Fisheries and Oceans Canada
Pêches et Océans Canada

CANADIAN FISHERIES STATISTICS 2008

ECONOMIC ANALYSIS AND STATISTICS
STRATEGIC POLICY SECTOR
OTTAWA

Canada

Published by:

Statistical Services
Economic Analysis and Statistics
Strategic Policy Sector
Fisheries and Oceans Canada
Ottawa, Ontario
K1A 0E6

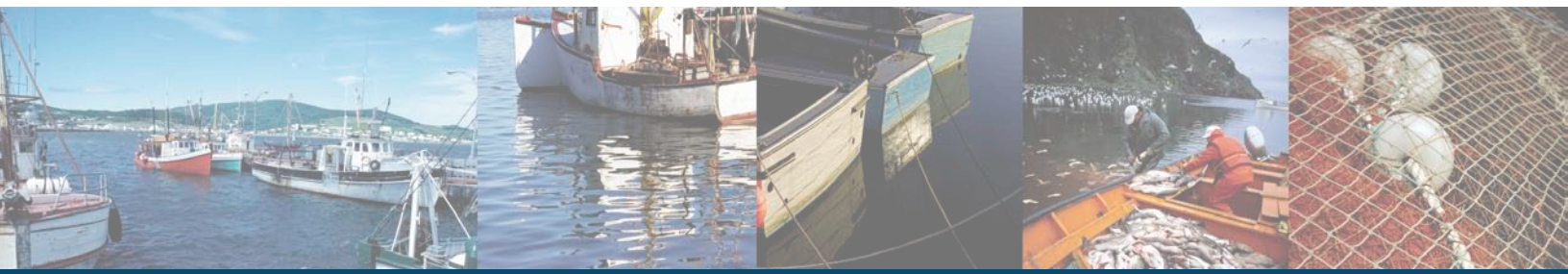
Canadian Fisheries Statistics 2008.

Également disponible en français.

DFO/2011-1732
Catalogue number: Fs1-9/2008E-PDF
ISSN 1925-7686

Correct citation for this publication:
DFO, 2011. Canadian Fisheries Statistics 2008.

Printed on recycled paper



Preface

The annual statistical snapshot Canadian Fisheries Statistics (formerly entitled Annual Statistical Review of Canadian Fisheries) is an overview of the structure, evolution and value of the fishing industry in Canada and the place this industry occupies in Canada and in the world. This 2008 edition provides statistics for 2006 to 2008, inclusive. Additional detailed tables on Canadian fisheries are included in a CD-ROM accompanying this publication.

The Canadian fisheries covered in this report include commercial marine and freshwater fisheries, as well as aquaculture. For information on recreational fisheries in Canada, please refer to the Statistical Services website at www.dfo-mpo.gc.ca/stats/recreational-eng.htm.

This publication is available on the Statistical Services website, in pdf, at www.dfo-mpo.gc.ca/stats/commercial/cfs/2008/cfs08-eng.htm.

Acknowledgments

This report was prepared by Michelle Fougere and Neville Johnson under the supervision of Yves Gagnon, A/Chief, Statistical Services, Economic Analysis and Statistics, Strategic Policy Sector, Fisheries and Oceans Canada.

We would like to thank the following Fisheries and Oceans regional and headquarters staff, from Statistical, Licensing and Policy & Economics Units for their excellent collaboration in the preparation of this publication:

Central and Arctic: Brent Fontaine, Salim Hayder

Newfoundland and Labrador: Anne Marie Russell, Sandra Savory, Regional Licensing Unit

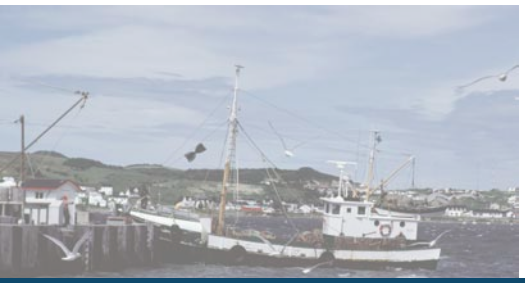
Québec: Édith Lachance, Bruno Levesque, Julie Aucoin

Gulf: Monique Niles, Gisèle Bernard, Daniel Doiron

Maritimes: Gina Parsons, Joe Walcott, Glenn Mackay

Pacific: Rae Dalgarno, Laurie Biagini, John Davidson, Harvey Eng

Ottawa: Kieth Brickley



Methodology and data sources

Data on marine fisheries are provided by Fisheries and Oceans Canada (DFO) statistical units in the Maritimes, Gulf, Quebec, Newfoundland and Labrador and Pacific Regions, and are then integrated at the Ottawa headquarters office. Data on freshwater fisheries are provided by DFO Central and Arctic and Maritimes regional offices and the Ontario Commercial Fisheries Association while, aquaculture data is obtained from Statistics Canada.

The primary classification system used in this publication for fisheries is the *Food and Agriculture Organization of the United Nation* (FAO) "*International Standard Statistical Classification of Aquatic Animals and Plants*" (ISSCAAP)[1]. ISSCAAP divides commercial species in groups based on their characteristics related to taxonomy, ecology and economics.

In terms of Canadian imports and exports, species are grouped according to the Harmonized System (HS) of classification, with data from Statistics Canada.

Note that figures in the detailed tables may not add up to the totals due to rounding, confidential data or, in certain instances, differences in the estimation methods.

Symbols and abbreviations

t	metric tonnes
,000t	thousands of metric tonnes
$	Canadian dollar
$m	millions of Canadian dollars
'	foot
"	inch
DFO	Fisheries and Oceans Canada
NAICS	North American Industrial Classification System
NAFO	Northwest Atlantic Fisheries Organization
FAO	Food and Agriculture Organization of the United Nations
AAFC	Agriculture and Agri-Food Canada
ASML	Annual Survey of Manufactures and Logging
ISSCAAP	International Standard Statistical Classification of Aquatic Animals and Plants
Atl.	Atlantic
Pac.	Pacific
#	number
IQ	individual quota
..	not available (n/a)
…	not applicable
x	confidential data
F	too unreliable to publish
-	zero (0)

[1] Latest version: FAO, 2001. Report of the nineteenth session of the Coordinating Working Party on Fishery Statistics (Nouméa, New Caledonia, July 10-13 2001). *FAO Fisheries Report*, No. 656.

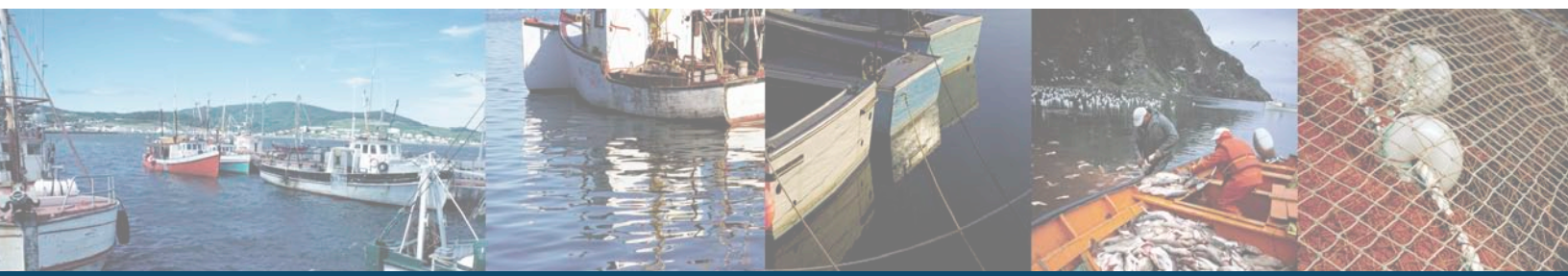


Table of Contents

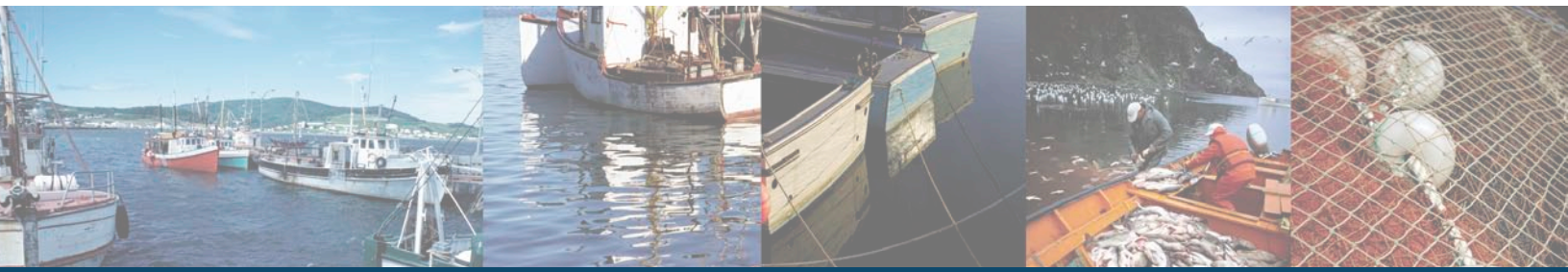
List of tables on the CD-ROM

Years covered: 2006, 2007 and 2008

Section 1 - Fisheries and the Canadian economy

Section 2 - Canada's position among the world's fisheries

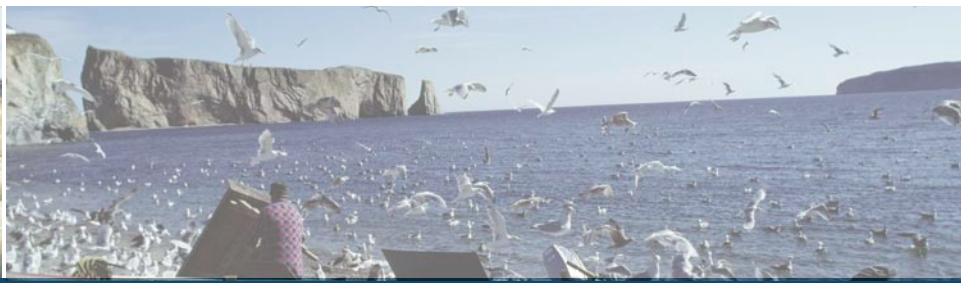
Section 3 - Commercial fisheries and aquaculture



Section 3 - Commercial fisheries and aquaculture (continued)

Section 4 - International Trade (fish and seafood products)

Appendix 1 - Overview of the main fishing fleets in Canada, 2007 (Tables 5.1.1 - 5.1.6)



1 Fisheries and the Canadian economy

CD-ROM - Section 1: 1.1.1 - 1.1.2, 1.2.1 - 1.2.4

1.1 Gross value

Total landings from marine commercial fishing in Canada were valued at $1.89 billion (932 thousand tonnes) in 2008. This represents a $70 million (-4%) decrease compared to 2007, owing mainly to decreases in the landed value on the Atlantic coast of herring, mackerel and shrimp respectively and, with the exception of sockeye, of salmon species on the Pacific coast. The value of freshwater fisheries has decreased somewhat with a total value of $59 million in 2008, 7% lower than in 2007.

Overall, aquaculture production fared better than the commercial fisheries. In 2008, the value of aquaculture production increased by $40 million to reach a total of $801 million, which represents an increase of 5% over 2007. This is mainly due to a 6% increase in the production value of farmed salmon and trout.

The gross revenue of the fish and seafood processing industry fell to $3.9 billion in 2008, 4% lower than in 2007. A good part of the year-to-year variation in the value of Canadian seafood production is due to fluctuations between the Canadian and US currencies. This is because an estimated 85%[2] of Canadian seafood production is exported, primarily to the United States. As such, the relative value of the two currencies plays an important role in determining the annual performance of the Canadian seafood sector, with a weaker Canadian dollar as compared to the US dollar generating higher seafood values.

Table 1.1: Value of the commercial fisheries, aquaculture and processing in Canada, 2006-2008

Industry	Production value[4] ($m)			
	2006	2007	2008	% change 2007-08
Marine fisheries[1]	1,914	1,959	1,889	-4%
Freshwater fisheries[1]	68	64	59	-7%
Aquaculture[2]	913	762	801	5%
Processing[3]	4,234	4,108	3,931	-4%

[1]Landed value. Source: DFO, Economic Analysis and Statistics.
[2]Production value. Source: Statistics Canada, 2010, Aquaculture Statistics 2009, Catalogue no. 23-222-XIE.
[3]Source: Statistics Canada, ASML, Table 301-0006, "Seafood product preparation and packaging" category. Total revenues of this sector include costs of purchasing the raw material from fish harvesters, a total cost figure close to the landed value of sea fisheries. Note that the added value from the processing sector in 2008 was estimated at $1,072m by Statistics Canada.
[4]To avoid double-counting, one should not add gross revenues of the four sectors shown in this table.

[2]Source: AAFC, "Canada's Fish and Seafood Industry", 2006.

1.2 Employment and GDP by industry

In 2008, employment in the commercial fishing and aquaculture industries declined slightly compared to 2007. The harvesting sector of the commercial fishing industry employed 52,107 fish harvesters and crew members, 1,713 less than in 2007 (-3%). The aquaculture industry employed 4,510 people, approximately 3% more than in 2007.

In 2008, the fish processing industry employed 27,641 workers, 2,584 fewer than in 2007. This represents a decrease of 9%, which is a much higher rate than the decrease in the number of workers employed in the harvesting sectors between 2007 and 2008.

Table 1.2: Employment by industry, Canada, 2006-2008

Industry	Employment estimates (number of persons)			
	2006	2007	2008	% change 2007-08
Marine and freshwater fisheries[1]	51,677	53,820	52,107[4]	-3%
Aquaculture[2]	4,670	4,370	4,510	3%
Processing[3]	29,436	30,225	27,641	-9%
Total	**85,783**	**88,415**	**84,258**	**-5%**

[1]Number of fish harvesters and crew. Source: DFO, Regional Statistical Units.
[2]Source: Canada Revenue Agency, Statistics Division.
[3]Source: Statistics Canada, ASML, Table 301-0006, "Seafood product preparation and packaging" category, Total number of employees, direct and indirect labour (persons).
[4]Harvester and crew employment from Pacific region is based upon their Fisher Registration Card (FRC) data.

The gross domestic product (GDP) in the Canadian agriculture industry increased by 2% in 2008 compared to 2007. However, the fish harvesting and processing sectors have shown quite different trends, with the rate for fish harvesting remaining relatively static while growth in the processing sector increased by 6%. Overall, between 2007 and 2008, the performance of the Canadian economy increased by just 1%.

Table 1.3: Gross Domestic Product (GDP) at basic prices, by industry[1], 2006-2008

Industry	GDP, millions of Chained 2002 dollars[2]			
	2006	2007	2008	% change 2007-08
Agriculture, forestry, fishing and hunting	27,958	27,570	28,034	2%
Fishing, hunting and trapping[3]	1,123	1,026	1,022	0%
Processing[4]	958	894	950	6%
All industries[5]	**1,191,403**	**1,218,979**	**1,226,809**	**1%**

[1]NAICS for the industries shown in this table are 11, 114 and 3117.
Source: Statistics Canada, Table 399-0025.
[2]Note that chained dollars allow to calculate growth rates, but not the contribution of each industry to the total Canadian GDP, as aggregates are not equal to the sum of their components.
[3]The contribution of fishing to the GDP of this category is estimated at 90% by Statistics Canada.
[4]Category "Seafood product preparation and packaging" (NAICS 3117).
[5]Source: Statistics Canada, CANSIM, Table 379-0027.

2 Canada's position among the world's fisheries

CD-ROM - Section 2: 2.1.1, 2.2.1 - 2.2.2, 2.3.1 - 2.3.4

2.1 Harvesting

The Food and Agriculture Organization (FAO) of the United Nations ranked Canada in 22nd place in terms of the global volume of fish landings in 2008; this represents just over 1% of the world total. This is a drop of two positions from 2007, when Canada was ranked 20th. The top three countries with respect to total fish landings were China, Peru and Indonesia, respectively. Collectively, they accounted for over 30% of worldwide catches in 2008.

While global aquaculture production has continued to increase, fish landings remained static in 2008 as compared to 2007.

Table 2.1: Total landings by country, marine and freshwater fisheries, ranked by volume in 2008 (,000 t)

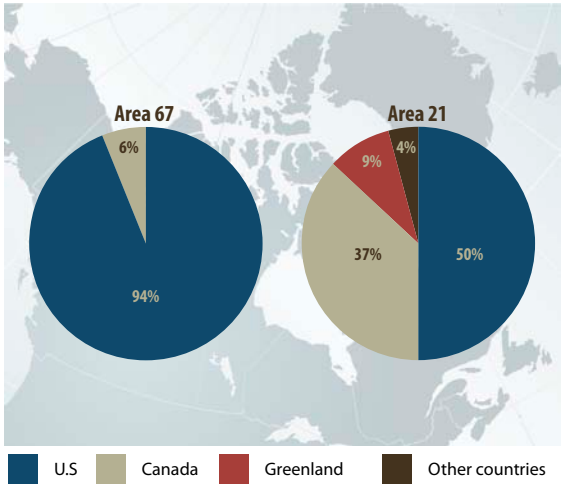
Rank	Country	Volume of Landings (,000 t)			
		2006	2007	2008	% change 2007-08
1	China[1]	15,062	15,143	15,317	1%
2	Peru	7,021	7,221	7,377	2%
3	Indonesia	4,819	5,055	4,960	-2%
4	United States	4,859	4,770	4,357	-9%
5	Japan	4,420	4,402	4,355	-1%
6	India	3,845	3,859	4,105	6%
7	Chile	4,462	4,131	3,939	-5%
8	Russia	3,296	3,463	3,394	-2%
9	Philippines	2,322	2,503	2,565	2%
10	Myanmar	2,007	2,236	2,494	12%
...					
22	**Canada[2]**	**1,080**	**1,025**	**950**	**-7%**
-	Other countries	37,545	37,180	36,988	-1%
Total		**90,737**	**90,989**	**90,800**	**0%**

[1]Includes Hong Kong and Macao.
[2]Canadian figures may not match exactly those found in Section 3 due to different data sources.
Source: FAO, FishStat Plus, Capture Production (February 2010).

Canadian fish harvesters operated in FAO[3] fishing areas 2, 21 and 67. Area 2 covers all inland freshwater commercial fisheries. Area 21 covers the northwest portion of the Atlantic Ocean, while area 67 includes the northeast part of the Pacific; i.e., both oceans that border Canada to the east and to the west. There was effectively no activity in FAO fishing area 18 despite the fact our northern territories border this area.

In 2008, 4,638 thousand tonnes of global fish landings were from these two areas, including 919 thousand tonnes in Canada (20% of total). Most landings were in the U.S., for a total of 3,444 thousand tonnes, which represents 74% of the overall landings in these two areas. Total catches in the northeast Pacific and northwest Atlantic represented approximately 5% of worldwide catches in 2008.

Figure 2.1: Total catches on the Atlantic and Pacific coasts of Canada, the United States and Greenland (FAO areas 21 and 67), by country, 2008



Source: FAO, FishStat Plus, Capture Production (February 2010).

Canada has a significantly higher presence in the Atlantic Northwest than in the Pacific Northeast. In 2008, Canadian fisheries accounted for 37% of catches reported in the Atlantic Northwest (zone 21), and almost 6% of catches in the Pacific Northeast (zone 67).

On average, the United States had close to half (49%) of the total catches in the northwest Atlantic between 2006 and 2008, compared to 38% for Canada. In terms of volume, Canada ranked first at the beginning of the 1990's: catches by Canadian fish harvesters at that time represented 42% of the total catches (average for 1988-1990), as compared to 40% for American fish harvesters. It should be noted that following the collapse of the Atlantic cod stocks at the beginning of the 1990s, the total landings in the Atlantic have decreased by nearly 40%.

2.2 Aquaculture

With aquaculture production amounting to about 144 thousand tonnes in 2008, Canada ranked 27th in the world in terms of volume and 20th in terms of value. China ranked first in aquaculture production, as it did

[3]A map of the different fishing areas is available on the FAO Web Site at ftp://ftp.fao.org/fi/maps/world_2003.gif.

with respect to marine fisheries. In 2008, the total volume of commercial aquaculture in China was 42,674 thousand tonnes, over 62% of worldwide aquaculture production. The value of production for China's aquaculture industry was $59.8 billion in 2008.

As opposed to marine fisheries, the worldwide aquaculture production experienced a growth of 11% in terms of volume from 2006 to 2008. Among countries with levels of production in excess of 50,000 tonnes, Indonesia, Vietnam, Malaysia, Nigeria and Uganda, had growth rates between 45% and 70% in the same period. In comparison, Canadian aquaculture production decreased by 16% between 2006 and 2008.

Table 2.2: Major world aquaculture producers, ranked by volume of aquaculture production in 2008 (,000t)

Rank	Country	Aquaculture Production (,000 t)			
		2006	2007	2008	% change 2007-08
1	China[1]	39,363	41,177	42,674	4%
2	Indonesia	2,479	3,121	3,855	23%
3	India	3,181	3,112	3,479	12%
4	VietNam	1,694	2,123	2,497	18%
5	Philippines	2,092	2,215	2,408	9%
6	Korea, Republic	1,279	1,399	1,395	0%
7	Thailand	1,407	1,351	1,374	2%
8	Japan	1,224	1,286	1,188	-8%
9	Bangladesh	892	946	1,006	6%
10	Chile	832	806	871	8%
...					
27	**Canada[2]**	**171**	**153**	**144**	**-6%**
-	Other countries	6,774	7,138	7,459	4%
Total		**61,389**	**64,828**	**68,349**	**5%**

[1]Includes Hong Kong and Macao.
[2]Canadian figures may not match exactly those found in Section 3 due to different data sources.
Source: FAO, FishStat Plus, Aquaculture Production (March 2010).

2.3 International trade

Since 2007, Canada has ranked 8th worldwide among seafood exporting countries in terms of total export value, behind the United States and Chile, among others. This represents a drop in rank, as in 2006, Canada was 6th, just ahead of Chile. China has remained the top seafood exporting country between 2006 and 2008, with an export share of 10.5% in 2008, almost 7% higher than Canada's share. However, China's 8% share of world export value is considerably less than its share of the global aquaculture production value (53%) and its percentage of global fishing volume (17%), which can be explained by the fact that a major part of the Chinese aquaculture production goes to the domestic market.

In comparison, Canada exports a larger share of its catches and its aquaculture production, estimated at 85%[4] (by value). This partly explains that, while Canada's wild fisheries and aquaculture production represent about 0.7% of the worldwide total (by volume), Canadian exports amount to 3.6% of the total value of worldwide exports of fish and seafood.

International trade in seafood has evolved considerably during the last two decades. In 1990, the United States and Canada were respectively 1st and 2nd in terms of seafood export value. Beginning in 1991, the gradual decrease in groundfish catches coupled with increased aquaculture production in Asian countries caused Canada to slip from 2nd to 7th place in total export value in 1993. Since 1993, Canada has not been among the top four major seafood exporters, although the value of exports from 2000-2004 resulted in Canada ranking as the fifth largest seafood exporting nation in the world. Export values have declined gradually to our current world ranking.

Table 2.3: Major world seafood exporters, ranked by total value of exports in 2008 (millions of CDN$)

Rank	Country	Exports Value[1] ($m)			
		2006	2007	2008	% change 2007-08
1	China[2]	10,828	10,650	11,543	8%
2	Norway	6,287	6,760	7,456	10%
3	Thailand	5,983	6,149	6,980	14%
4	Denmark	4,535	4,455	4,924	11%
5	VietNam	3,833	4,074	4,860	19%
6	United States	4,752	4,836	4,833	0%
7	Chile	4,127	4,052	4,293	6%
8	**Canada[3]**	**4,177**	**4,012**	**3,976**	**-1%**
9	Spain	3,257	3,510	3,733	6%
10	Netherlands	3,206	3,547	3,640	3%
-	Other countries	47,806	49,740	53,863	8%
Total		**98,791**	**101,784**	**110,101**	**8%**

[1]Includes re-exports.
[2]Includes Hong Kong and Macao.
[3]Canadian figures may not match exactly those found in Section 4 due to different data sources.
Source: FAO, FishStat Plus, Fisheries Commodities Production and Trade (December 2010).

Table 2.4 on the following page shows the main Canadian fish and seafood exports by volume by product group in 2008. Canada has a significant share of worldwide exports of some products, such as smoked herring (63% of worldwide exports of this product are Canadian products), lobster (51%), frozen crab (39%), fish livers and roes (26%), Greenland, Atlantic and Pacific halibut (13%) and fresh haddock (14%).

[4]Source: AAFC, "Canada's Fish and Seafood Industry", 2006.

Table 2.4: Canada's share of world seafood exports, by product exported in 2008 (millions of CDN$)

Product[1]	Exports Value[2] ($m)		
	Canada 2008[3]	% of Canadian exports	% of World exports
Lobster, live, frozen or preserved	555	14%	51%
Crabs, whether in shell or not, frozen	566	14%	39%
Salmon, fresh, frozen or preserved	546	14%	7%
Shrimp, frozen or preserved	369	9%	2%
Fish fillets, fresh or frozen	139	3%	1%
Sea urchins and other molluscs, fresh or frozen	139	4%	9%
Scallop, fresh or frozen	112	3%	11%
Greenland, Atlantic and Pacific halibut, fresh or frozen	86	2%	13%
Fish livers and roes, dried, smoked, salted or in brine	54	1%	26%
Mackerel (Scomber spp.), frozen	52	1%	4%
Hake, frozen	62	2%	10%
Haddock, fresh or chilled	24	1%	14%
Herring, including fillets, smoked	28	1%	63%
Other	1,243	31%	2%
Total	**3,976**	**100%**	**4%**

[1]Products grouped according to Harmonized System (HS) categories.
[2]Includes re-exports.
[3]Canadian figures may not match exactly those found in Section 4 due to different data sources.
Source: FAO, FishStat Plus, Fisheries Commodities Production and Trade (December 2010).

Canada imports far less fish and seafood than it exports, and ranked as the 16th highest seafood importer in the world in 2008. Canada's rank has dropped two positions since 2006 when it ranked 14th worldwide. Japan and the United States were the top two major fish and seafood importers in 2008 and they accounted for 27% of the worldwide value of imports.

Table 2.5: Major world seafood importers, ranked by value of imports in 2008 (millions of CDN$)

Rank	Country	Imports Value ($m)			
		2006	2007	2008	% change 2007-08
1	Japan	16,171	14,445	16,236	12%
2	United States	15,197	14,784	15,218	3%
3	China[1]	7,126	7,393	8,250	12%
4	Spain	7,233	7,529	7,597	1%
5	France	5,794	5,820	6,283	8%
6	Italy	5,382	5,561	5,845	5%
7	Germany	4,285	4,647	4,845	4%
8	United Kingdom	4,255	4,497	4,538	1%
9	Denmark	3,333	3,255	3,431	5%
10	Korea, Republic	3,165	3,359	3,160	-6%
...					
16	**Canada[2]**	**2,089**	**2,176**	**2,221**	**2%**
-	Other countries	29,539	33,391	38,144	14%
Total		**103,569**	**106,855**	**115,769**	**8%**

[1]Includes Hong Kong and Macao.
[2]Canadian figures may not match exactly those found in Section 4 due to different data sources.
Source: FAO, FishStat Plus, Fisheries Commodities Production and Trade (December 2010).

3 Commercial fisheries and aquaculture[5]

CD-ROM - Section 3: 3.1.1 - 3.1.16, 3.2.1, 3.3.1

3.1 Commercial marine fisheries

CD-ROM - Section 3: 3.1.1 - 3.1.16

The commercial fishing industry on Canada's east coast underwent a period of significant change after the decline of Atlantic cod stocks in 1992. In the early 1990s, groundfish played a major role in the fish harvesting and processing sectors of Atlantic Canada, representing almost 50% of the landed quantities of fish species. Over time the dominance of groundfish decreased to a level whereby in 2008, it represented less than 15% of landed quantities. In 2008, groundfish as a whole represented just over 9% of the total landed value of marine commercial fishing in Atlantic Canada.

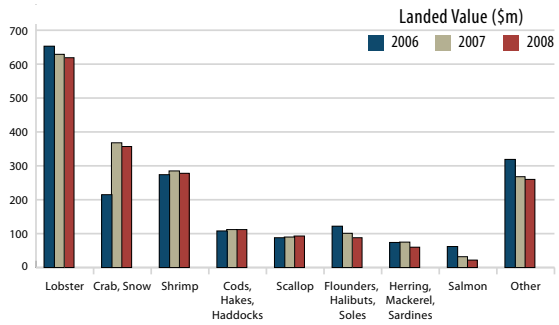
On the Pacific coast, the landings of salmon and, to a lesser extent, herring have declined consistently since the early 1990s. Salmon and herring landing have declined from over 45% of total quantity in 1990 to about 11% in 2008. At the same time, the landed quantity of groundfish has increased from 48% in 1990 to almost 73% in 2008. During the same period, the value of the Pacific salmon and herring fisheries dropped from 70% to almost 14%. The value of groundfish landings has increased from 18% of the total to 41% in 2008.

Shellfish on both coasts have replaced other species as the main species harvested and, due to their relatively high value, Canada's total landed value has remained steady despite declining overall landings. In 2008, shellfish represented close to 78% of the total landed value in Canada. In terms of volume landed, shellfish represented 47% of the total volume of landings in 2008.

The most important crustaceans harvested in Canada are shrimp, snow crab and lobster. Together, these species represented about 66% of the total landed value for marine species in Canada in 2008.

In 2008, the landed value of snow crab saw a sharp increase of 66% from 2006, up from a total of $215 million. This represents an increase in value to $357 million compared to the $215 million in 2006. The primary reasons for this increase were both increased snow crab prices and volume of landings during the 2008 fishing season. This price increase was significant, as in 2006 the average price of snow crab was $2.40/kg, while in 2008 it had increased by 58% to $3.80/kg.

Figure 3.1: Total landed value, main commercial marine species, Canada, 2006-2008



Source: DFO, Economic Analysis and Statistics.

In 2008, lobster harvests continued to outperform snow crab despite the substantial decrease in the average landed price for lobster by 11.5% to $10.50/kg from 2006. In 2008, the total volume of lobster landings increased by almost 21% over 2007 (+$10 million) and the total value amounted to nearly $619 million in 2008, about $9.6 million less than in 2007.

The landed quantities of scallop have continued to increase and, by 2008, they had increased to over 67,600 tonnes. In 2006, the total Canadian landings of scallop were just over 63,400 tonnes before, increasing modestly by just over 3% to 65,300 tonnes in 2007, followed by yet another increase of 3.5% in 2008. Scallop prices have remained stable between 2006 and 2008. The total landed value of scallops increased to almost $93 million in 2008, a gain of $3.3 million compared to 2007.

Between 2007 and 2008, most other commercial marine species in Canada have seen only modest increases in landed value. This includes American eels (+$4.6 million), Bluefin tuna (+$4.2 million), sea scallops (+$3.9 million) and yellowtail flounder (+$3.8 million). In 2008, noticeable reductions in landed value were experienced in some fisheries such as Greenland halibut (-$8.1 million), Pacific halibut (-$7.2 million) and Atlantic herring (-$5.9 million).

Details of the landed volume, value and average price variations for the main marine species landed in Canada between 2006 and 2008 are presented in Appendix II, Tables 6.1 to 6.3. An overview of the main fishing fleets in Canada in 2008 is presented in Appendix I, Tables 5.1 to 5.6. For 2007 tables, see Appendix I, Tables 5.1.1 to 5.1.6 on the CD-ROM.

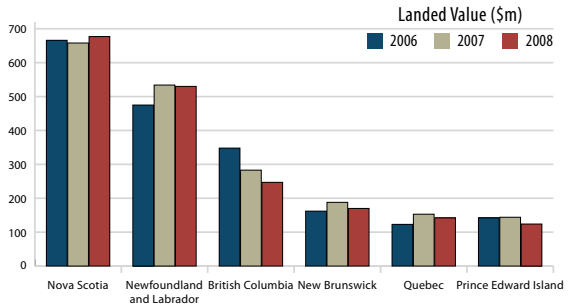
[5] All values and prices in this section are in Canadian dollars.

3.1.1 Provinces

Marine commercial fishing occurs in six of the ten Canadian provinces and three territories. Nova Scotia, Newfoundland and Labrador and British Columbia are the three provinces where fishing has the greatest value, followed by New Brunswick, Prince Edward Island and Quebec. British Columbia and New Brunswick also enjoy a major aquaculture production.

In 2008, 27% (255 thousand tonnes) of the total volume of commercial marine fisheries in Canada was landed in Nova Scotia, for a total of $677 million, or 36% of the total Canadian landed value. The key species were lobster (54%), scallops (13%) and Queen crab (10%) as well as cod, hake and halibut, which accounted for 8% of the landed value. Landings in 2007 were somewhat lower than in 2008, when total landings in Nova Scotia were 262,611 tonnes with a value of $658 million or 34% of the total landed value in Canada.

Figure 3.2: Total landed value, commercial marine fisheries, by province, Canada, 2006-2008



Source: DFO, Economic Analysis and Statistics.

The total landed volume in Newfoundland and Labrador in 2008 fell slightly from that of the previous year. The total landed volume in the province fell to just under 338 thousand tonnes in 2008, a decrease of 5% from 2007. However, while the value of landings decreased for lobster, seals and pelagic species, these were offset by increased landed value for shrimp, other crustaceans and crab, resulting in a decrease of less than 1% in total value to $530 million in 2008. Newfoundland and Labrador's share of the total landings in Canada has increased modestly from 25% of the total landed value in Canada in 2006, to 27% in 2007 and up to 28% in 2008. Key species by value in 2008 were shrimp (35%) and crab (34%).

British Columbia ranked third in terms of landings, as it contributed 13% of the total fishing value in Canada in 2008, for a total of $247 million. The total landed volume in British Columbia decreased from 2007 by 11% to 150 thousand tonnes in 2008. Based on landed value, the key species harvested were crab (15%), flounder, halibut and sole (14%), and clam, cockles and arkshells at 13%.

New Brunswick and Quebec were in fourth and fifth places respectively. In 2008, the landed value in New Brunswick was $170 million, with Quebec at $142 million. Landings in these two provinces represent 16.5% of the total landed value in Canada. Landings in New Brunswick fell by 9.5% in value between 2007 and 2008, largely due to declines in the landed value of crab and herring (an overall decline of 19%). Landed values declined slightly in Quebec in 2008, falling 7% from $153 million in 2007 to $142 million.

Prince Edward Island was in sixth place with respect to the value of marine commercial fishing in Canada. In 2008, 6.6% or $124 million of the total value of catches in Canadian waters was landed in this province.

3.1.2 NAFO areas, Atlantic Canada

Between 2006 and 2008, the southern part of the Gulf of St. Lawrence was the most lucrative NAFO fishing area in terms of the landed value in Canada. The presence of large stocks of lobster and snow crab partly explains the high value of fishing in this area. The southern Scotian shelf and the north-eastern part of Newfoundland also were highly productive areas during this period, contributing 44% of the total landed value of marine species on the Canadian Atlantic coast. In 2008, these three areas combined represented 62% of the total landed volume and 69% of the total landed value in Atlantic Canada.

Table 3.1: Total landed value by NAFO[6] areas, commercial marine fisheries, Atlantic Canada, 2006-2008

Groups	NAFO Areas	Landed Value ($m)			
		2006	2007	2008	% of total (2008)
Southern Gulf of St. Lawrence	4T, 4VN	419	472	417	25%
Southern Scotian Shelf	4X, 5Y, 6D, 6E	416	368	376	23%
North-Eastern Newfoundland	2J, 3K, 3L	273	333	343	21%
Northern Scotian Shelf	4W, 4VS	109	137	147	9%
Northern Gulf of St. Lawrence	4R, 4S, 3PN	102	117	114	7%
Georges Bank	5Ze	73	74	92	6%
Southern Newfoundland	3PS, 3MNO	84	84	82	5%
Northern Labrador and Baffin Island	2G, 2H, 0A, 0B, 1B	90	88	64	4%
Other	-	1	3	8	1%
Total		**1,567**	**1,676**	**1,642**	**100%**

Source: DFO, Economic Analysis and Statistics.

[6]NAFO stands for "Northwest Atlantic Fisheries Organization". A map of NAFO areas is available in Appendix III, showing the groupings of Table 3.1.

3.1.3 Months of activity in Atlantic Canada

On the Atlantic coast of Canada, most fish landings took place between April and September, representing 75% of all landings in 2008. However, it was in May and June that landings had the greatest value, principally due to lobster, shrimp and scallop catches. In 2008, landings during these two months had a value of approximately $728 million, which was 44% of the total landed value on the Atlantic coast.

In general, the volume of fish landed between October and March is relatively lower in New Brunswick, Prince Edward Island and Quebec. In Newfoundland and Labrador, higher fish landings occur from April through October, with higher values during the months of May to July. The volume of landings in Nova Scotia are high from May through October, with only small variations compared to other provinces, while landed value is seen to be somewhat higher from November to January, compared to the volume of landings in these months.

Table 3.2: Total landed value by month, commercial marine fisheries, Atlantic Canada, 2008

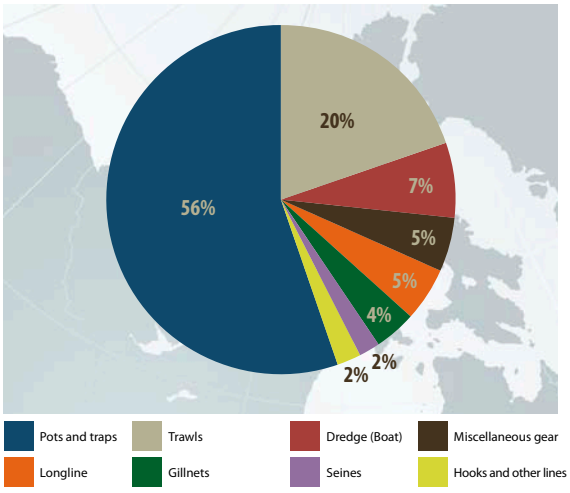
Month	Landed Value ($m)					
	NS	NB	PEI	Que	NFL	Total
January	46	3	0	6	15	70
February	31	2	0	0	11	44
March	35	2	0	0	21	57
April	48	2	0	14	44	108
May	125	53	58	60	112	407
June	86	49	39	34	113	320
July	70	9	3	12	82	176
August	44	17	10	7	44	122
September	34	11	9	5	36	95
October	30	4	5	2	26	67
November	47	13	1	1	13	75
December	82	5	0	0	14	101
Total	**677**	**170**	**124**	**142**	**530**	**1,642**

Source: DFO, Economic Analysis and Statistics.

3.1.4 Fishing gear

In 2008, nearly 56% of the marine fishing value in Canada came from species that were caught using pots and traps, such as crab and lobster. In terms of volume, trawling contributed 35% to the total commerical catch in Canada. This, however, resulted in only 20% of the total value. The lower value results from typically lower market prices for trawled species, such as groundfish and shrimp, than trapped species.

Figure 3.3: Total landed value by fishing gear type, commercial marine fisheries, Canada, 2008



Source: DFO, Economic Analysis and Statistics.

3.1.5 Vessels

In 2008, there were 15,984 active vessels in Canada's marine commercial fisheries. A fishing vessel is considered active if at least one instance of fish landings is recorded during the year. This number has decreased slightly compared to 2007, when the number of active vessels totalled 16,683 (-4%).

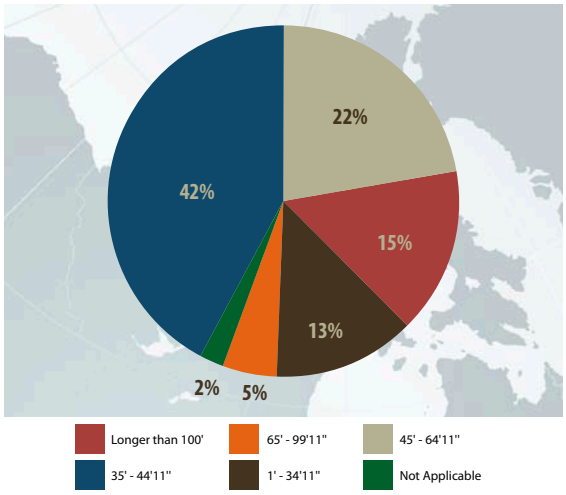
The majority (91%) of these vessels were inshore fishing vessels less than 45' in length. While midshore and offshore fishing vessels (more than 45' in length) represented less than 10% of all active fishing vessels in Canada, they recorded 42% of the total Canadian landed value in 2008.

Table 3.3: Number of active fishing vessels by length group, 2006-2008

Vessel Length	Number of Active Vessels[1]			
	2006	2007	2008	% of total (2008)
Unknown length	10	10	11	0%
1' - 34'11"	8,154	8,313	7,851	49%
35' - 44'11"	7,041	6,916	6,760	42%
45' - 64'11"	1,232	1,204	1,136	7%
65' - 99'11"	211	196	186	1%
100' +	70	67	59	0%
Total[2]	**16,697**	**16,683**	**15,984**	**100%**

[1]Vessel that reported landings in a given year.
[2]Due to some vessel length changes, numbers may not add to total.
Source: DFO, Economic Analysis and Statistics.

Figure 3.4: Total landed value by vessel length, commercial marine fisheries, Canada, 2008



Source: DFO, Economic Analysis and Statistics.

The average landed value per active fishing vessel was $118,176 in Canada in 2008, which was less than 1% higher than the average landed value in 2007. Among the main commercial species, landings of northern shrimp (Pandalus Borealis) and sea scallops had the highest average value per vessel in 2008, reaching on average $548,193 and $185,864 respectively per vessel. The average landed values of lobster ($72,876) and Atlantic cod ($9,321) per vessel were significantly lower primarily because each of these two fleets represents a large segment of all vessels (53% and 30%, respectively).

Table 3.4: Number of active vessels and average landed value of selected marine species by vessel, Canada, 2008

Major species	Number of active vessels and average value of landings per vessel[1]		
	# of active vessels[2]	# of active vessels as a % of total vessels	Average value of landings per vessel ($)
Lobster	8,500	53%	72,876
Cod, Atlantic	4,833	30%	9,321
Snow Crab	2,928	18%	121,954
Salmon	2,587	16%	8,326
Herring	1,082	7%	28,146
Greenland Halibut	701	4%	34,311
Scallops, Sea	498	3%	185,864
Shrimp, p. Borealis	465	3%	548,193
Pacific Halibut	236	1%	119,333
Dungeness Crab	212	1%	171,642
Total	**15,984**	**100%**	**118,176**

[1]There is no direct link between the value of landings and the net income by vessel since operating costs vary from one fishery to another.
[2]Vessels may land more than one species (categories not mutually exclusive).
Source: DFO, Economic Analysis and Statistics.

In 2008, 40% of the total active fishing vessels in Canada landed fish in Newfoundland and Labrador (6,355 vessels). Nova Scotia was second with 3,740 vessels, about 23% of the Canadian total. Between 2007 and 2008, the number of active vessels in all provinces except Nova Scotia decreased. In Nova Scotia, the increase in active fishing vessels was very minor (up 2%).

Table 3.5: Number of active fishing vessels by province of landing, Canada, 2006-2008

Province	Number of Active Vessels[1]			
	2006	2007	2008	% of total (2008)
Nova Scotia	3,810	3,664	3,740	23%
New Brunswick	1,910	1,933	1,878	12%
Prince Edward Island	1,408	1,398	1,346	8%
Quebec	1,264	1,305	1,269	8%
Newfoundland and Labrador	6,401	6,717	6,355	40%
British Columbia	2,263	1,981	1,688	11%
Total[2]	**16,697**	**16,683**	**15,984**	**100%**

[1]Vessels that reported landings, by province, in a given year.
[2]Due to some vessels landing in more than one province, numbers may not add to total.
Source: DFO, Economic Analysis and Statistics.

3.2 Commercial freshwater fisheries

CD-ROM - Section 3: 3.2.1

In Canada, freshwater commercial fishing takes place primarily in Lake Huron, Lake Ontario and Lake Superior in Ontario, in lakes Winnipeg, Cedar, Manitoba and Winnipegosis in the province of Manitoba and in Great Slave Lake in the Northwest Territories. This fishing activity is relatively modest when compared to the commercial fishing of marine species. In 2008, it amounted to 3% of the commercial fishing value and 3% of the total volume in Canada.

The landed volume of freshwater species declined by 3% when compared to 2007, decreasing by 1,034 tonnes for a total of 31,063 tonnes in 2008. The lower landed value of some key species resulted in a drop in total landed value in 2008 to $59 million, $4.4 million (-7%) less than in 2007.

The main freshwater species fished commercially in Canada are yellow pickerel, whitefish and perch. Landings of these three species represented close to 82% of the total landings of freshwater species in Canada in 2008.

Table 3.6: Total landed value by species, commercial freshwater fisheries, Canada, 2006-2008

Species	Landed Value ($,000)			
	2006	2007	2008	% change 2007-2008
Yellow Pickerel	32,534	30,528	28,643	-6%
Whitefish	9,145	9,423	10,777	14%
Perch	18,308	13,958	9,144	-34%
White Bass	1,687	2,020	2,322	15%
Smelt	467	2,273	1,884	-17%
Pike	965	1,035	1,605	55%
Sauger	491	298	739	148%
Sucker (Mullet)	764	580	710	22%
Lake Trout	447	384	424	10%
Other	3,167	3,163	3,031	-4%
Total	**67,977**	**63,662**	**59,279**	**-7%**

Source: DFO, Central and Arctic, Policy Sector.

Freshwater commercial fishing is the most important fishery in Ontario and Manitoba, with respective landed values of $27 million and $25 million in 2008. Fish landings in these two provinces represented 88% of the overall landed value of freshwater commercial fisheries in Canada in 2008.

Table 3.7: Total landed value by province, commercial freshwater fisheries, Canada, 2006-2008

Province	Landed Value ($,000)			
	2006	2007	2008	% change 2007-2008
Ontario	36,430	32,188	27,315	-15%
Manitoba	23,818	23,833	24,745	4%
Saskatchewan	2,843	2,279	3,039	33%
Quebec	2,030	2,030	2,030	0%
Alberta	1,748	2,454	1,240	-49%
New Brunswick	498	498	498	0%
Northwest Territories	610	380	413	9%
Total	**67,977**	**63,662**	**59,279**	**-7%**

Source: DFO, Central and Arctic, Policy Sector.

3.3 Aquaculture

CD-ROM - Section 3: 3.3.1

Overall aquaculture production increased in value to $801 million in Canada in 2008, close to $40 million more than in 2007 (+5%). This higher value can be attributed to increases in the value of salmon and trout.

The aquaculture production value of mussels and oysters decreased by 19% for both species, while trout production increased by 71%. Meanwhile, the value of salmon production increased by only 3% in 2008, due to a higher production volume and higher price.

In 2008, the production value of salmon accounted for about 78% of the total aquaculture production value in Canada.

Table 3.8: Value of aquaculture production by major species, Canada, 2006-2008

Major species	Value of aquaculture production ($,000)			
	2006	2007	2008	% change 2007-2008
Salmon	748,246	604,917	624,582	3%
Trout[1]	19,743	23,570	40,330	71%
Mussels	35,817	33,940	27,322	-19%
Oysters	19,063	16,726	13,502	-19%
Clams	8,906	9,713	8,614	-11%
Other	81,208	72,704	86,923	20%
Total[2, 3]	**912,983**	**761,570**	**801,273**	**5%**

[1]Excludes other finfish for all provinces except Quebec beginning in 2006.
[2]Totals include re-stocking.
[3]Totals exclude confidential data.
Source: Statistics Canada, 2010, Aquaculture Statistics 2009, Catalogue no. 23-222-XIE.

British Columbia continues to dominate Canadian aquaculture production, accounting for over half of Canada's total. In 2008, New Brunswick reported the second highest production, primarily from finfish. Newfoundland and Labrador, which ranked third in value of production, reported that value was primarily from finfish, although further details are unavailable due to the limited number of producers in the province. In Nova Scotia, which ranked fourth in value of production in 2008, finfish accounted for 69% of the total value of $35.6 million.

Table 3.9: Value of aquaculture production by provinces and species, Canada, 2008

Province	Value of aquaculture production in 2008 ($,000)				
	Salmon	Mussels	Trout	Other	Total
British Columbia	409,267	1,281	2,816	14,879	428,243
New Brunswick	192,140	545	5,000	628	198,313
Prince Edward Island	..	22,300	..	7,300	29,600
Newfoundland and Labrador	..	..	..	..	63,120
Nova Scotia	23,175	2,430	1,479	8,562	35,646
Ontario	0	0	17,200	0	17,200
Quebec[1]	0	766	1,574	7,323	9,663
Other	0	0	81[2]	0	81[2]
Total Canada	**624,582**	**27,322**	**40,330**	**109,039**	**801,273**

Note: Provinces with data not available are not included in the Canada totals.
[1]Quebec totals include restocking.
[2]Two of the 3 provinces are confidential.
Source: Statistics Canada, 2010, Aquaculture Statistics 2009, Catalogue no. 23-222-XIE.

4 International trade

CD-ROM - Section 4: 4.1.1 - 4.1.10

4.1 Exports

Canadian exports of marine, freshwater and aquaculture fish and seafood products remained static with a total value of $3.88 billion in 2008, which was $4 million more than in 2007. The most valuable Canadian exports in 2008 were lobster, farmed salmon, snow crab and shrimp, the combined value of which represented 60% of the total value of Canadian seafood exports during the year.

Table 4.1: Total value of Canadian exports, fish and seafood products, by species, 2006-2008

Species	Export Value ($m)			
	2006	2007	2008	% change 07-08
Groundfish	**442**	**383**	**390**	**2%**
Cod, Haddock	111	111	112	0%
Halibut, Flounders	76	73	74	2%
Hake	85	79	91	16%
Greenland Turbot	55	43	40	-8%
Other	115	77	74	-4%
Pelagic fish	**992**	**877**	**941**	**7%**
Herring, Mackerel, Sardines	209	197	235	19%
Salmon, farmed	540	488	524	8%
Salmon, wild	145	111	90	-19%
Tuna	29	23	27	17%
Other	69	59	65	10%
Shellfish	**2,278**	**2,262**	**2,202**	**-3%**
Lobster	1,004	907	924	2%
Crab, snow	426	520	519	0%
Crab, other	94	116	124	7%
Shrimp	456	438	360	-18%
Scallop	100	112	105	-6%
Clams	101	84	84	0%
Other	97	87	86	0%
Other marine species	**263**	**234**	**232**	**-1%**
Freshwater fish	**118**	**124**	**119**	**-4%**
Perch	23	22	18	-19%
Pickerel	39	42	38	-11%
Other	56	59	63	7%
Total	**4,094**	**3,880**	**3,884**	**0%**

Source: Statistics Canada, International Trade Division.

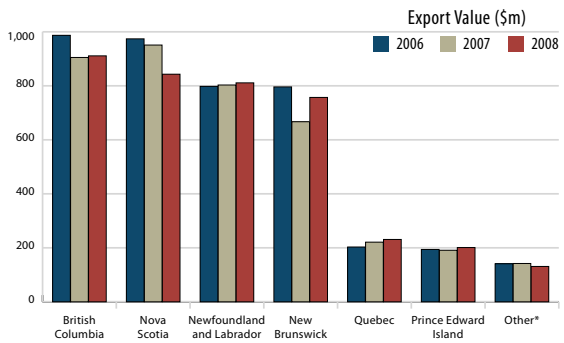
In 2008, hake, tuna and herring, mackerel and sardines combined as well as farmed salmon experienced increases in the value of exports. The total value of exported herring, mackerel and sardines was $235 million in 2008, an increase in value from 2007 of $38 million (+19%). Farmed salmon exports increased by almost $37 million (+8%) from 2007 as a result of a higher volume of exports in 2008, with little change in the average price paid. The value of hake exports were up by nearly $13 million (+16%). Crab exports, other than snow crab, increased by $8 million (+7%) over 2007.

On the other hand, the value of shrimp exports decreased by over $77 million (-18%). A similar change in export value occurred for wild salmon, which fell by almost $21 million (-19%). The value of snow crab exports remained flat at $519 million, a drop of less than $1 million from 2007. Species such as scallops and Greenland halibut both saw decreases in the value of exports by 6% and 8%, respectively.

Exports of halibut and flounders, lobster, clams, cod and haddock as well as other shellfish species saw little change in the value of their exports between 2007 and 2008.

In 2008, British Columbia led Canadian provinces and territories in exports with a value of almost $911 million. The second highest export values were recorded in Nova Scotia with exports exceeding $843 million. These two provinces accounted for 45% of all fish and seafood exports in 2008. Newfoundland and Labrador and New Brunswick followed with exports of $811 million and $757 million, respectively. Quebec and Prince Edward Island each had export values exceeding $200 million, while all other provinces and territories reported exports under $75 million.

Figure 4.1: Total value of Canadian seafood exports by province, 2006-2008



*Ontario, Manitoba, Saskatchewan, Alberta, Northwest Territories, Yukon, Nunavut.
Source: Statistics Canada, International Trade Division.

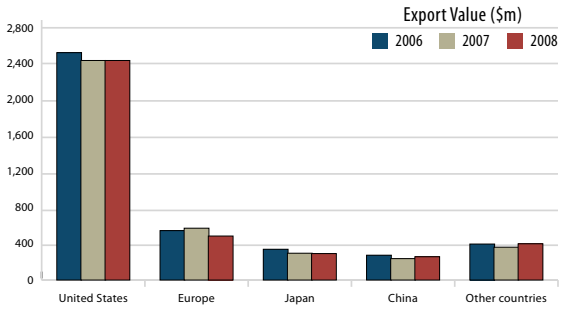
In 2008, the main market for Canadian fish and seafood was the United States, accounting for almost 63% of Canadian exports. While exports to individual countries such as Japan and China accounted for 7.5% and 6.7% of the total export value respectively, the

European Union, comprised of 27 member nations, accounted for almost 13% of Canada's exports.

A small number of countries showed growth in terms of important export markets for Canadian seafood products. Russia, ranked 6th in 2008, had a 103% increase in Canadian imports since 2006, from $44 million to just over $89 million.

From a value perspective, the United States, which retained its first place position, had the highest reduction in exports between 2006 and 2008, importing $87 million (-3%) less in Canadian seafood exports in 2008 than in 2006. From 2007 to 2008, however, exports increased by almost $37 million (+1.5%). With 13% of the export value, European Union was the 2nd most important export market for Canada. Similarly, Japan, the 3rd most important export market for Canada, imported almost $48 million (-14%) less of Canada's fish and seafood products in 2008 than in 2006. Between 2007 and 2008, the Japanese market continued a very slight downward trend, falling just 1% over the period.

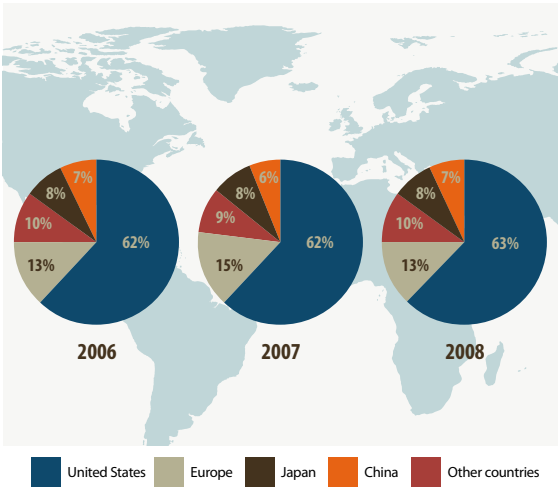
Figure 4.2: Value of Canadian seafood exports by major markets, 2006-2008



Source: Statistics Canada, International Trade Division.

Main exports to the European market in 2008 were sockeye, pink and chum salmon from British Columbia and shrimp, lobster and Atlantic cod from the Atlantic Provinces. In the American market, lobster, salmon, and snow crab accounted for 65% of the total Canadian exports to the United States. The main exports by value to the Japanese market were herring, snow crab, shrimp, lobster, Atlantic salmon, and sablefish, which accounted for more then two-thirds of the value of all exports to the country.

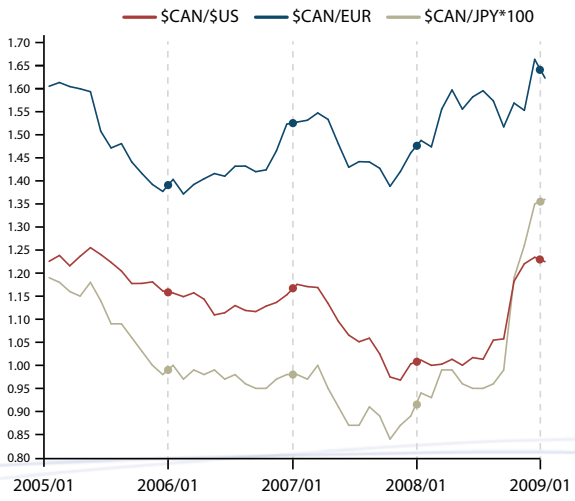
Figure 4.3: Share (%) of the value of Canadian exports, by major markets, 2006-2008



Source: Statistics Canada, International Trade Division.

A possible cause for the decrease in Canadian seafood exports to the United States was the exchange rate. Between 2006 and 2008 the exchange rate for the US dollar fell by over 6% against the Canadian dollar. On average in 2006, for every Canadian dollar of imports, US importers were paying $0.88 US. On average in 2008, US importers were paying almost $0.94 US for each Canadian dollar of exports. In contrast, despite the fact the value of the Euro increased by 10% against the Canadian dollar, this did not result in an increase in exports to the European Union. Between 2006 and 2008, Canadian exports to the European Union dropped by 11%.

Figure 4.4: Movement of exchange rates between the Canadian dollar and the US dollar, the euro and the japanese yen, 2005/01 – 2009/01



Source: Bank of Canada.

4.2 Imports

Canadian imports of marine, freshwater and aquaculture products reached a total value of $2.24 billion in 2008, which represents an increase of $35 million (+2%) compared to 2007. The main imported species were shrimp, lobster, wild salmon, tuna as well as groundfish species such as cod and haddock combined and halibut. Together, these species represented slightly less than half the total value of Canadian fish imports in 2008, but were 4% lower than in 2007.

Table 4.2: Total value of Canadian imports, fish and seafood products, by species, 2006-2008

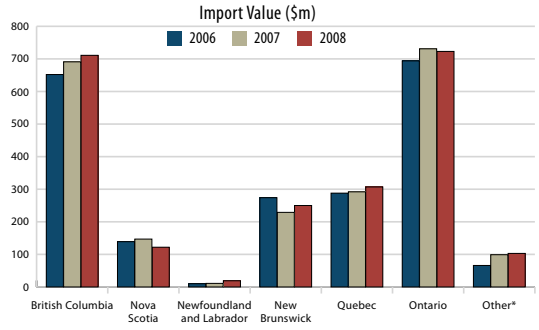
Species	Import Value ($m)			
	2006	2007	2008	% change 07-08
Groundfish	**281**	**290**	**263**	**-9%**
Cod, Haddock	96	95	86	-9%
Halibut	96	105	88	-16%
Other	89	90	89	-1%
Pelagic fish	**358**	**392**	**472**	**20%**
Herring, Mackerel, Sardines	29	26	30	15%
Salmon, farmed	21	21	56	174%
Salmon, wild	150	189	195	3%
Tuna	141	138	172	24%
Other	16	18	19	2%
Shellfish	**925**	**916**	**855**	**-7%**
Lobster	208	180	159	-12%
Crab, snow	5	4	7	69%
Crab, other	79	77	74	-3%
Shrimp	409	433	395	-9%
Scallop	62	65	58	-12%
Clams	42	40	41	3%
Other	119	117	121	4%
Other marine species	**465**	**474**	**519**	**9%**
Freshwater fish	**95**	**128**	**126**	**-2%**
Total	**2,123**	**2,200**	**2,235**	**2%**

Source: Statistics Canada, International Trade Division.

The import value of herring, mackerel, sardines, salmon (farmed and wild), and tuna increased by $79 million in 2008 (+21%) from 2007. In contrast, imports of cod, haddock, halibut, lobster, shrimp and scallops fell by $92 million (-11%).

The main destinations of seafood imports into Canada in 2008 were the provinces of Ontario (32.4%), British Columbia (31.8%), Quebec (13.7%) and New Brunswick (11.2%). Most imports into Ontario and British Columbia were fresh and frozen shellfish and canned fish products, accounting for 46% and 44% of the provinces imports respectively. 58% of Quebec's main imports were fresh and frozen shellfish followed by fresh and frozen fish fillets. Fresh and frozen shellfish accounted for over 60% of all imports into New Brunswick in 2008.

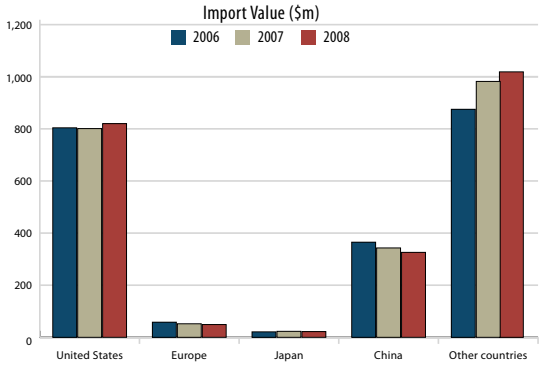
Figure 4.5: Total value of Canadian seafood imports by province, 2006-2008



*Prince Edward Island, Manitoba, Saskatchewan, Alberta, Yukon.
Source: Statistics Canada, International Trade Division.

In 2008, 36.7% of the total value of Canadian imports of fish and seafood came from the United States, for a total of $820 million. Thailand came second with 14.9% of the total value ($333 million), followed by China with 14.6% ($326 million). Chile and Vietnam were fourth and fifth, accounting for 5.1% and 4.6% of the value of Canadian imports, respectively.

Figure 4.6: Total value of Canadian seafood imports by major markets, 2006-2008



Source: Statistics Canada, International Trade Division.

5 Appendix I: Overview of the main fishing fleets in Canada, 2008

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Notes regarding all tables:

1. The following overview of marine commercial fishing fleets provides information for all six administrative regions of DFO. Figure 5.1 below presents a subdivision of Canada showing DFO administrative regions.

2. A “fish harvester” is defined here as the holder of one or more commercial fishing licences that was active in 2008. An “active” licence is one that landed at least 1kg of marine or freshwater species during the year. Fleets are in general mutually exclusive; however some fish harvesters may be counted as part of more than one fleet. Hence, numbers for fish harvesters are approximations, and not directly comparable with numbers in the remainder of this statistical review.

Figure 5.1: DFO administrative regions

Source: DFO, Economic Analysis and Statistics.

Table 5.1: Overview of main fleets, DFO Maritimes Region (Southern New Brunswick and Nova Scotia except Northumberland Strait), 2008

Fishing Fleet	Fishing Method	Management Method	Vessel Length	Number of Fish Harvesters	Main (directed) Species	Landed Value in 2008 ($m)
Multispecies Non-Vessel	Rakes, Tongs	Competitive	Non-Vessel	2,255[1]	Clams	**$1m**
Multispecies Inshore	Drag, Trawl, Traps, Gillnet, Longline, Seine	Competitive, Trap Limits, IQ	< 65'	3,529	Lobster, Groundfish, Snow Crab, Scallop, Swordfish, Herring, Sea Urchins, Shrimp, Tuna, Mackerel	**$530m**
Multispecies Midwater	Trawl, Gillnet	Competitive, IQ	65' - 100'	10	Groundfish	**$4m**
Multispecies Offshore	Drag, Trawl, Traps	IQ, Trap Limits	> 100'	19	Scallop, Shrimp, Clams, Lobster, Groundfish, Tuna	**$102m**
Aboriginal Bands	Drag, Trawl, Traps, Gillnet, Longline, Seine	Competitive, Trap Limits, IQ	All	21	Snow Crab, Lobster, Groundfish, Scallop, Shrimp, Swordfish, Sea Urchins	**$32m**
Total				**5,834**		**$669m**

[1]Number of licence holders, less number of vessel-based licence holders.
Source: DFO, Maritimes Region, Statistics and Licensing Units.

Table 5.2: Overview of main fleets, DFO Gulf Region (Eastern New-Brunswick, Prince Edward Island, Nova Scotia's Northumberland Strait), 2008

Fishing Fleet	Fishing Method	Management Method	Vessel Length	Number of Fish Harvesters	Main (directed) Species	Landed Value in 2008 ($m)
Crabbers	Traps	IQ	< 45' and 50' - 100'	262	Snow Crab	**$60m**
Shrimp Fishers	Trawl	IQ	All	20	Shrimp	**$6m**
Herring Seiners	Purse Seine	IQ	> 65'	0	Herring	**$1m**
Lobster / Multispecies	Traps, Gillnet, Hook & Line	Trap Limits (75-375)	< 45'	2,645	Lobster (Directed), Herring, Tuna, Snow Crab, Groundfish	**$198m**
Groundfish Specialists	Trawl, Seine, Longline, Gillnet	IQ and Competitive	< 65'	163	Groundfish (Directed), Shrimp, Snow Crab	**$4m**
Aboriginals	Traps	IQ, Trap Limits (75-375)	< 45'	232	Snow Crab, Lobster	**$17m**
Other				5,998		**$25m**
Total				**9,320**		**$311m**

Source: DFO, Gulf Region, Statistics and Licensing Units.

Table 5.3: Overview of main fleets, DFO Quebec Region (Quebec), 2008

Fishing Fleet	Fishing Method	Management Method	Vessel Length	Number of Fish Harvesters[1]	Main (directed) Species	Landed Value in 2008 ($m)
Crabbers	Traps	IQ	< 100'	189	Crab	**$37m**
Lobster Fishers	Traps	Trap limits	< 65'	561	Lobster	**$39m**
Shrimp Fishers	Trawl	IQ	< 100'	33	Shrimp	**$14m**
Groundfish / Multispecies	Gillnet, Trawl, Traps	IQ and Competitive	< 45'	259	Cod, Greenland Halibut, Atlantic Halibut, Temporary Snow Crab and Shrimp allocations	**$12m**
Midshore Groundfish / Multispecies	Longline, Traps, Trawl	IQ and Competitive	> 45'	93	Cod, Greenland Halibut, Atlantic Halibut, Temporary Snow Crab and Shrimp allocations	**$9m**
Aboriginals	Trawl, Gillnet, Traps	IQ and Competitive	< 100'	12	Groundfish, Lobster, Shrimp and Snow Crab	**$11m**
Total				**1,147**		**$123m**

[1]Number of active Quebec fish harvesters in 2008, “core” and “s/o” designations only.
Source: DFO, Quebec Region, Statistics and Licensing Unit and Policy & Economics Branch.

Table 5.4: Overview of main fleets, DFO Newfoundland and Labrador Region (Newfoundland and Labrador), 2008

Fishing Fleet	Fishing Method	Management Method	Vessel Length	Number of Fish Harvesters	Main (directed) Species	Landed Value in 2008 ($m)
Inshore	Pots, Gillnet, Traps, Rifles	IQ, Competitive	< 35'	4,592	Groundfish, Snow Crab, Lobster, Cod, Roe (lumpfish), Capelin, Seal	**$96m**, including $36m in Snow Crab and $28m in Lobster
Nearshore	Pots, Otter trawl, Gillnet, Purse Seine, Rifles, Hakapik	IQ, Competitive	35' - 65'	1,374	Groundfish, Snow Crab, Shrimp (Pandalus Borealis), Seal Skins, Mackerel, Greenland Halibut	**$271m**, including $140m in Snow Crab and $88m in Shrimp
Midshore	Pots, Purse Seine, Gillnet	IQ, Competitive	65' - 100'	24	Snow Crab, Mackerel, Greenland Halibut, Shrimp, Herring, Capelin	**$9m**, including $3m in Shrimp
Offshore	Otter Trawl, Pots	Enterprise allocations, IQ, Competitive	100' +	15	Shrimp (Pandalus Borealis), Clams (Stimpsons Surf), Greenland Halibut, Yellowtail Flounder, Snow Crab, Cod	**$154m**, including $99m in Stimpson Surf Clams and $95m in Shrimp
Total				**6,005**		**$530m**

Source: DFO, Newfoundland and Labrador Region, Statistics and Licensing Units.

Table 5.5: Overview of main fleets, DFO Pacific Region (British Columbia), 2008

Fishing Fleet	Fishing Method	Management Method	Vessel Length	Number of Fish Harvesters[1]	Main (directed) Species	Landed Value in 2008 ($m)
Shellfish	Dive, Dredge, Trawl, Traps, Hand picking or digging, Longline, Seine	IQ, Competitive, Trap Limits	12' - 150'	739	Prawn, Shrimp, Geoduck, Dungeness Crab, Clam, Horse Clam, Euphausiid, Sea Urchins, Sea Cucumber, Opal Squid	**$94m**
Groundfish - Multispecies	Trawl, Longline	IQ, Competitive	10' - 188'	330	Groundfish (Rockfish, Longspine / Shortspine Thornyheads, Greenlings, Lingcod, Perch, Cod, Sole, Flounder, Dogfish, Pollock, Hake, Tuna)	**$56m**
Pacific Halibut	Longline	IQ	9' - 85'	425	Pacific Halibut	**$31m**
Sablefish	Longline, Traps	IQ	23' - 117'	48	Sablefish	**$17m**
Salmon	Gillnet, Purse Seine, Troll	Competitive	17' - 101'	1,556	Salmon (Sockeye, Coho, Pink, Chum, Chinook)	**$17m**
Herring	Purse Seine, Gillnet, Seine, Dip net	IQ, Competitive	48' - 101'	146	Herring, Herring Roe, Herring spawn on kelp	**$16m**
Other						**$12m**
Total				**3,244**		**$245m**

[1]The number of harvesters and crew employment for Pacific region is based upon their Fisher Registration Card (FRC) data.
Source: DFO, Pacific Region, Statistics and Licensing Units.

Table 5.6: Overview of main fleets, DFO Central & Arctic Region (Freshwater fisheries and Canadian Arctic), 2008

Fishing Fleet	Fishing Method	Management Method	Vessel Length	Number of Fish Harvesters	Main (directed) Species	Landed Value in 2008 ($m)
Groundfish, North Atlantic (NAFO Sub-Area 0)	Trawl, Longline, Gillnet	IQ	> 65', under ice longlining	6	Greenland Halibut	**n/a**
Shrimp, North Atlantic (NAFO Sub-Area 0)	Trawl	IQ	> 65'	4	Shrimp (Pandalus Borealis)	**n/a**
Freshwater Fisheries (MB, SK, AB, NWT, ON and NU)	Gillnet	Competitive	n/a	2,098	Whitefish, Pickerel, Pike, Other	**$26m**
Great Lakes Fisheries	Gillnet, Trap Net, Trawl, Hoop Net, Other	IQ	n/a	513	Yellow Perch, Walleye, Lake Whitefish, Bass, Smelt, Other	**$27m**
Aboriginals	Gillnet	Competitive	n/a	289	Arctic Char	**$0m**
Total				**2,910**		**$53m**

Source: DFO, Central and Arctic Region, Policy & Economics Branch.

6 Appendix II: Landings tables, marine fisheries

Table 6.1: Landed volume of the main marine species fished in Canada, thousand tonnes, 2006-2008

Main species, by ISSCAAP division	Landed Weight (,000 t)				
	2006	2007	2008	% of total (2008)	% change 2007-2008
Diadromous fishes	**30**	**25**	**10**	**1%**	**-59%**
Salmon	24	20	5	1%	-74%
Other diadromous fish	6	5	5	1%	1%
Marine fishes	**534**	**505**	**455**	**49%**	**-10%**
Groundfish	**237**	**216**	**216**	**23%**	**0%**
Atlantic halibut	2	2	2	0%	4%
Greenland halibut	15	14	12	1%	-11%
Pacific halibut	7	6	5	1%	-20%
Cod, Atlantic	27	27	27	3%	0%
Haddock	17	19	21	2%	7%
Hake, North Pacific	82	67	69	7%	4%
Rockfishes	12	13	13	1%	-3%
Sablefish	5	4	3	0%	-13%
Other groundfish	70	65	64	7%	-1%
Pelagic fish	**296**	**289**	**239**	**26%**	**-18%**
Herring	160	168	140	15%	-16%
Herring, Pacific	23	12	11	1%	-6%
Swordfish	1	1	1	0%	3%
Tuna	6	6	4	0%	-28%
Mackerel	54	53	30	3%	-44%
Capelin	42	38	39	4%	4%
Other pelagic fish	9	11	12	1%	12%
Crustaceans	**339**	**346**	**336**	**36%**	**-3%**
Crab, Dungeness	4	6	6	1%	3%
Crab, Snow (Queen)	90	91	94	10%	4%
Lobster	55	49	59	6%	21%
Shrimp	181	191	169	18%	-11%
Other crustaceans	9	9	8	1%	-13%
Molluscs	**118**	**99**	**102**	**11%**	**3%**
Scallop	63	65	68	7%	3%
Clams, Stimpson Surf	22	19	20	2%	6%
Clams, Pacific geoduck	2	2	2	0%	0%
Other molluscs	31	14	13	1%	-4%
Other[1]	**56**	**30**	**29**	**3%**	**-3%**
Total	**1,077**	**1,005**	**932**	**100%**	**-7%**

[1]Other = “Whales, seals and other aquatic mammals”, “Miscellaneous aquatic animals”, “Miscellaneous aquatic products” and “Aquatic plants”.
Source: DFO, Economic Analysis and Statistics.

Table 6.2: Landed value of the main marine species fished in Canada, million dollars, 2006-2008

Main species, by ISSCAAP division	Landed Value ($m)				
	2006	2007	2008	% of total (2008)	% change 2007-2008
Diadromous fishes	**68**	**39**	**33**	**2%**	**-15%**
Salmon	62	32	22	1%	-32%
Other diadromous fish	6	8	12	1%	56%
Marine fishes	**435**	**397**	**359**	**19%**	**-10%**
Groundfish	**302**	**272**	**252**	**13%**	**-8%**
Atlantic halibut	16	19	18	1%	-3%
Greenland halibut	36	32	24	1%	-25%
Pacific halibut	55	35	28	1%	-20%
Cod, Atlantic	37	43	45	2%	5%
Haddock	27	28	27	1%	-4%
Hake, North Pacific	20	16	17	1%	4%
Rockfishes	17	19	18	1%	-9%
Sablefish	33	24	20	1%	-14%
Other groundfish	61	56	55	3%	-2%
Pelagic fish	**133**	**124**	**107**	**6%**	**-14%**
Herring	34	36	30	2%	-16%
Herring, Pacific	19	21	16	1%	-20%
Swordfish	12	11	9	0%	-23%
Tuna	28	24	25	1%	4%
Mackerel	20	18	12	1%	-33%
Capelin	12	10	10	1%	0%
Other pelagic fish	7	4	4	0%	-6%
Crustaceans	**1,171**	**1,323**	**1,298**	**69%**	**-2%**
Crab, Dungeness	21	34	36	2%	6%
Crab, Snow (Queen)	215	368	357	19%	-3%
Lobster	653	629	619	33%	-2%
Shrimp	274	285	278	15%	-2%
Other crustaceans	7	7	7	0%	-7%
Molluscs	**187**	**168**	**170**	**9%**	**1%**
Scallop	88	90	93	5%	4%
Clams, Stimpson Surf	29	27	29	2%	8%
Clams, Pacific geoduck	32	30	30	2%	-2%
Other molluscs	37	21	19	1%	-13%
Other[1]	**54**	**31**	**29**	**2%**	**-6%**
Total	**1,914**	**1,959**	**1,889**	**100%**	**-4%**

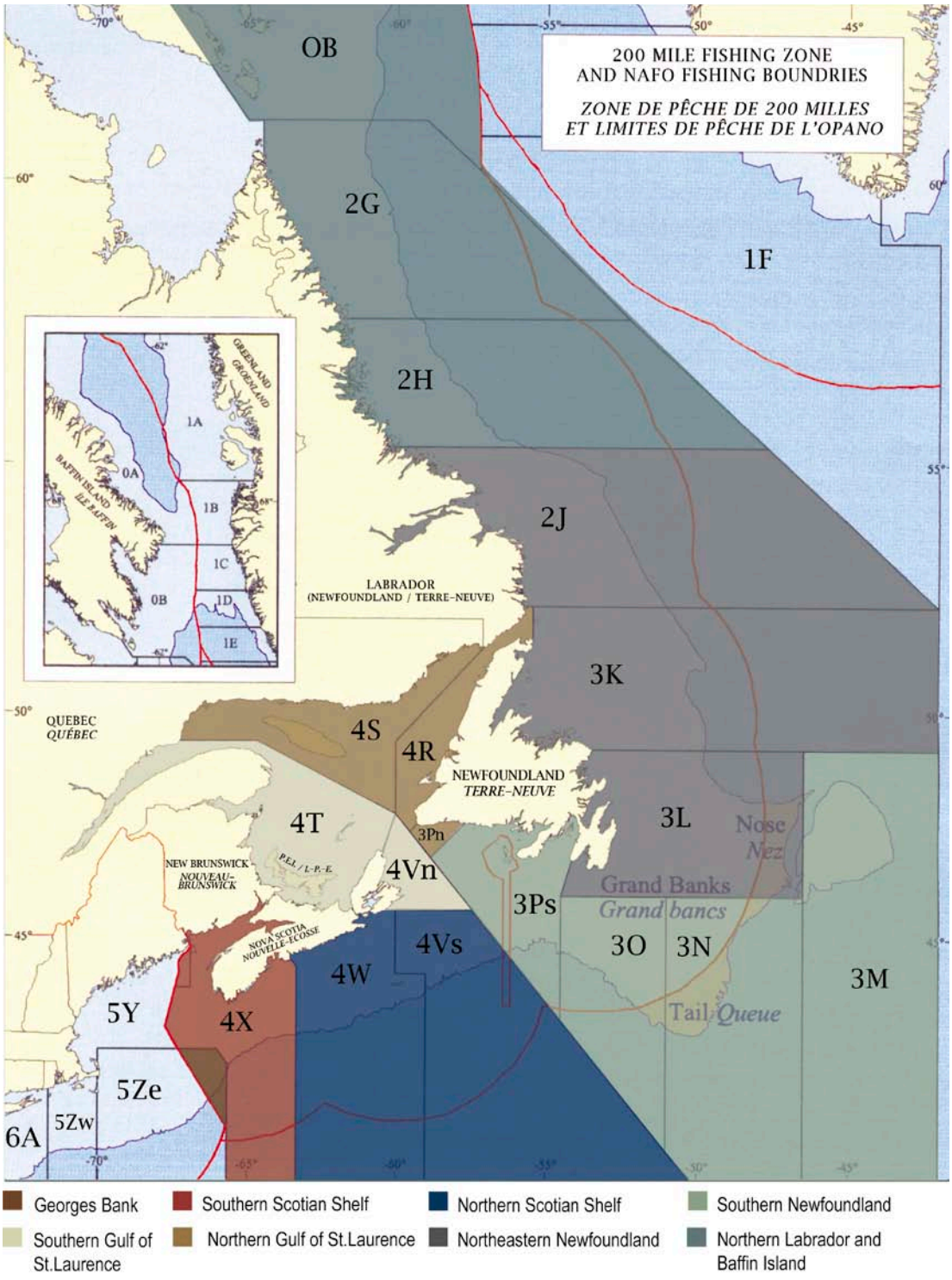
[1]Other = “Whales, seals and other aquatic mammals”, “Miscellaneous aquatic animals”, “Miscellaneous aquatic products” and “Aquatic plants”.
Source: DFO, Economic Analysis and Statistics.

Table 6.3: Landed price of the main marine species fished in Canada, $/kg 2006-2008

Main species, by ISSCAAP division	Landed Price ($/kg)				
	2006	2007	2008	% change 2007-2008	% change 2006-2008
Diadromous fishes	**2.24**	**1.57**	**3.27**	**109%**	**46%**
Salmon	2.53	1.56	4.02	157%	59%
Other diadromous fish	1.03	1.58	2.45	55%	138%
Marine fishes	**0.82**	**0.79**	**0.79**	**0%**	**-3%**
Groundfish	**1.27**	**1.26**	**1.17**	**-8%**	**-9%**
Atlantic halibut	8.91	9.17	8.59	-6%	-4%
Greenland halibut	2.49	2.35	1.98	-16%	-21%
Pacific halibut	7.53	5.92	5.92	0%	-21%
Cod, Atlantic	1.36	1.60	1.68	5%	24%
Haddock	1.58	1.44	1.29	-10%	-18%
Hake, North Pacific	0.24	0.24	0.24	0%	0%
Rockfishes	1.39	1.46	1.36	-6%	-2%
Sablefish	7.25	6.64	6.60	-1%	-9%
Other groundfish	0.87	0.87	0.86	-2%	-1%
Pelagic fish	**0.45**	**0.43**	**0.45**	**4%**	**0%**
Herring	0.21	0.22	0.22	0%	2%
Herring, Pacific	0.83	1.71	1.46	-15%	76%
Swordfish	8.47	8.44	6.37	-25%	-25%
Tuna	4.73	3.98	5.79	46%	22%
Mackerel	0.38	0.33	0.40	21%	6%
Capelin	0.28	0.27	0.26	-4%	-7%
Other pelagic fish	0.71	0.37	0.31	-16%	-57%
Crustaceans	**3.45**	**3.83**	**3.86**	**1%**	**12%**
Crab, Dungeness	5.51	5.54	5.66	2%	3%
Crab, Snow (Queen)	2.40	4.05	3.80	-6%	58%
Lobster	11.87	12.87	10.50	-18%	-12%
Shrimp	1.51	1.50	1.65	10%	9%
Other crustaceans	0.80	0.78	0.83	6%	4%
Molluscs	**1.58**	**1.69**	**1.66**	**-2%**	**5%**
Scallop	1.39	1.37	1.37	0%	-1%
Clams, Stimpson Surf	1.34	1.42	1.44	2%	8%
Clams, Pacific geoduck	20.65	19.51	19.03	-2%	-8%
Other molluscs	1.19	1.56	1.42	-9%	19%
Other[1]	**0.97**	**1.04**	**1.01**	**-3%**	**4%**
Total	**1.78**	**1.95**	**2.03**	**4%**	**14%**

[1]Other = “Whales, seals and other aquatic mammals”, “Miscellaneous aquatic animals”, “Miscellaneous aquatic products” and “Aquatic plants”.
Source: DFO, Economic Analysis and Statistics.

7 Appendix III: Map of NAFO fishing areas



Source: DFO, Communications Branch and Economic Analysis and Statistics.