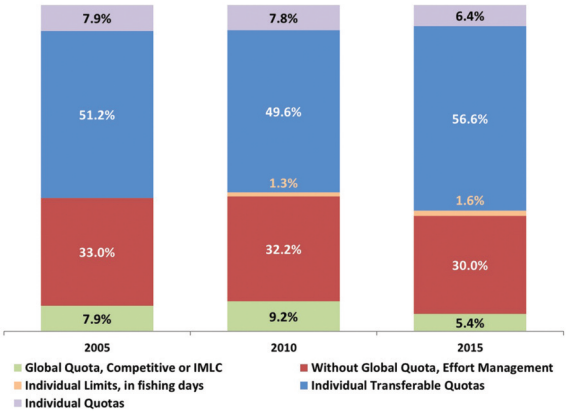
[6] Measured in weight or units, a quota is the maximum quantity of a given species that fishers are authorized to harvest.

No-quota fishery (solely fishing effort management)

No-quota fishing allows fishers and fleets to fish without limits on individual or community quantities. In these fisheries, the fishing effort is limited by other management measures, such as gear, licence, fishing-days and vessel-length maximums, and set fishing times. The lobster fishery is a good example of fishing without a global quota but with a fishing effort limit.

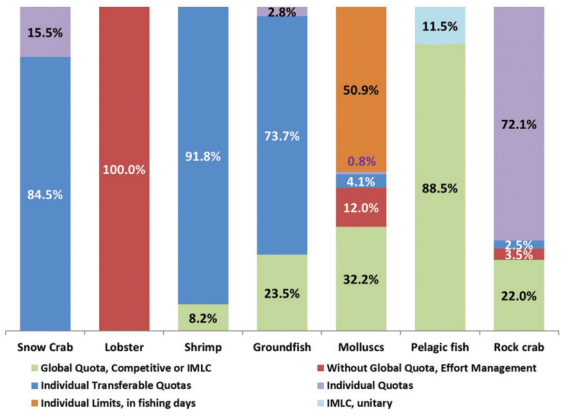
Another example of no-quota fishing management is the implementation of individual limits regarding fishing days. In this type of regime, fishers are individually allocated a number of fishing days rather than a quantity. One day usually corresponds to one fishing trip and must not exceed a given number of hours (often 12). Fishers may use their banked fishing days at their convenience, but typically within a limited fishing time.

Graph 13: Evolution of the total value of landings, by fisheries management regimes in Quebec, 2005, 2010 and 2015



Source: DFO, Quebec Region

Graph 14: Distribution of the fisheries management regimes in Quebec, by total value of landings of main species, 2015



Source: DFO, Quebec Region

2.2 Fishing gear[7]

There are seven main fishing gear used for commercial marine fishing in Quebec. By order of economic importance, these gear consist of traps, trawls, gillnets, longlines, hand lines, dredges and seines. These gear are typically separated into two categories: **fixed gear** (usually set up at the bottom) or **mobile gear** (pulled by a vessel). Graphs 15 and 16 illustrate the evolution of the total value of landings in Quebec by the main types of fishing gear used and the distribution of the main types of fishing gear used in Quebec by total value of landings of main species.

Trap (fixed gear)

A trap is a rigid structure covered with a netting or a mesh. It has one or more openings designed so that the targeted individual (Snow Crab, Rock Crab, lobster or whelk), drawn in by bait, finds it easy to enter but very difficult to escape. Most of the time, traps are also equipped with a mechanism enabling smaller individuals to escape. Traps are placed individually or using longlines (or trap lines), meaning that the traps are connected together and weighted so that they rest on the bottom. A fisher can therefore place several hundred traps.

Trawl (mobile gear)

A trawl is a cone-shaped net that a vessel pulls to capture groundfish or shrimp. This gear has different species-specific characteristics. For example, the shrimp trawl, by far the most used in Quebec, is equipped with a separating grate (a Nordmore Grate) that prevents fish from being caught. The trawl's mesh size also lets smaller organisms pass through. For shrimp trawls used in the Gulf of St. Lawrence, the mesh size at the cod end cannot exceed 40 mm.

Gillnet (fixed gear)

In Quebec, the gillnet is used to capture groundfish and pelagic fish. It is made of mesh (nylon or rope) and is equipped with floats (top line) and lead sinkers (bottom line) that hold it in the water vertically. Fishes' gills or bodies stay caught in the net's mesh.

Once the net is anchored to the ocean bottom, its ends are attached to buoys that float on the water surface. These buoys indicate the location and owner of the gear. Groundfish fishers in Quebec can use up to 120 nets and must comply with precise mesh dimensions to ensure that nets capture targeted species limit bycatches and incidental catches to the extent practicable.

Longline (fixed gear)

A longline is a line of baited hooks that is anchored to the ocean bottom or at various depths, depending on the targeted species. Longlines are mainly used to catch Atlantic Halibut and, to a lesser extent, cod. The number of hooks on a longline is limited and variable.

[7] Sources: A Fishery Manager's Guidebook, Cochrane and Garcia, FAO, 2009 and Underwater World, Fisheries and Oceans Canada, 1989.

Hand line and troll (fixed or mobile gear)

Hand-lining is a simple hook and line technique, usually with baited hook. This technique may be practised from a vessel or shoreline. A troll involves several baited hooks or lures tied to a line that is dragged by a vessel.

The hand line and troll are among the oldest fishing methods. Despite this, these fishing gear are still used to catch several fish species, in particular, mackerel, cod and tuna.

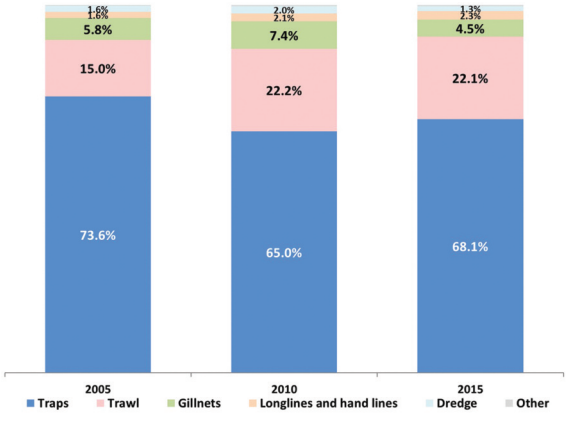
Dredge (mobile gear)

A dredge consists of a metal frame with teeth onto which a type of chain-mesh bag is attached. In Quebec, the dredge is the main gear used to capture scallop, surfclam and Sea Cucumber. A dredge is dragged along the ocean bottom and uses its teeth to lift mollusk and Sea Cucumber into its bag. A hydraulic dredge, used for harvesting surfclam, is equipped with an additional tool: hydraulic pumps that jet water into the bottom to extract mollusk.

Seine (mobile gear)

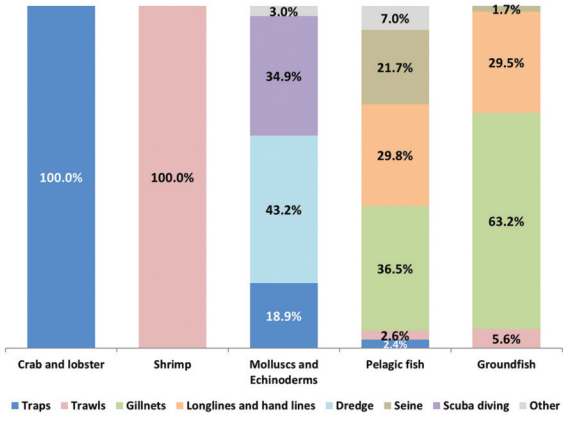
A purse seine is a net that encircles pelagic fish at the water surface or deeper. Conversely, Scottish and Danish seines capture groundfish by encircling them on the ocean bottom.

Graph 15: Evolution of the total value of landings in Quebec, by main fishing gear used, 2005, 2010 and 2015



Source: DFO, Quebec Region

Graph 16: Distribution of the main fishing gear used in Quebec, by total value of landings of main species, 2015

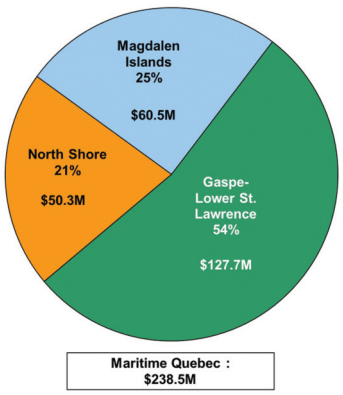


Source: DFO, Quebec Region

2.3 Evolution of landings

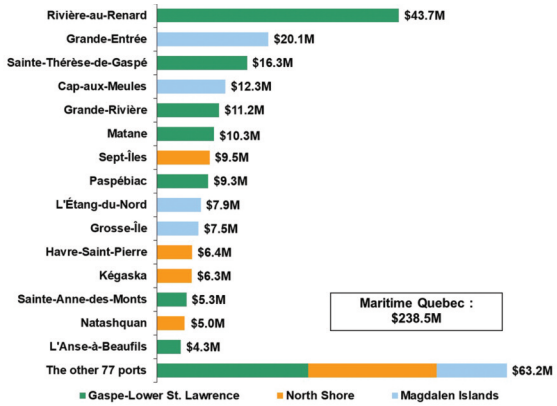
In 2015, landings of marine products in Quebec, all species combined, totalled 57,569 tonnes, for a value of $238.5M[8]. As illustrated in Graph 17, a little more than half of the catches (54%) were landed in the Gaspé-Lower St. Lawrence area, or $127.7M. The Magdalen Islands and the North Shore accounted for 25% and 21% of total landings, respectively.

Graph 17: Distribution of the value of landings in Quebec by maritime area, 2015



Source: DFO, Quebec Region

Graph 18: Distribution of the value of landings at the 15 main harbours in Quebec by maritime area, 2015



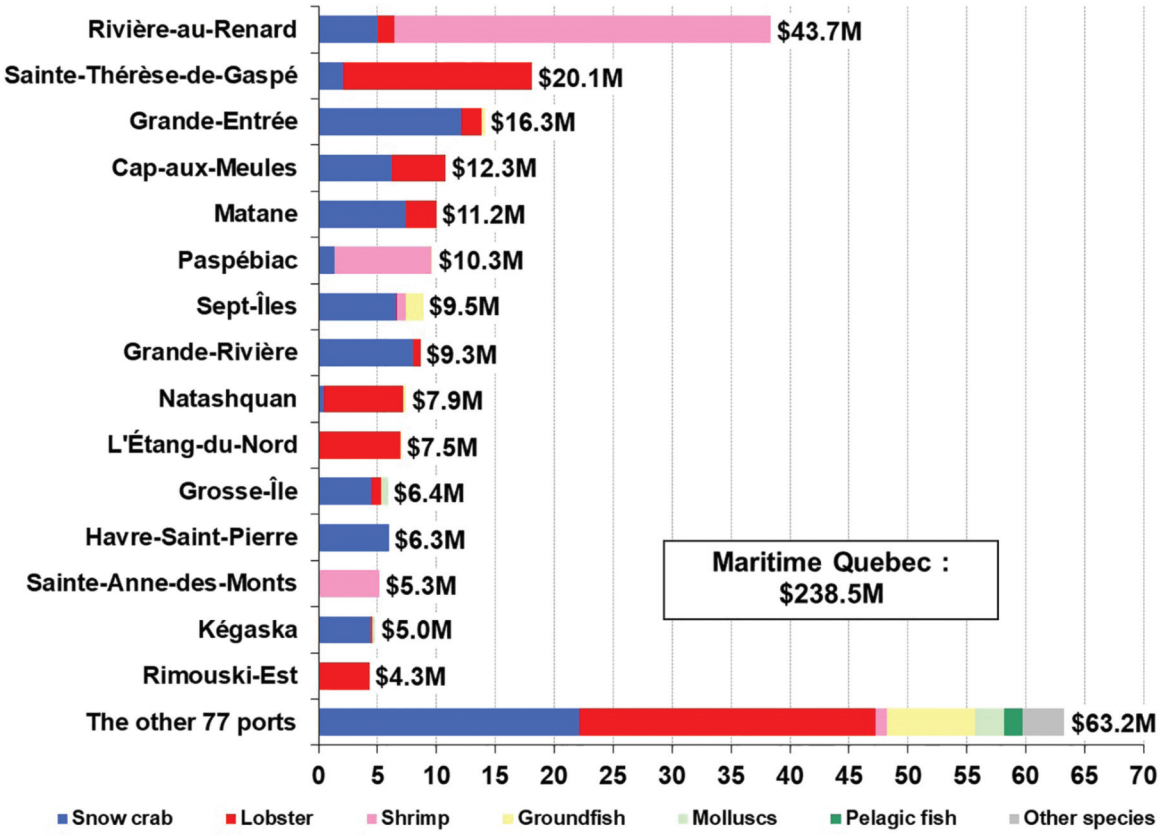
Source: DFO, Quebec Region

Catches of fish and seafood from Quebec were landed in 92 different fishing harbours. The most significant 15 accounted for 74% of the total value of landings. The most significant harbour was Rivière-au-Renard ($43.7M), followed by those of Grande-Entrée ($20.1M) and Sainte-Thérèse-de-Gaspé ($16.3M) (Graph 18).

[8] This amount includes landings by fishers from outside of Quebec who landed their catch in Quebec, representing $4.9M in 2015 (or 2%), but does not include landings made by Quebec fishers outside Quebec.

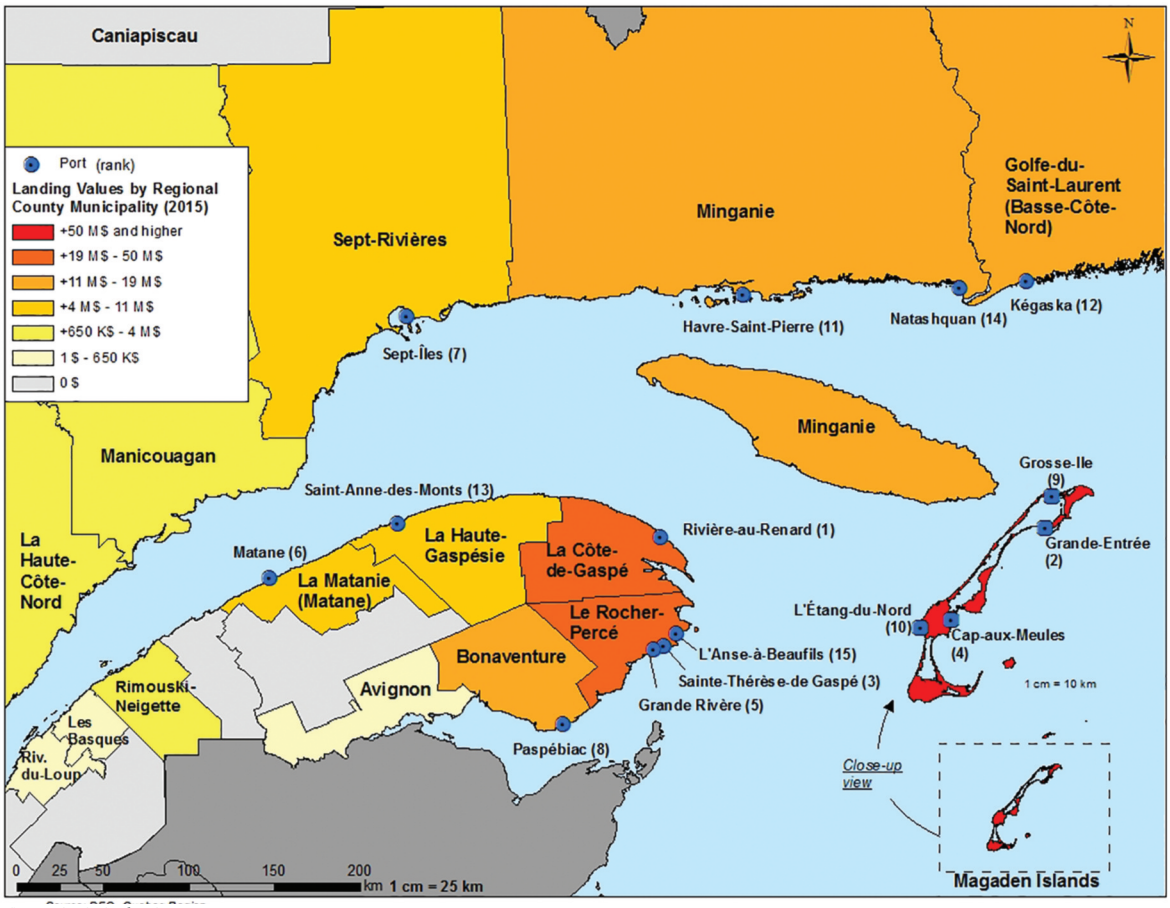
As illustrated in Graph 19, shrimp landings are concentrated in a limited number of harbours, whereas catches of other species are generally landed in many different harbours. Map 2 provides geographical locations for Quebec's 15 main harbours, as well as the intensity of landings in the RCMs of maritime Quebec.

Graph 19: Distribution of the value of landings at the 15 main harbours in Quebec by main species, 2015



Source: DFO, Quebec Region

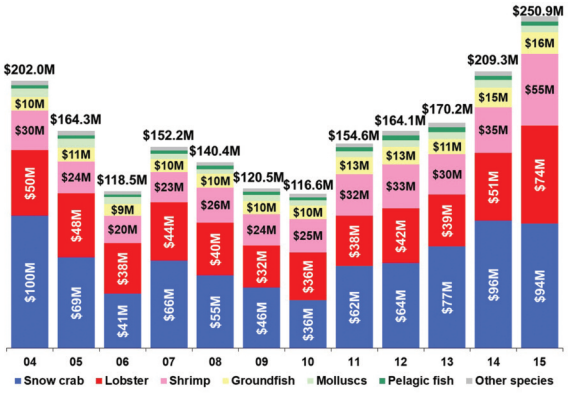
Map 2: Value of landings by RCM and the 15 main commercial fishing harbours (2015)



Source: DFO, Quebec Region

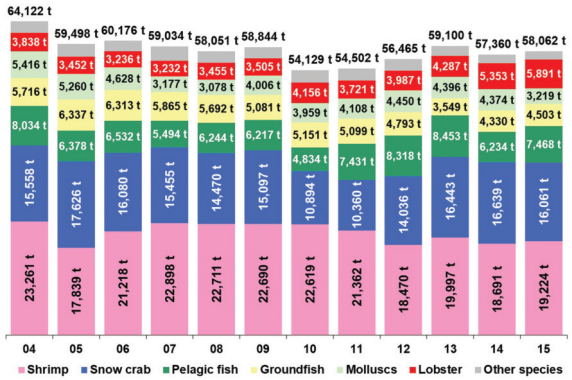
Graph 20 shows that the value of landings from Quebec fishers increased sharply between 2010 and 2015, from $116.6M to a record value in current dollars of $250.9M. This increase of 115% in five years is attributable to increased catches of lobster and snow crab as well as to an increase in the value of catches of three main crustaceans (snow crab, lobster and shrimp). We note that the quantity of landings was very stable between 2005 and 2015 (Graph 21).

Graph 20: Evolution of the value of landings by Quebec fishers by main species, 2004–2015



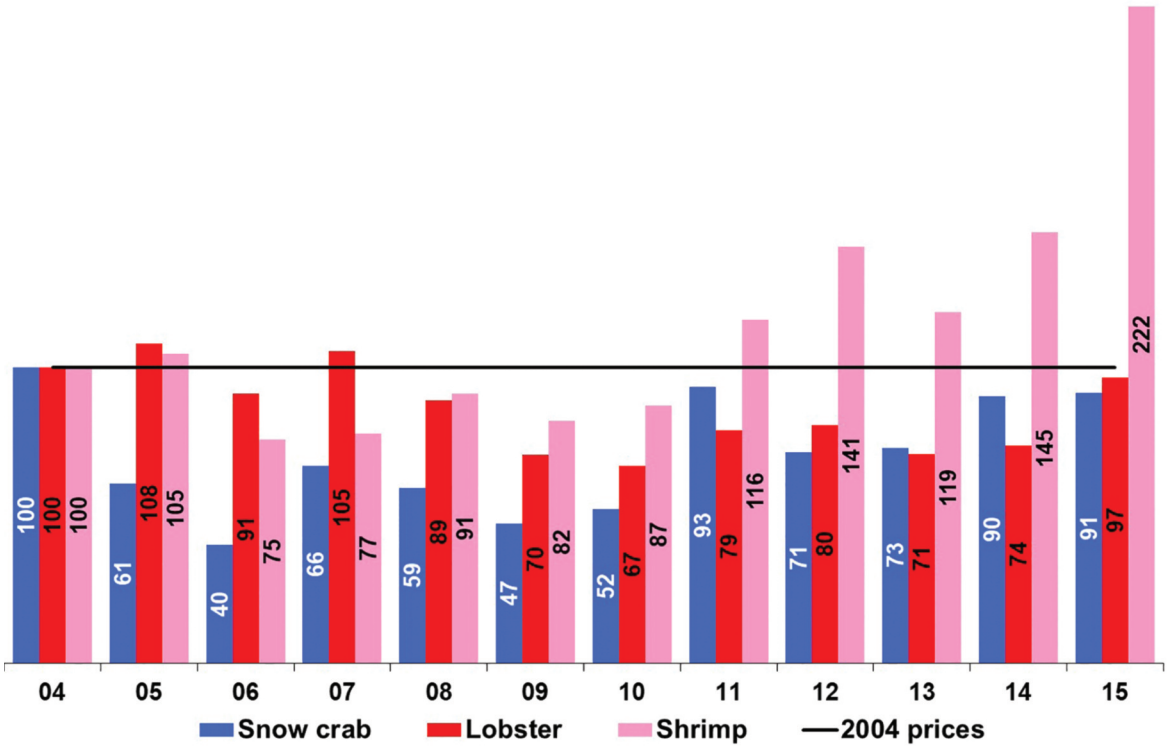
Source: DFO, Quebec Region

Graph 21: Evolution of the quantity of landings by Quebec fishers by main species, 2004–2015



Source: DFO, Quebec Region

Graph 22: Evolution of the landed price index of main species, Quebec, 2004-2015 (2004 = 100)



Source: DFO, Quebec Region

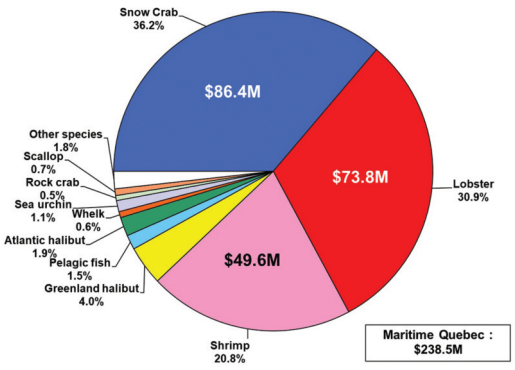
Graph 22 shows the evolution of prices for the three main crustaceans caught in Quebec (snow crab, lobster and shrimp) between 2004 and 2015 (for the index, 2004 = 100). Thus, the graph shows that shrimp prices went from 100 to 222 between 2004 and 2015, an increase of 122%. Conversely, the price of snow crab went from 100 to 91 during the same period, a drop of 9%. Furthermore, for the 2010–2015 period, prices for shrimp (+155%), lobster (+45%) and snow crab (+75%) increased.

2.4 Landed species

In 2015, the three main species landed in Quebec—snow crab, lobster and shrimp—accounted for 88% of the total landed value. With landings amounting to $86.4M (36.2%), snow crab was the main species landed, followed by lobster ($73.8M; 30.9%) and shrimp ($49.6M; 20.8%) (Graph 23).

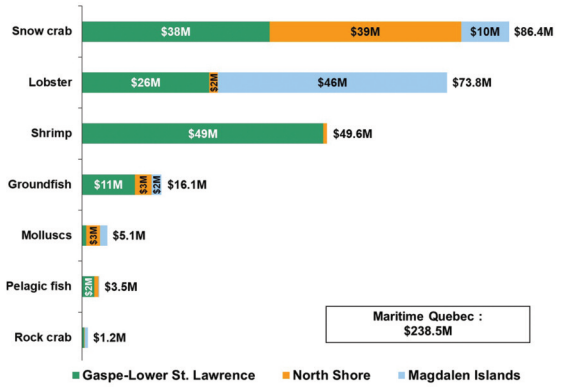
The groundfish fishery (Greenland Halibut, cod, Atlantic halibut, etc.), historically one of the main fishing activities in Quebec[9], accounted for $16.1M, 6.7% of the value of total landings in 2015. The pelagics fishery, essentially composed of herring, mackerel and capelin, totalled 16% of the volume landed in Quebec. However, due to their low unit value, these species represented just 1.5% of the value of Quebec landings in 2015 ($3.5M). Other species that are fished commercially in Quebec included sea urchin ($2.6M), scallops ($1.6M), whelk ($1.5M) and rock crab ($1.2M).

Graph 23: Distribution of the value of landings by main species, Quebec, 2015



Source: DFO, Quebec Region

Graph 24: Distribution of the value of landings by main species[10] and by maritime area, 2015



Source: DFO, Quebec Region

Graph 24 illustrates the distribution of landings in Quebec by species and by maritime area. Snow crab are mainly landed on the North Shore ($38.8M) and in Gaspé-Lower St. Lawrence ($37.9M). Note also that in Quebec, nearly two thirds of lobsters are caught in the Magdalen Islands, the rest being caught in Gaspé-Lower St. Lawrence. In addition, 98.5% of shrimp, 70.7% of groundfish and 66.6% of pelagic fish are landed in the Gaspé-Lower St. Lawrence area. Finally, 54.4% of shellfish are caught on the North Shore.

[9] Prior to 1988, groundfish represented over a third of the value of landings in Quebec.

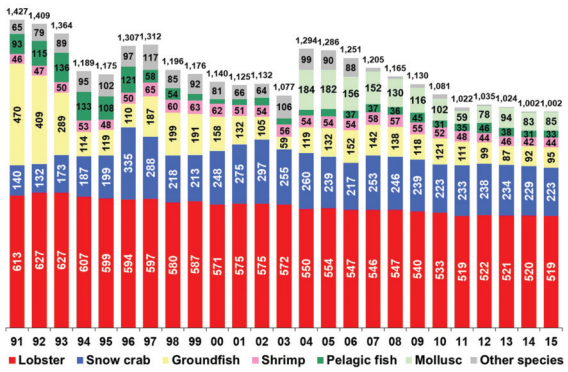
[10] Sea urchin and sea cucumber, though echinoderms, were included in the mollusk category.

2.5 Workforce

In 2015, there were 1,002 active commercial fishing businesses in Quebec and, consequently, approximately the same number of owner-operators[11]. Of this number, 519 and 223 mainly caught lobster and snow crab, respectively (Graph 25). There were also 95 businesses specializing in fishing groundfish, 44 in shrimp and 33 in pelagic fish. Finally, among the 1,002 active businesses, there were 73 softshell and surf clams harvesters[12].

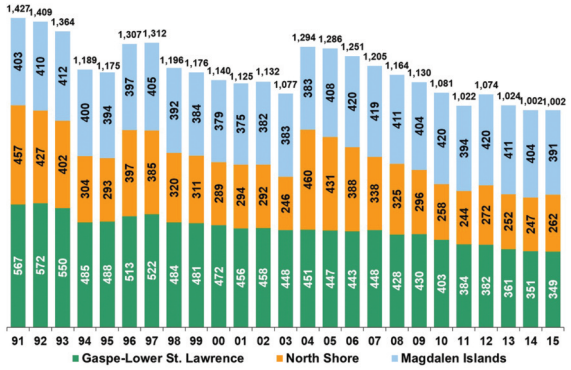
Fishing businesses were more or less evenly distributed among the three maritime areas (Graph 26). In 2015, there were 391 fishing businesses in the Magdalen Islands, 349 in Gaspé-Lower St. Lawrence and 262 in the North Shore area.

Graph 25: Evolution of the number of active fishing businesses by main species, Quebec, 1991-2015



Source: DFO, Quebec Region

Graph 26: Evolution of the number of active fishing businesses by maritime area, Quebec, 1991-2015



Source: DFO, Quebec Region

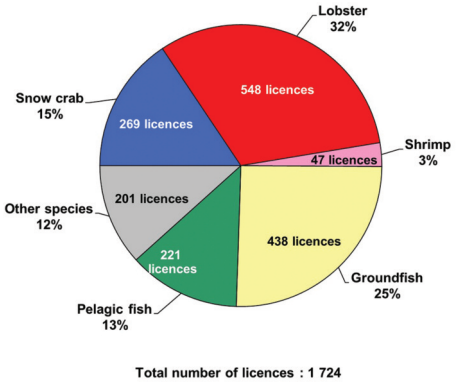
There were 1,724 active licences in 2015 (Graph 27). This means that, on average, each active company used 1.7 licences. Since owner-operators generally hold a single licence per species, that indicates that many businesses hold licences for more than one species. The Magdalen Islands area accounted for the largest number of licences in 2015, with a total of 667 licences, followed by Gaspé-Lower St. Lawrence (621 licences) and the North Shore (432 licences). Note that the number of active licences is declining. In fact, it has decreased by 13% since 2008, when it totalled 1,971 licences, compared to 1,724 in 2015. The number of licenses for several species have decreased since 2008: 6% for lobster (580 licences in 2008), 31% for snow crab (389 licences), 26% for pelagic fish (298 licences) and 22% for shrimp (60 licences). In addition, the number of fishing licences operated for groundfish increased by 15%, from 382 licences in 2008 to 438 licences in 2015.

[11] According to the Canadian owner-operator policy, owners of fishing businesses using vessels under 65 feet must be present on the vessel during fishing operations.

[12] Since 2004, softshell and surf clam harvesting requires a license from DFO. It should be noted that harvesters do not use vessels.

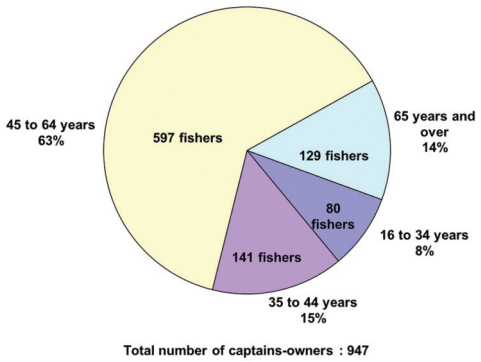
As illustrated in Graph 28, the majority of owner-operators were between 45 and 64 years of age (63%), followed by 35 to 44 years (15%) and 65 years and over (14%). Owner-operators aged 34 years and less accounted for 8% of the total workforce in 2015. Owner-operators aged 50 years and over alone accounted for 57% of the total workforce of owner-operators in 2015. In addition to the 947 owner-operators, there were approximately 2,000 crewmembers in Quebec in 2015, for a total of about 3,000 fishers.

Graph 27: Distribution of the number of licences used by main species, Quebec, 2015



Source: DFO, Quebec Region

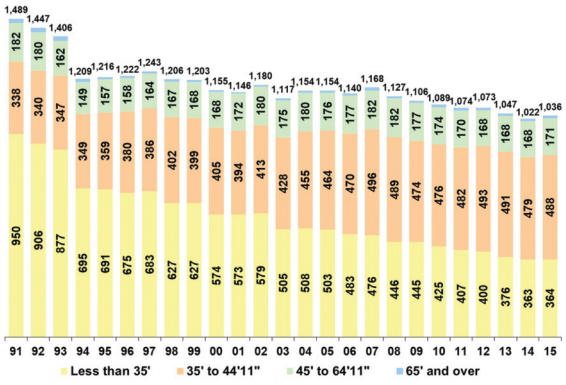
Graph 28: Distribution of the number of owner-operators by age group, Quebec, 2015



Source: DFO, Quebec Region

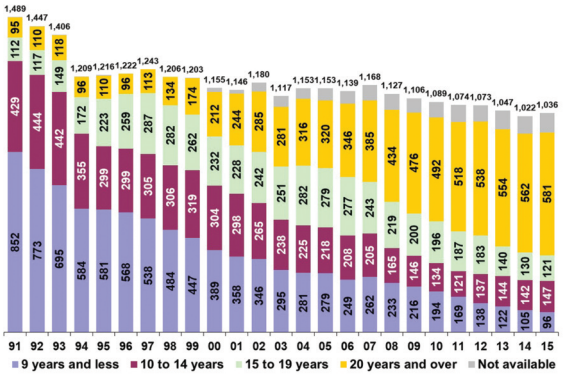
In 2015, Quebec had 1,036 active fishing vessels, a decrease of nearly 30% compared to 1991 and of 44% compared to 1989, mainly due to the sharp drop in groundfish stocks in the early nineties. As illustrated in Graph 29, the various vessel-length categories have not all changed in the same way during this period. While the number of vessels under 35 feet decreased by 62% since 1991 (950 to 364), the number of vessels longer than 35 feet has increased from 539 to 672 during the same period, an increase of 25%. Consequently, about 35% of vessels were under 35 feet in 2015 (they represented nearly 64% of the fleet in 1991), 47% were between 35 and 45 feet and 17% of the vessels were 45 feet or more.

Graph 29: Evolution of the number of active fishing boats by length, Quebec, 1991-2015



Source: DFO, Quebec Region

Graph 30: Evolution of the number of active fishing boats by age, Quebec, 1991-2015



Source: DFO, Quebec Region

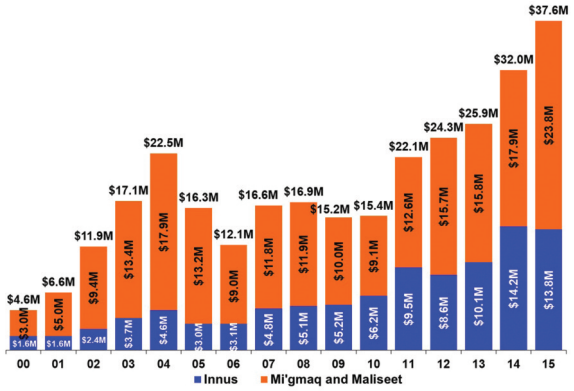
Regarding the age of vessels used for commercial fishing, there has been a decrease of vessels under ten years old, both in number and in relative share (Graph 30). Vessels under ten years old accounted for 57% of the entire fleet in Quebec in 1991 (and 72% in 1988), compared to 9% in 2015. The fleet of commercial fishing vessels in Quebec is aging. However, this aging of the fleet may be less concerning than the statistics reflect because of the major renovations that are performed on the vessels increasingly often.

2.6 Aboriginal communities in maritime Quebec

Maritime Quebec has 11 Aboriginal communities active in commercial fishing: three Mi'kmaq communities, a Maliseet community and seven Innu communities (Map 3). Aboriginal peoples from the Gaspé-Lower St. Lawrence area (the Mi'kmaq and Maliseet) gained access to the commercial fishery in 2000, following the Marshall decision[13], while North Shore communities (Innu) began in 1996, during the implementation of the Aboriginal Fisheries Strategy (AFS)[14], which derives from the Sparrow decision[15].

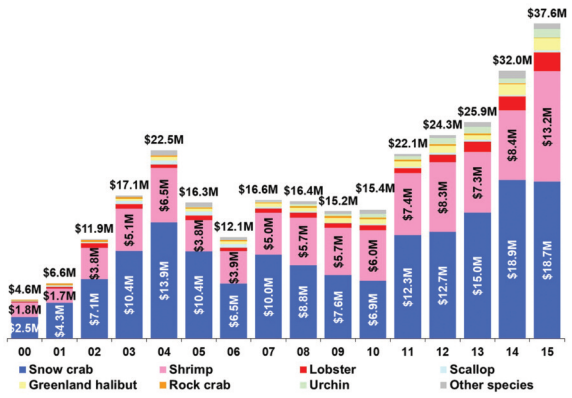
In 2015, the Aboriginal communities of Quebec used 73 fishing vessels and employed approximately 305 fishers. The value of their landings totalled $37.6M[16], or approximately 16% of the Quebec total (Graph 31). About 5% of this total ($1.8M) was landed outside of Quebec in 2015. The Mi'kmaq and Maliseet communities are responsible for an average of 70% of Quebec Aboriginal landings for the 2000–2015 period.

Graph 31: Evolution of the value of landings by Quebec Indigenous communities, by nation, 2000-2015



Source: DFO, Quebec Region

Graph 32: Evolution of the value of landings by Quebec Indigenous communities, by main species, 2000-2015



Source: DFO, Quebec Region

In the 1996-1999 period, during which the Aboriginal communities of the Gaspé-Lower St. Lawrence area were not yet active in the commercial fishery, landings from the seven Aboriginal communities on the North Shore consisted exclusively of snow crab. It is only as of 2000 that commercial landings by Aboriginal communities in Quebec really became significant[17]. In that year, the Aboriginal communities of the Gaspé–Lower St. Lawrence area began the commercial fishery and allocations for the North Shore communities increased substantially. The increase in landings continued until in 2004. In 2005, the quantities landed stabilized, when the price of crustaceans began to decline. In 2011, landings began to increase again, totalling $37.6M in 2015, 717% more than in 2000.

Overall, snow crab (50%) and shrimp (35%) accounted for 85% of the value of landings by Aboriginal communities in 2015 (Graph 32). Other landed species, such as lobster (6%), Greenland halibut (4%), sea urchin (3%) and scallop (1%), were still relatively marginal, although their share of landings has increased significantly since 2000.

[13] The Marshall decision confirmed the right of the Mi'kmaq and Maliseet Nations to earn revenue from fishing.

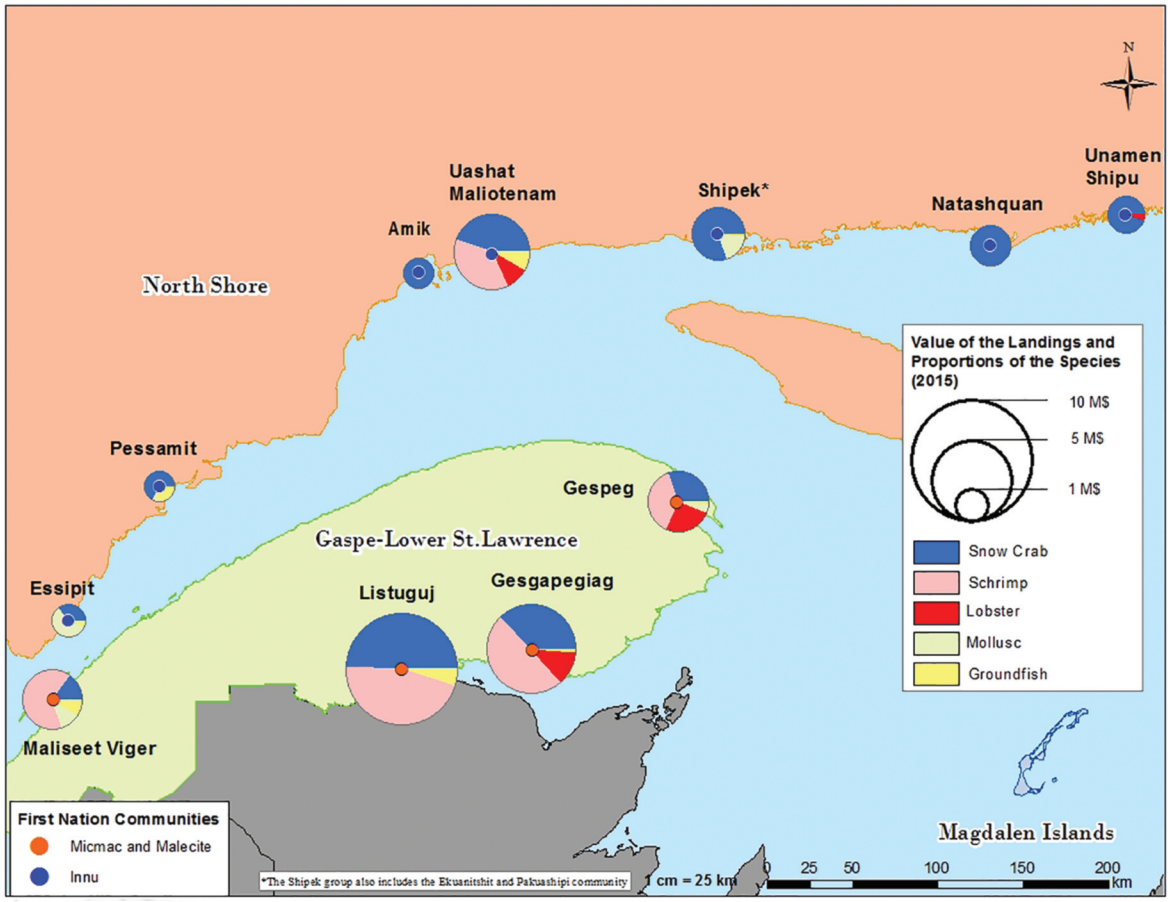
[14] This strategy aims to facilitate the access of Aboriginal communities to the commercial fishery.

[15] The Sparrow decision recognized fisheries as a constitutional right.

[16] The values presented in Graphs 31 and 32 include landings outside of Quebec.

[17] There was a 900% increase in the value of landings by Aboriginal communities between 1999 and 2000.

Map 3: Indigenous communities in maritime Quebec



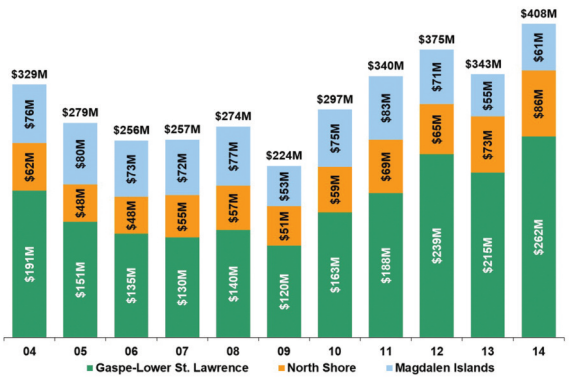
Source: DFO, Quebec Region

3 Processing and sales of fishery resources

3.1 Production value and number of jobs

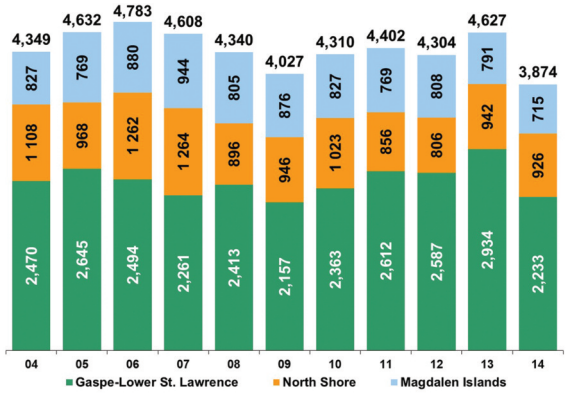
In 2014, the fishery resources processing industry in maritime Quebec consisted of 82 businesses, for sales totalling $408M[18]. Generally, these businesses buy fish and seafood directly from fishers, then resell on the local, national or international market. A number of them carry out a primary processing (cooking, freezing, salting, packaging, etc.) before selling their products.

Graph 33: Evolution of the value of production by marine resources processing businesses in maritime Quebec, 2004-2014



Source: DFO, Quebec Region

Graph 34: Evolution of the number of jobs[19] in the marine resources processing industry in maritime Quebec, 2004-2014



Source: DFO, Quebec Region

While 51% of the value of fish and seafood harvested for maritime Quebec was landed in Gaspé-Lower St. Lawrence, the area accounted for 64% of the total production of the processing industry in 2014. Conversely, on the North Shore and in the Magdalen Islands, the processing sector held a relatively less significant share than the harvesting sector. These two sectors represented 26% and 23% of landings in maritime Quebec, respectively, while the share of their processors in the total production was 21% and 15%. Greater proximity to the main markets, as well as the prime position of the shrimp industry (for which processing generates a higher value added than for most other species), are factors that could explain the relative importance of the processing industry in the Gaspé-Lower St. Lawrence area.

Generally following the observed trend in the harvesting sector, the production of marine products in maritime Quebec experienced fluctuations over the past fifteen years. In 2009, production reached its lowest level since 2004, $224M. It then increased to $408M in 2014, an increase of 24% since 2004. Snow crab production fluctuated repeatedly during this period, varying from $75M to $151M. This partly explains the fluctuations of the total production of maritime Quebec.

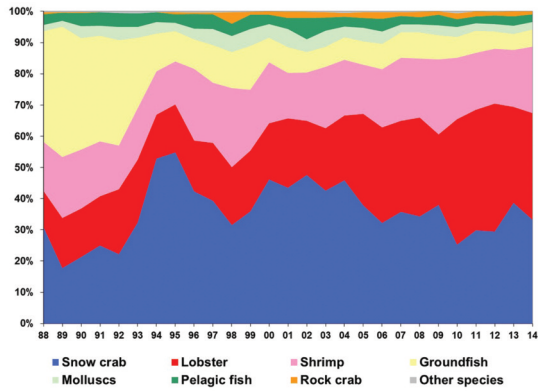
The marine products processing industry employs hundreds of workers in Quebec's three maritime areas (Graph 34). Note that the annual variations in the number of jobs are closely related to the annual production volume of marine products.

[18] This total production value also includes the purchase of marine products by Quebec factories from factories outside Quebec.

[19] The number of job is the the maximum number of employees that the processing plants have hired for a year. It is the best information available at this time. These data must therefore be interpreted very cautiously,

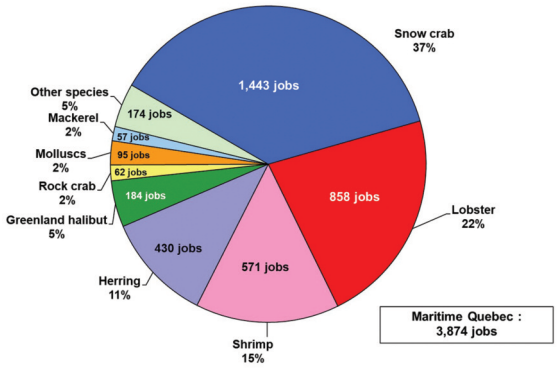
As illustrated in Graph 35, the share of groundfish in the total production of marine products in Quebec dropped significantly between 1988 and 2014, from 36% to 6%. This decline is due to the collapse of stocks, as well as moratoriums established starting in the early 1990s. During the same period, the shares of lobster and shrimp in the total production increased from 12% to 34% and from 16% to 21%, respectively. Moreover, the relative shares of snow crab, shellfish and pelagic fish did not increase in the production, although they experienced significant increases and decreases in absolute terms in some cases.

Graph 35: Evolution of the value of production by marine resources processing businesses in maritime Quebec by main species, 1988-2014



Source: DFO, Quebec Region

Graph 36: Distribution of the number of jobs in the marine resources processing industry in maritime Quebec by species, 2004-2014



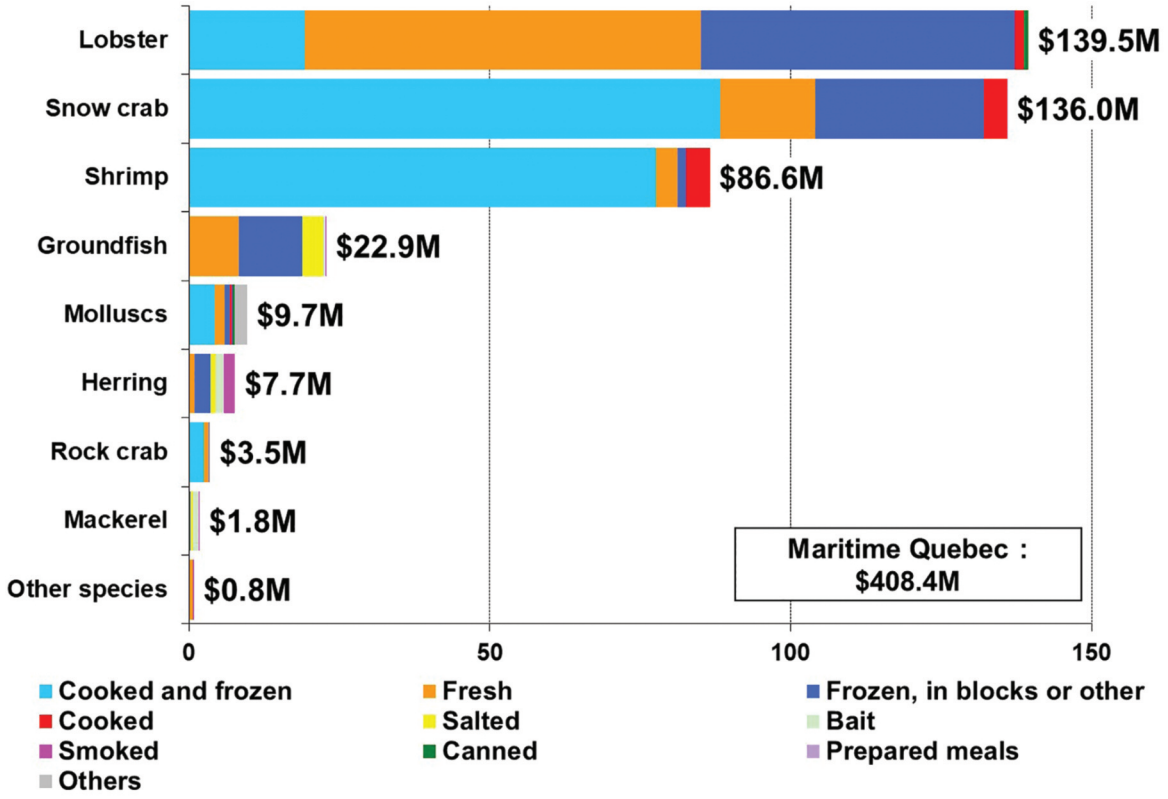
Source: DFO, Quebec Region

The number of jobs in the seafood processing sector in maritime Quebec rose to more than 3,870 in 2014 (Graph 36). Of this number, it is estimated that approximately 1,443 were attributable to processing of snow crab, 858 for lobster and 571 for shrimp. In 2014, 58% of jobs were located in the Gaspé-Lower St. Lawrence area. The two other two marine sectors shared the rest of the jobs, with 24% on the North Shore and 18% in the Magdalen Islands. It is worth noting that the statistics on the number of jobs represent the maximum number of people employed over the course of a year and that the majority of these jobs are seasonal.

3.2 Processed species

In 2014, the fisheries resources processing industry in maritime Quebec produced $139.5M worth of lobster (Graph 37). It is the main species in this industry sector, followed by snow crab ($136.0M) and shrimp ($86.6M). These three species accounted for approximately 89% of production. As illustrated in Graph 37, most marine products were sold cooked and frozen (73%) or fresh (24%). Cooked dishes, canned products, bait and smoked, salt or marinated products represented just 3% of production.

Graph 37: Distribution of the value of marine resources processing in maritime Quebec by main species processed and by type of products, 2014



Source: DFO, Quebec Region

3.3 Businesses

Among the 82 processing businesses in maritime Quebec, the main 14 accounted for 77% of production and for about 65% of jobs in the industry. Table 1 provides basic information on these businesses. It should be noted that only businesses with sales greater than $1,000 were considered.

Table 1: Principal marine resources processing businesses in maritime Quebec in 2007

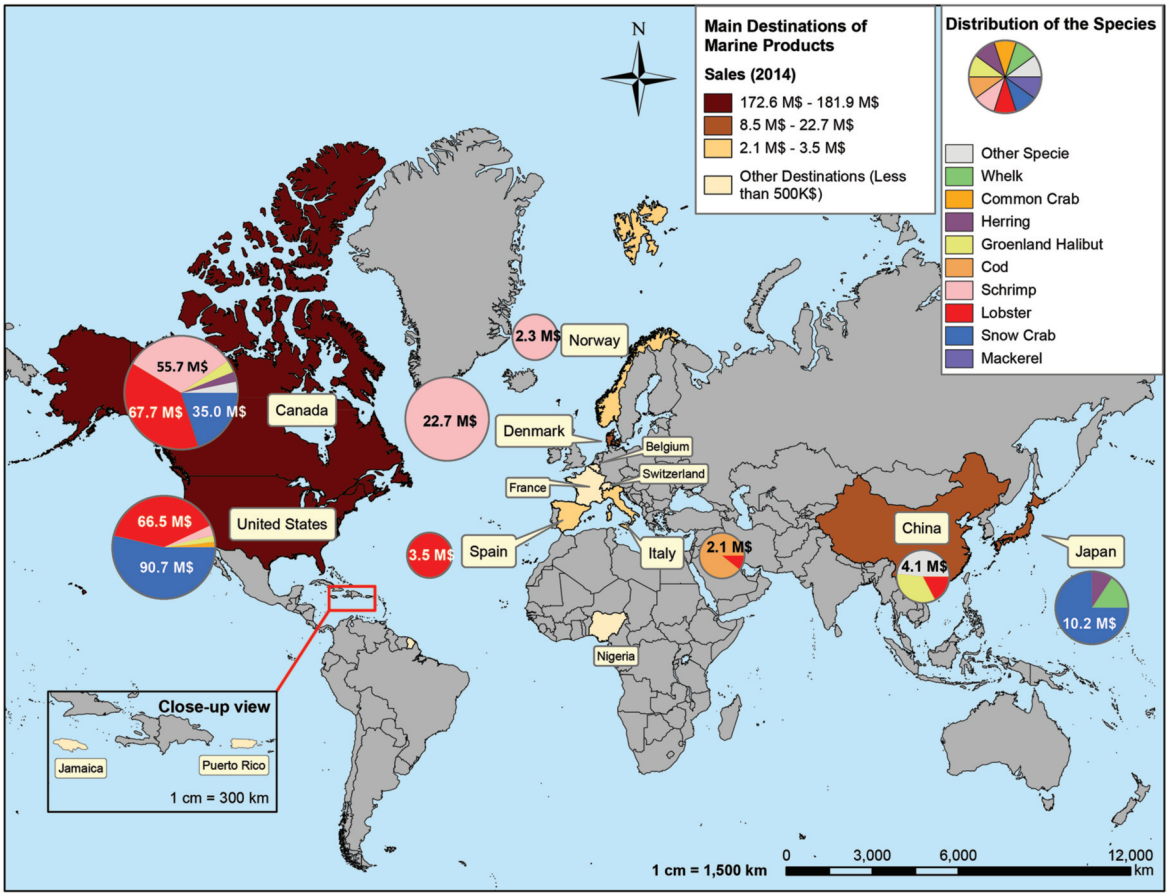
Name of buyer	Community	Maritime area	Sales figures	Number of jobs
E. Gagnon & Fils	Sainte-Thérèse-de-Gaspé	Gaspésie-BSL	$25M +	300 +
Les Pêcheries Marinard	Rivière-au-Renard	Gaspésie-BSL	$25M +	200-300
Unipêche M.D.M.	Paspébiac	Gaspésie-BSL	$25M +	200-300
Les Fruits de Mer de l'Est du Québec	Matane	Gaspésie-BSL	$25M +	100-200
Crevettes du Nord Atlantique	L'Anse-au-Griffon	Gaspésie-BSL	$25M +	100-200
Poisson Salé Gaspésien	Grande-Rivière	Gaspésie-BSL	$25M +	200-300
La Renaissance des Îles	L'Étang-du-Nord	Îles-de-la-Madeleine	$20M-$25M	300 +
Distributions J.M. Bernatchez	Grande-Rivière	Gaspésie-BSL	$20M-$25M	Less than 100
Poséidon	Longue-Pointe-de-Mingan	Côte-Nord	$15M-$20M	100-200
Crustacés Baie-Trinité	Baie-Trinité	Côte-Nord	$15M-$20M	100-200
Poissonnerie du Havre	Havre-Saint-Pierre	Côte-Nord	Less than $15M	100-200
Les Crabiers du Nord	Portneuf-sur-Mer	Côte-Nord	Less than $15M	Less than 100
Cape Dolphin Fisherman's Coop.	Grosse-Île	Îles-de-la-Madeleine	Less than $15M	Less than 100
Lelièvre Lelièvre et Lemoignan	Sainte-Thérèse-de-Gaspé	Gaspésie-BSL	Less than $15M	100-200
The other 68 businesses			$95.7M	1 357
TOTAL			**$408.4M**	**3 874**

Source: DFO, Quebec Region

3.4 Destination of sales

In 2014, 45% of the fish and seafood produced in Quebec was sold on the Canadian market, representing sales of $181.9M. The remaining production was exported, mainly to the United States ($172.7M; 42.3% of sales), Europe ($31.1M; 8%), Japan ($13.7M; 3.3%) and China[20] ($8.0M; 2%) (Graph 38).

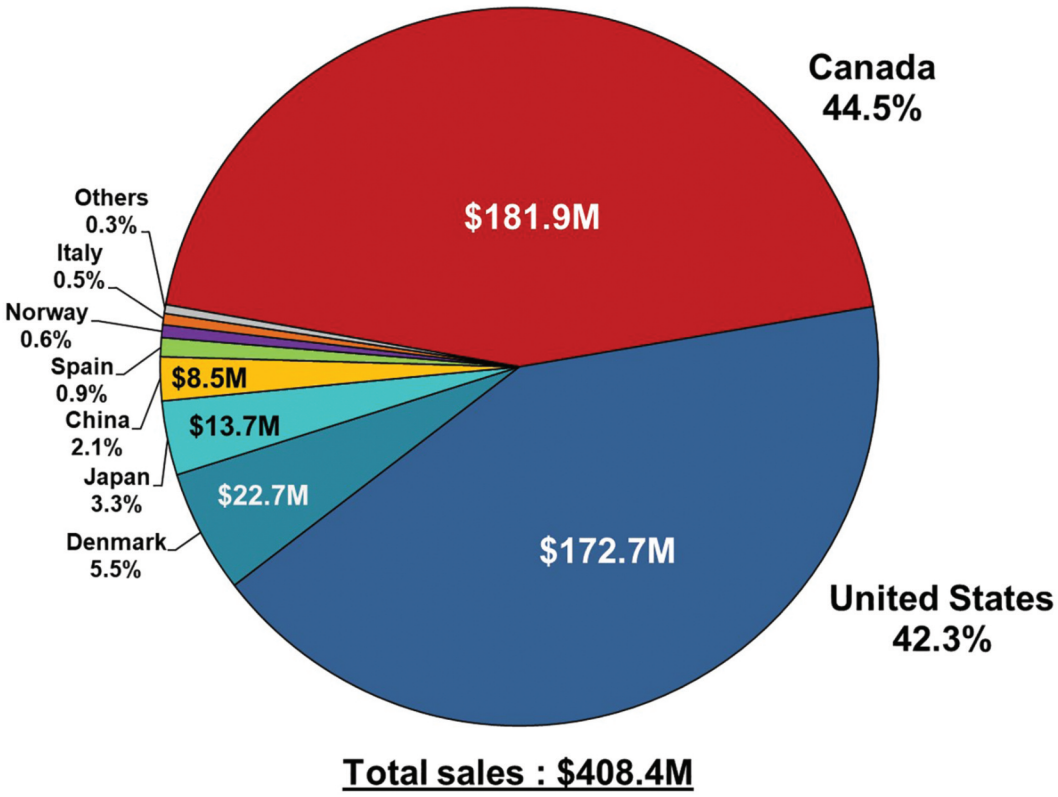
Map 4: Destinations of marine products in sales values by main species



Source: DFO, Quebec Region

[20] China includes Hong Kong.

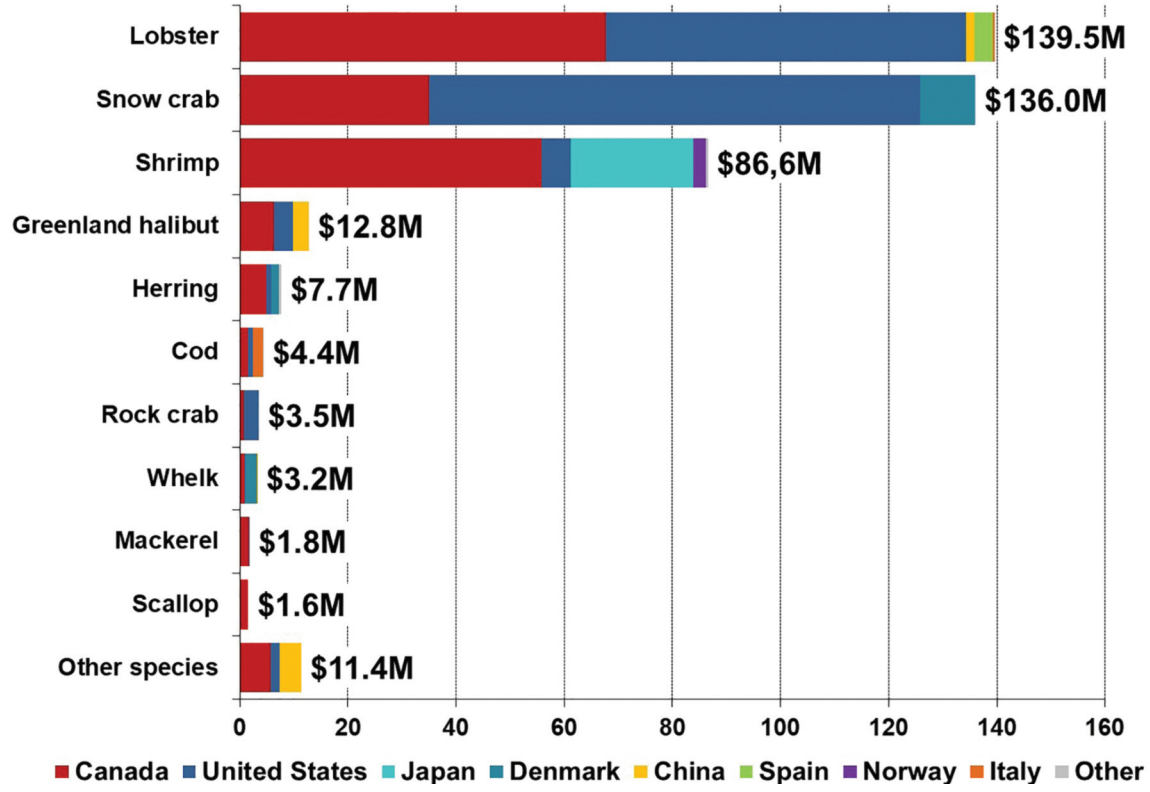
GRAPH 38: Distribution of the sales values of marine products from maritime Quebec by export country, 2014



Source: DFO, Quebec Region

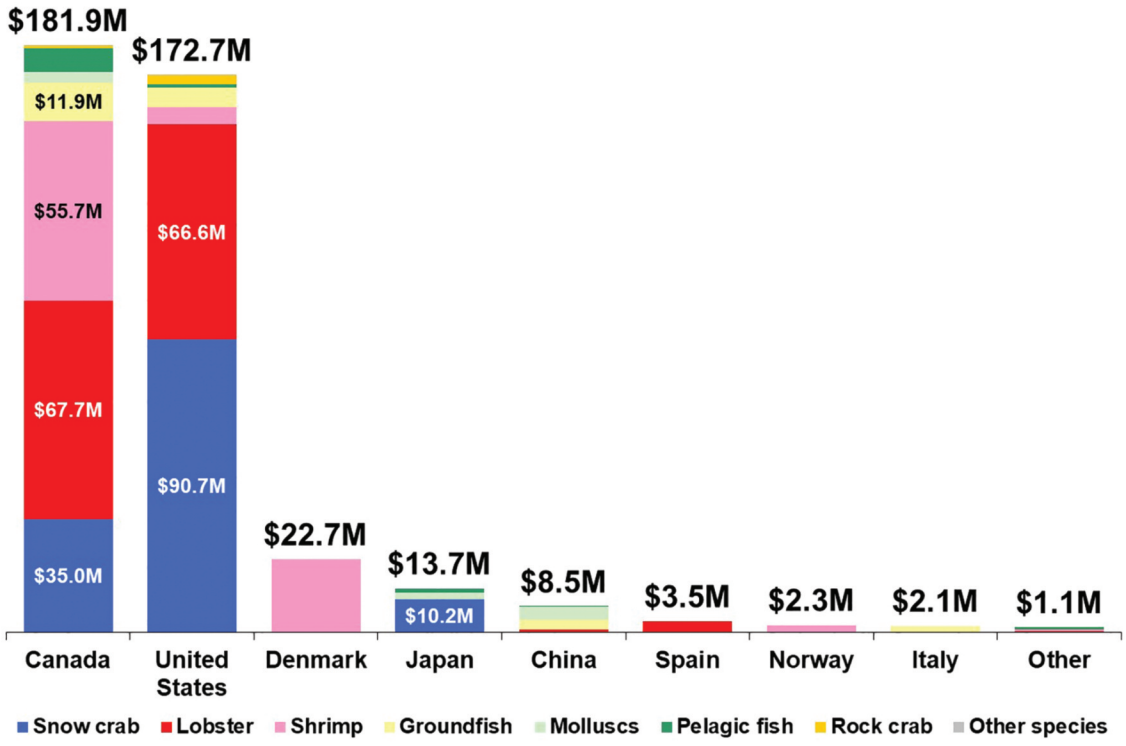
As illustrated in Graphs 39 and 40, the destination of sales differs greatly depending on the species. Thus, in 2014, lobster was sold in Canada and the United States in almost similar proportions, 49% and 48% respectively, while for snow crab, more than half of Quebec production was sold in the United States (67%). For shrimp, 64% of the production was sold in Canada and the rest was exported to Europe (29% of sales) and the United States (6%). In addition, more than two third of cod caught in Quebec in 2014 was exported to Italy (42% of sales) and to the United States (19%). Most other species were sold mainly in Canada, except rock crab and whelk, for which, respectively, 78% and 67% of production went to the United States and to Japan.

Graph 39: Distribution of the value of marine resources processing in maritime Quebec by main species processed and by export country, 2014



Source: DFO, Quebec Region

GRAPH 40: Distribution of the value of marine resources processing in maritime Quebec by export country and by main species processed, 2014

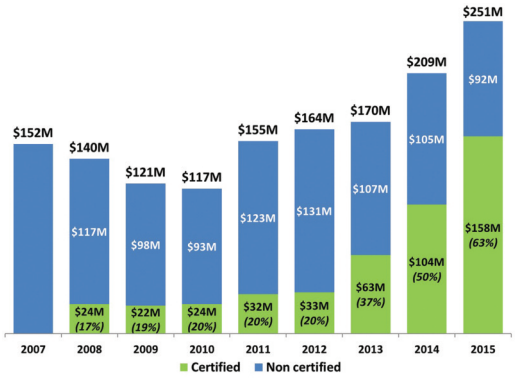


Source: DFO, Quebec Region

4 Ecocertification

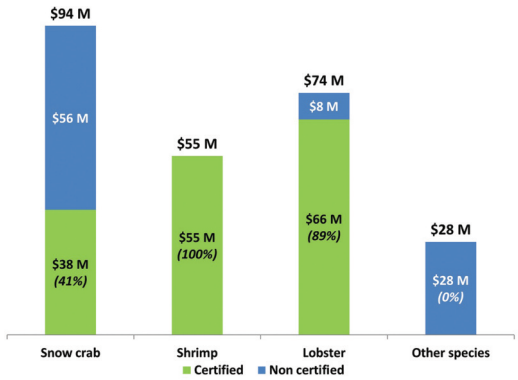
Ecocertification is a process for certifying the sustainability of fishing or aquaculture activities, based certain objective criteria. As demand for certified marine products is growing in Canada and worldwide, some actors in the Quebec fishing industry have seized the opportunity by taking steps to obtain ecocertification in recent years.

Graph 41: Evolution of the value of landings in Quebec depending on whether or not they are ecocertified, 2007-2015



Source: DFO, Quebec Region

Graph 42: Distribution of the value of landings in Quebec by main species depending on whether or not they are ecocertified, 2015



Source: DFO, Quebec Region

The proportion of ecocertified products to the total value of landings has become significant in Quebec, more than tripling in the last five years (Graph 41). In less than 10 years, it went from 0% to 63%. About 40% of the value of landed snow crab has been certified since 2013 in Quebec, while all shrimp landings have been since 2011. Moreover, eighty-nine percent of the value of lobster landed in 2015 was ecocertified, while two years earlier, this percentage was zero (Graph 42).

Marine Stewardship Council (MSC)

All stocks certified in Quebec have an MSC certification. The MSC is a non-profit NGO that issues independent certifications to attest that products have been fished sustainably, meaning they are in compliance with the standards of the United Nations Food and Agriculture Organization (FAO) and the International Social and Environmental Accreditation and Labelling Alliance (now just referred to as the ISEAL Alliance) for responsible fisheries. The MSC is generally recognized as the global reference in terms of sustainable fishing and is based on three basic principles: the sustainability of targeted stocks, preservation of ecosystems and the effectiveness of the fishery management system. To be ecocertified, a fishery must be evaluated on these criteria by an accredited independent certification agency.

Shrimp

All shrimp landings in Quebec are MSC certified. The shrimp industry was the first in the province to take steps toward certification, helping shrimpers to distinguish their product in the marketplace as higher quality than that of their Asian competitors.

Snow crab

Snow crab from Areas 12, 12E and 12F, representing 40% of the value of snow crab landed in Quebec, is ecocertified.

Lobster

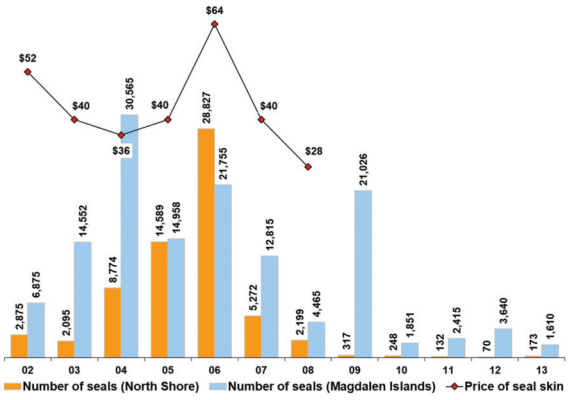
Lobster fishers in the Magdalen Islands (Area 22), for which the landings represent 60% of the value of lobster caught in Quebec, were the first lobster fishers to have their lobster catches certified in 2014. The areas surrounding Gaspé (19A-B, 20A-B, and 21A-B) joined this number in 2015. Now, nine out of ten lobsters from Quebec come from ecocertified fisheries.

5 Harp seal hunting

In 2013, 2,396 seal-hunting licences were issued in Quebec. Of this number, 1,349 licences went to residents of the North Shore, 937 to residents of the Magdalen Islands and 110 to residents of the Gaspé-Lower St. Lawrence area. However, seal hunting is a recreational or commercial activity practised mainly in the first two regions. Since 2010, seal-hunting licences have authorized the hunting of harp seals and grey seals. The specifications regarding the fishing season, authorized gear, etc. are identified in the Conservation Harvesting Plans and licence conditions.

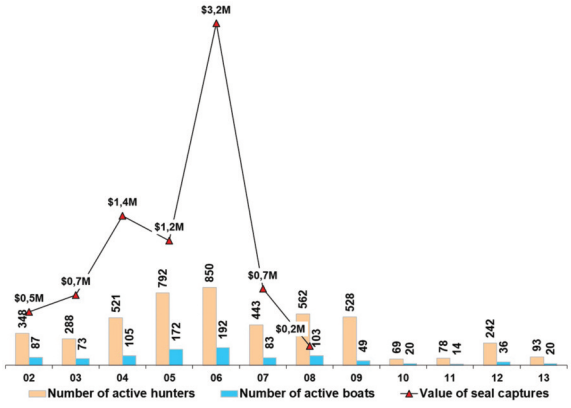
Generating total income ranging from a few hundred thousand dollars to over $3M depending on the year, harp seal hunting represents a major economic and cultural activity in the Magdalen Islands and on the North Shore. According to the data available, more than 90% of seal catches reported by commercial hunters in Quebec are sold in the form of skins to eight plants in Quebec and Newfoundland and Labrador, with the number of buyers varying from year to year. As shown in Graphs 43 and 44, seal catches fluctuate from year to year, notably due to the price obtained for skins, the location and size of seal herds and the spring ice conditions along the coast. A significant decrease in catches observed as of 2010 may be due to in part to the ban on European imports of Canadian seal products, the low price of skins or ice conditions that dissuaded many hunters during these years.

Graph 43: Evolution of the number of harp seal captured by maritime area in Quebec and evolution of the price of seal pelts, 2002-2013[21]



Source: DFO, Quebec Region

Graph 44: Evolution of the number of hunters and active boats participating in the seal hunt and of the total value of seal captures, 2002-2013



Source: DFO, Quebec Region

[21] Between 2009 and 2013, the prices of sealskins are not available because no skins were sold or because the data are confidential due to the small number of fishers who sold skins during these years. For this reason, the data on the value of catches between 2009 and 2013 are also confidential.

During the 2002–2013 period, there were an average of 400 active seal hunters in Quebec. There were, on average, 80 vessels participating in this hunt per year during the same period. An average of five hunters per vessel was estimated. Between 2002 and 2007[22], 93% of hunters from the Magdalen Islands used vessels longer than 35 feet, while on the Lower North Shore, vessels under 35 feet were used by nearly half (48%) of hunters.

It should be noted that the majority of seal hunting licence holders are fishers for whom hunting is a complementary economic activity. For hunters active in the commercial fishery, the majority of fishing revenues come from lobster for residents of the Magdalen Islands and snow crab for those on the North Shore.

Seal hunting has a particular importance for residents of the Magdalen Islands that is not only monetary. In addition to the financial aspect, seal hunting is also practised for cultural and recreational reasons. For many hunters, seal hunting is an activity deeply rooted in traditional and family customs passed down from generation to generation. For most owner-operators, seal hunting is closely linked to commercial fishing activities, allowing them to pay a portion of the expenses incurred during the fishing season, in addition to offering their crew the opportunity to work during this period of the year. In addition, many fishers engage in this activity to acquire seal meat, which is used for personal consumption. Seal meat is transformed into a multitude of products (sausages, terrines, marinated morsels, etc.) that also go to consumers, restaurateurs and tourists. Seal furs are also used for local crafts that are especially prized by tourists. The local economy revolving around the seal hunt generates many direct and indirect jobs.

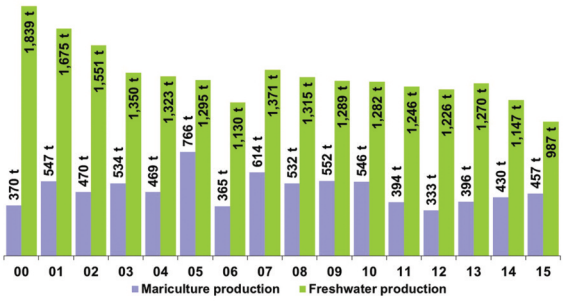
[22] The 2009 and 2013 data on the number of fishers by maritime area and the vessels used by length category are confidential.

6 Aquaculture

In 2015, Quebec's aquaculture production was estimated at about 1,444 tonnes, worth about $10.1M. More specifically, freshwater production totalled 987 tonnes for a value of $8.4M, while maricultural (seawater) production totalled 457 tonnes, for a value of $1.7M (Graphs 45 et 46).

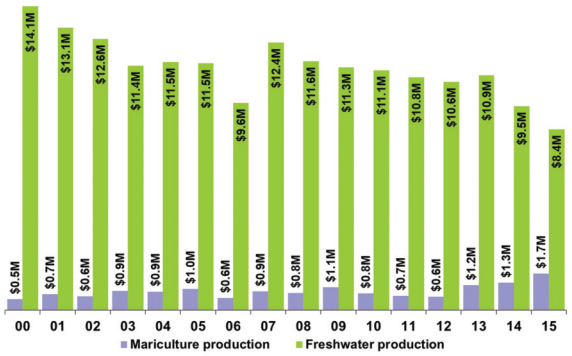
In Quebec, freshwater production mainly consists of the rearing of various salmonid species, such as rainbow trout, brook trout, Arctic char and lake trout. Maricultural farming is primarily focused on mussels and scallops. Sea urchins and oysters are emerging productions. In 2015, Quebec's production was distributed among 113 operators, 81 in freshwater and 32 in seawater. This distribution (freshwater/seawater) is mainly explained by the fact that the commercial freshwater aquaculture industry has been active in Quebec for at least thirty years, while maricultural production is a young industry that has developed in the past twenty years.

Graph 45: Evolution of Quebec aquaculture production in tonnes, 2000-2015



Source: MAPAQ

Graph 46: Evolution of the value of Quebec aquaculture production, 2000-2015



Source: MAPAQ

6.1 Freshwater production

Between 2000 and 2015, the freshwater sector experienced a 46% decrease in production. The constant decrease in freshwater production since 2013 is due to closures of businesses (because of bankruptcy or environmental causes). The signing of the Stratégie de développement durable de l'aquaculture en eau douce au Québec [Sustainable Development Strategy for Freshwater Aquaculture in Quebec] (STRADDAQ) in 2004 helped stabilize production at about 1,400 tonnes. The STRADDAQ is a partnership agreement between the Association des aquaculteurs du Québec [Association of Quebec aquaculturists] (AAQ) and the Government of Quebec[23]. The objective of this agreement was for fish farms that have joined the program to attain a phosphorous waste emission target of 4.2 kg per tonne of production by 2014. This was equivalent to an overall reduction of about 40% in the amount of phosphorus released by fish farms into the environment. The STRADDAQ applies in priority to fish farms producing more than five tonnes annually.

[23] The Ministère du Développement durable, de l'Environnement et de la Lutte contre les Changements climatiques (MDDELCC) and the Ministère de l'Agriculture, des Pêcheries et de l'Alimentation (MAPAQ).

6.2 Maricultural production

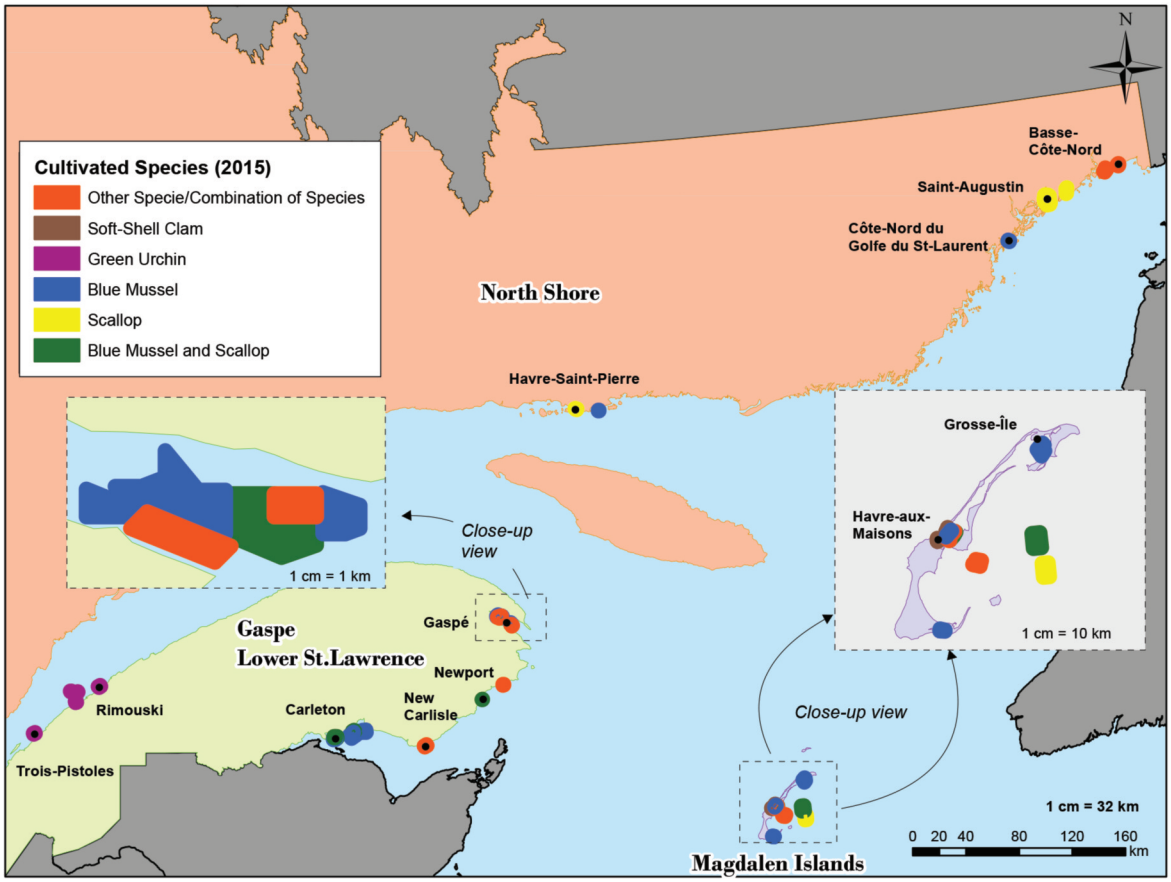
Between 2000 and 2015, the value of Quebec's maricultural production (shellfish) increased from $507,200 to more than $1.7M, a total increase of 235% and an average annual increase of 15.6%. In 2015, 45 sites operated by 32 businesses over a total area of 5,878 marine hectares produced 453 tonnes of shellfish (Table 2). This industry employed approximately 100 people per year, mainly from May to November. In terms of value, Quebec shellfish production represented 1.9% of Canadian shellfish production ($89.6M).

Table 2: Summary of Quebec mariculture, by maritime area, 2015

	Gaspe-Lower St.Lawrence	North Shore	Magdalen Islands	Total
Number of businesses	20	7	5	32
Number of sites	27	8	10	45
Area (marine hectares)	2,916	2,153	809	5,878
Species (in order of importance)	Mussel, sea urchin, scallop	Mussel and scallop	Mussel, oyster and scallop	Mussel, scallop, sea urchin and oyster

Source: DFO, Quebec Region

Map 5: Mariculture production sites with species cultivated (2015)



Source: DFO, Quebec Region

7 Freshwater commercial fishing

In 1983, Canada delegated all responsibility for freshwater fishing to the Quebec government.

In Quebec, commercial freshwater fishing is mainly concentrated in the river corridor of the St. Lawrence. In 2015 (estuary and inland waters), this fishery, for which landings amounted to 476 tonnes, generated total revenues of $1.2M (Table 3). There were 80 fishers sharing 95 licences, with average annual revenues of approximately $15,300 (Table 4). In terms of value, the main species fished were eel, lake sturgeon, Atlantic sturgeon, brown bullhead and carp.

The freshwater commercial fishery has undergone a decrease over the past twenty years. The decline of populations of certain species such as eel and yellow perch partially explains this decrease in landings.

Fishing for anadromous fish[24] is primarily conducted in the North Shore and Gaspé areas. The book trout fishing takes place only on the North Shore and represents 11.5 tonnes of landings. In 2015, the estimated total revenue of this fishery was approximately $53,300 (Table 3).[25]

Table 3: Catches of anadromous and freshwater fish, by area, 2015 (thousands of $)

Species	Estuary and inland waters	Gaspé	North Shore	Total
Eel	465.1			465.1
Yellow sturgeon	216.3			216.3
Black sturgeon	204.2			204.2
Brown bullhead	88.9			88.9
Unspecified panfish	29.4			29.4
Anadromous salmonids			53.3	53.3
Rainbow smelt	2.7	0.7[26]	0.1	3.5
Channel catfish	32.6			32.6
Carp	72.2			72.2
Sucker	4.0			4.0
Other freshwater fishes	106.5			106.5
Total	**1,221.8**	**0.7**	**53.4**	**1,275.9**

Source: MAPAQ

In 2015, it is estimated that 280 freshwater fishing licences were issued for all of Quebec, representing a total of 450 fishers and crew (Table 4).

[24] This fish lives at sea and spawns in freshwater.

[25] As the proportions of brook trout sold to plants and directly to consumers are unknown, a 50:50 proportion was used to estimate the value (price for plants: 2.75$/lb and consumer price: 6.50$/lb).

[26] For smelt, only the average price in plants was available. For the purposes of this study, it was considered that the entire fishery was sold to plants.

Table 4: Number of licence holders and fishers (including fishers' helpers), by area, 2013-2015

Year	Estuary and inland waters		Gaspé		North Shore		Total	
	Licence	Fisher	Licence	Fisher	Licence	Fisher	Licence	Fisher
2013	99	85	31	48	156	309	286	442
2014	97	82	31	53	153	316	281	451
2015	95	80	32	56	153	314	280	450

Source: MAPAQ

8 Recreational fishing in the maritime areas

In Quebec, Fisheries and Oceans Canada is in charge of managing recreational fisheries (or sport fisheries) for marine species, i.e., living in salt water. This fishery is practised in the Saguenay River and in the St Lawrence Estuary and Gulf. Anadromous and catadromous species[27], such as sturgeon, sea trout, eel, salmon, smelt and striped bass, are managed by Quebec Department of Forests, Wildlife and Parks (MFFP) under the Quebec Fishery Regulations (1990).

For species managed by DFO, any person may engage in recreational fishing without being registered or licensed and using an unregistered vessel while respecting the regulatory provisions associated with each species or group of species.

The practice of harvesting shellfish also occurs in tidal water. This activity is governed by daily quotas, seasons, minimum and maximum sizes and specific areas. No licence is required and harvesters are not required to report to Fisheries and Oceans Canada.

Information on recreational fisheries activities in Canada is based on the results of the Survey of Recreational Fishing in Canada conducted every five years by DFO, in cooperation with all regional, provincial and territorial fisheries licensing agencies. This nationally-coordinated study provides the most comprehensive information on recreational fisheries activities and harvests in all regions of the country. It is also the most up-to-date source of detailed statistics on the economic contribution made by anglers at both provincial/territorial and national levels. The survey reports are available at the following address:

http://www.dfo-mpo.gc.ca/stats/rec/canada-rec-eng.htm.

Recreational fishing in the maritime areas has been declining since 1990, in terms of the numbers of fishers, fishing days and fish retained. The number of fishers and the number of fishing days have declined dramatically between 1990 and 2005, by 60% and 63%, respectively, whereas these numbers increased between 2005 and 2010, by 25% and 98%, respectively. The quantity of fish retained dropped by more than 70% between 1990 and 2010 (Table 5).

Table 5: Sport fishing in maritime Quebec, 1990-2010

Year	Number of fishing days	Average number of days per fisher	Number of fishers	Number of fish kept
1990	560,035	7.0	80,005	5,266,615
1995	199,050	5.0	39,810	2,920,463
2000	253,686	5.6	45,301	3,236,034
2005	207,318	6.5	31,895	1,543,697
2010	410,650	10.3	39,869	1,407,376

Source: Survey of Recreational Fishing in Canada, 1990–2010

[27] Fish that live in freshwater and spawn at sea.

Table 6 presents the DFO estimates regarding catches from recreational saltwater fishing in Quebec by species. Recreational harvesting of shellfish, for the softshell clam and the Atlantic surf clam, represents the largest volumes in 2014. The softshell clam is harvested in the three areas: 47,400 kg on the North Shore, 14,750 kg in the Magdalen Islands and 5,100 kg in Gaspé-Lower St. Lawrence, representing nearly 30% of all saltwater sport fishing in Quebec. The Atlantic surf clam is essentially harvested in the Magdalen Islands, with 47,650 kg (20% of the total). Capelin, mackerel and Atlantic cod are among the other species prized for recreational saltwater fishing in Quebec.

Table 6: Estimate of catches from sport fishing in salt water in Quebec by species and by maritime area in 2014

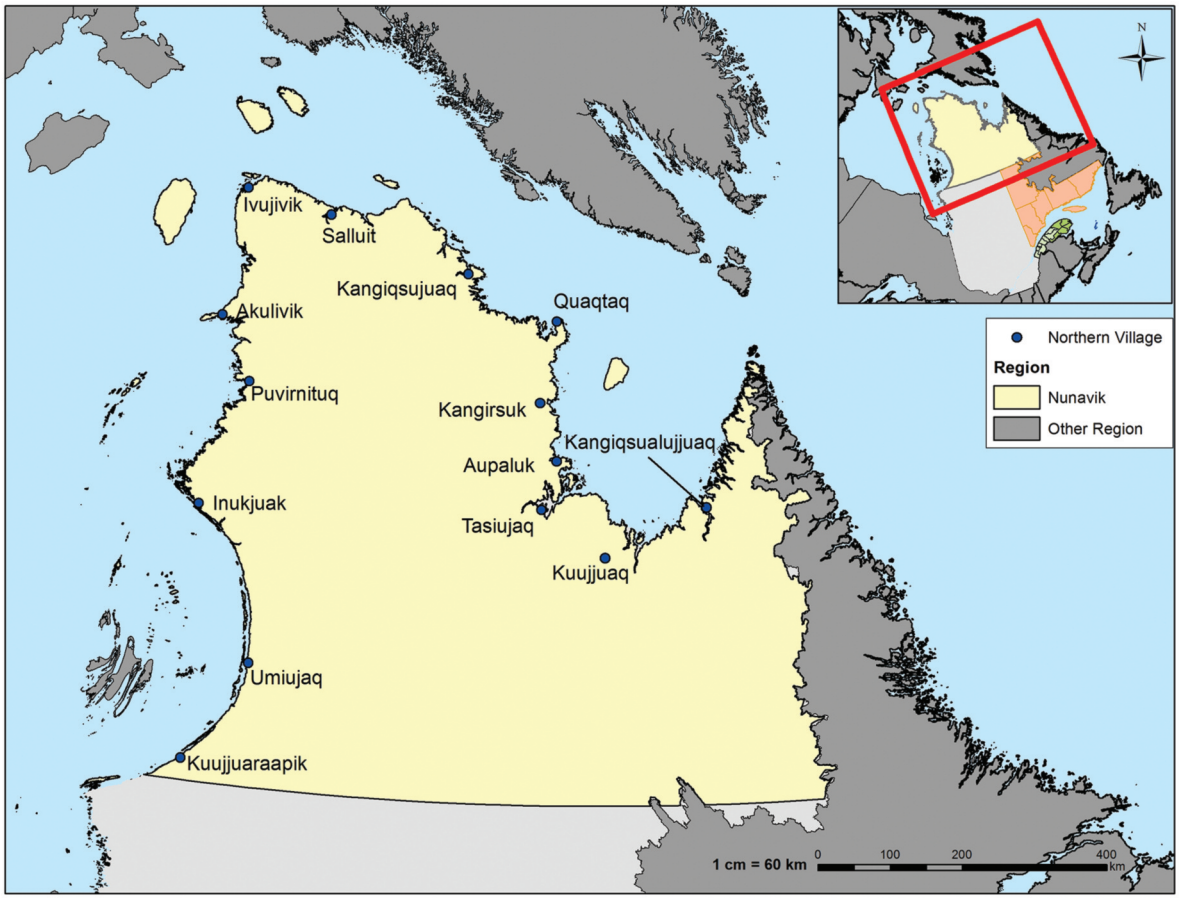
Species	Catches, 2014 (kg)			
	Magdalen Islands	North Shore	Gaspe-Lower St.Lawrence	Total
Capelin	0	32,400	6,500	38,900
Razor clam	350	0	0	350
Greenland halibut	0	900	0	900
Atlantic surf clam	47,650	0	0	47,650
Mackerel	6,800	6,450	21,950	35,200
Cod	1,150	6,900	16,150	24,200
Rock cod	0	2,250	4,500	6,750
Mussel	900	1,000	900	2,800
Softshell clam	14,750	47,400	5,100	67,250
American plaice	250	650	150	1,050
Winter flounder	250	0	5,300	5,550
Redfish	0	10,000	0	10,000
Total	**72,100**	**107,950**	**60,550**	**240,600**

Source: Strategic Services, DFO – Quebec Region

9 Marine hunting and fishing in Nunavik

Nunavik forms the northern third of Quebec and covers an area of about 507,000 km² of tundra and boreal forest. The 11,500 Nunavik inhabitants, of whom 90% are Inuit, live along the coasts in 14 Northern villages.

Map 6: The region of Nunavik and its 14 northern villages



Source: MERN

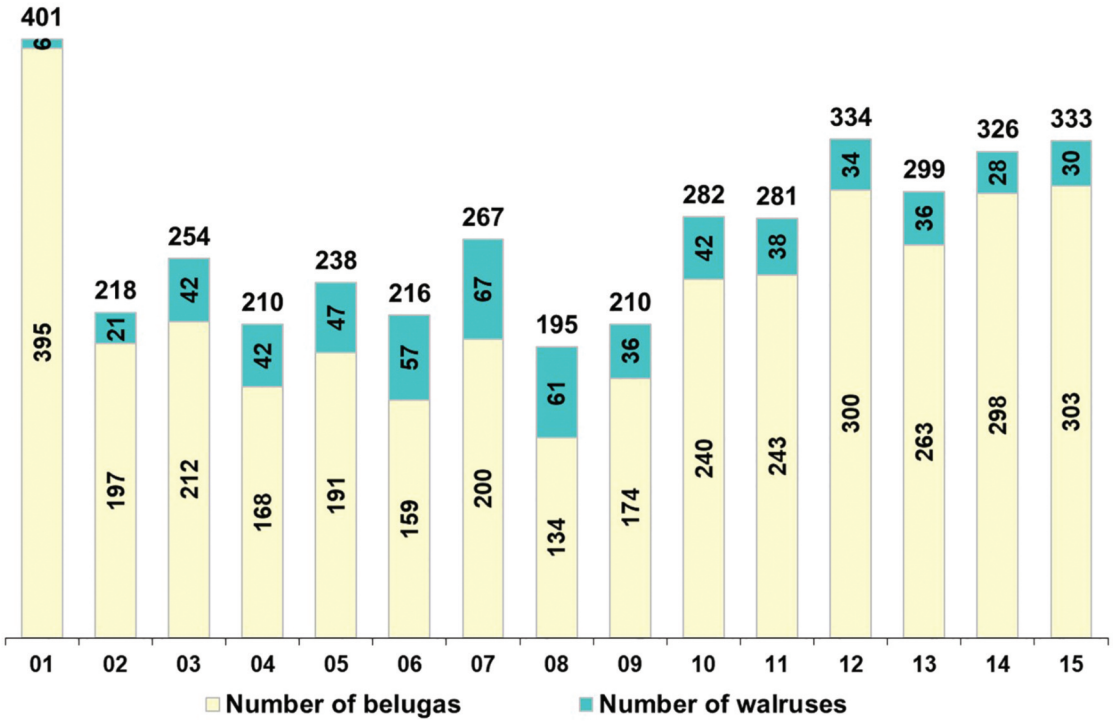
Shrimp and Greenland halibut are the only two species fished commercially in Nunavik. The Makivik Corporation[28] owns the access rights for these species in Nunavik waters. Makivik has transferred its Greenland halibut allocations to other businesses, but it continues to fish shrimp directly.

In addition to the commercial shrimp fishery, the Inuit catch numerous species of fish and invertebrates for food: Atlantic salmon, brook trout, Arctic char, scallops, sea urchins, mussels, etc. They also hunt marine mammals including some seal species, bowhead whale, white whale and walrus. The seal, white whale and walrus are probably the most significant marine species caught by the Inuit in terms of food supply.

[28] The Makivik Corporation has legally represented the Inuit people since 1978, a few years after the signing of the James Bay and Northern Quebec Agreement (1975).

Graph 47 illustrates the evolution of white whale and walrus catches since 2001. The number of walruses killed has remained relatively stable since 2009, ranging between 28 and 42 walruses. White whale catches decreased between 2001 and 2009 and increased slightly between 2010 and 2015.

Graph 47: Evolution of beluga and walrus catches in Nunavik, 2001-2015



Source: DFO, Quebec Region