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Message from the Minister



As Minister of Fisheries and Land Resources, I am proud to present the 2018 Seafood Industry Year in Review. The purpose of this annual review is twofold – to provide a comprehensive overview of Newfoundland and Labrador's wild and farmed fisheries and to share a vision for continued growth and diversification as we become a global player in a challenging and competitive sector.

The fishing and aquaculture sectors of Newfoundland and Labrador enjoyed another successful year in 2018. The value of total fish and seafood production was \$1.3 billion, marking

the fourth consecutive year the value of seafood production in Newfoundland and Labrador has exceeded one billion dollars.

The seafood industry continues to be an integral component of our provincial economy, employing almost 16,000 people from over 400 communities in harvesting, processing, and aquaculture operations.

We continue to meet objectives outlined in **The Way Forward** by attracting global players, like Grieg NL and MOWI Canada East, furthering our efforts to position Newfoundland and Labrador as a global player on the Aquaculture stage. By 2022, we expect to generate 1,100 person years of employment and help increase food self-sufficiency from 10 to 20 per cent.

Building on efforts to position Newfoundland and Labrador as an ideal place to do business and invest, I participated with Federal ministers and Atlantic premiers in an Atlantic Growth Strategy mission to China to promote Atlantic Canadian companies and encourage new partnerships. The mission saw Ocean Choice International enter into a marketing agreement with Qingdao Meichu Food Co. Ltd. I met with senior executives to discuss trade, investment and Chinese interests in the province's natural resources, participated in trade shows, and helped promote Atlantic Canada as an education destination. Of course, to attract investment to our shores we need to make certain we have the necessary funding supports and oversight in place. In 2018, Newfoundland and Labrador joined the Canadian Fish and Seafood Opportunities Fund, a \$30 million, six-year, Federal/Provincial cost-shared funding program that is the marketing pillar of the Atlantic Fisheries Fund. The Fisheries Advisory Council developed a position on adjacency as it relates to the federal **Fisheries Act**, and began examining issues related to cod industry revitalization. The Atlantic Fisheries Fund continues to play a key role as our industry transitions to groundfish, with fishing enterprises receiving funding for modern equipment to produce high value, high quality fish and seafood products.

In 2019, I will continue to engage the wild fisheries and aquaculture sectors to address industry needs in ways that result in new employment and economic activity. I look forward to working closely with you as we continue to secure maximum benefits for the people and communities of Newfoundland and Labrador.

Sincerely,

Honourable Gerry Byrne, MHA District of Corner Brook Minister



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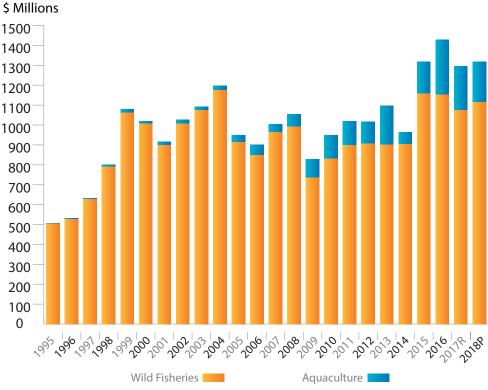
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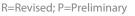
Industry Performance

The Newfoundland and Labrador fish and seafood industry had another successful year in 2018. The total value of fish and seafood production was just over \$1.3 billion, making it the fourth consecutive year that the total value was over one billion dollars. Aquaculture represented almost 16 per cent of the total market value in 2018, while the wild fisheries represented 84 per cent of the total production market value.

Production Market Value

Newfoundland and Labrador





Source: Fisheries and Oceans Canada (DFO); Department of Fisheries and Land Resources (FLR); Statistics Canada

Employment

The fishery and aquaculture sectors continued to be a significant source of employment for Newfoundland and Labrador in 2018, particularly in rural areas of the province. In total, the industry employed 15,882 people from over 400 communities in the province, representing a decrease of approximately four per cent over 2017. Aquaculture sector employment estimates remained on par with 2017, with 424 workers engaged in grow-out and hatchery activities. The number of registered fish harvesters declined two per cent in 2018, with 9,234 harvesters estimated to have registered with the Professional Fish Harvesters Certification Board (PFHCB). Employment in the processing sector declined eight per cent to 6,224 workers.

Seafood Industry Employment Newfoundland and Labrador

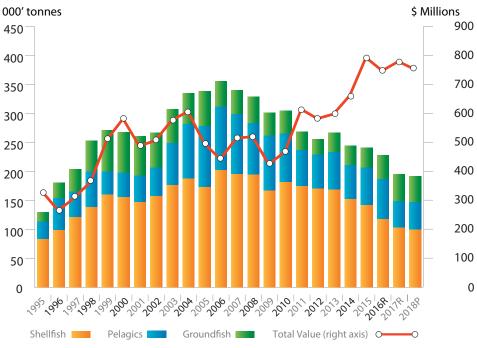
Industry Sector	2017R	2018P	% Change
Aquaculture	424	424	0
Harvesting (Wild Fisheries)	9,415	9,234	-2
Processing (Aquaculture and Wild Fisheries)	6,780	6,224	-8
Total	16,619	15,882	-4

R=Revised: P=Preliminary Source: FLR; PFHCB



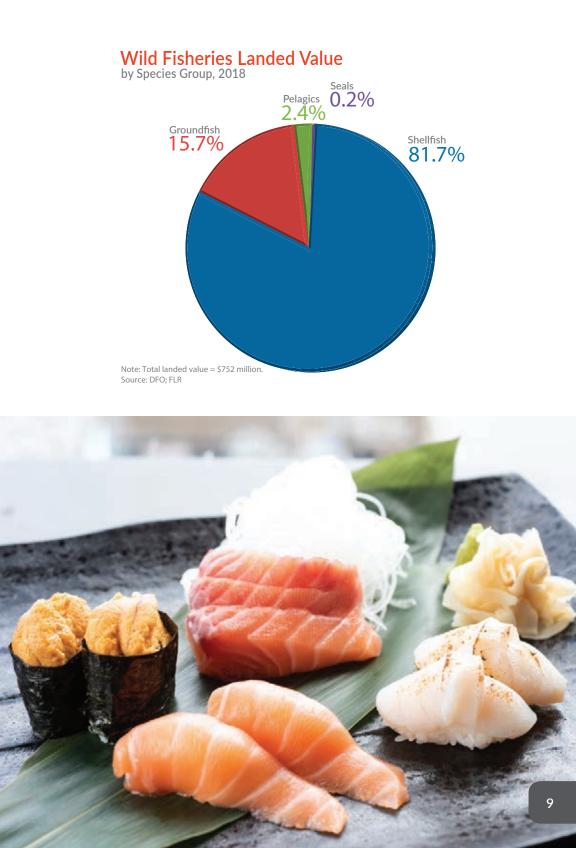
Wild Fisheries

The commercial fisheries of Newfoundland and Labrador continue to be an important economic generator for the province. The total value of landings in 2018 was \$752 million, representing a decrease of three per cent from 2017. Landings declined two per cent to 191,758 tonnes in 2018 as a result of lower crab, shrimp, cod and herring landings. A year over year comparison of the volume and value of commercial fish landings for select species in Newfoundland and Labrador is provided in the table on page 17.



Fish Landings by Species Group Newfoundland and Labrador

R=Revised; P=Preliminary Source: DFO; FLR



Shellfish

In 2018, the shellfish sector continued to be a major contributor to the commercial fishery, representing 52 per cent of total landings and 82 per cent of the associated value. Shellfish landings declined three per cent to 99,813 tonnes in 2018, largely as a result of quota reductions for the snow crab fishery. The corresponding landed value also decreased three per cent to \$614 million, due to the lower landed volumes.

Snow crab

Snow crab landings decreased 16 per cent to 28,062 tonnes in 2018 as a result of a reduction of the Total Allowable Catch (TAC). The corresponding landed value declined by only nine per cent to \$295 million, due to higher raw material prices, compared to 2017. The average raw material price for snow crab increased from \$4.39 per pound in 2017, to \$4.77 per pound in 2018.

Shellfish Landings Newfoundland and Labrador

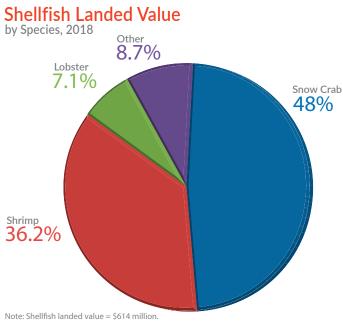


Shrimp

In 2018, total shrimp landings were down two per cent to 44,696 tonnes. Inshore shrimp landings declined due to quota reductions in Shrimp Fishing Area (SFA) 6. Gulf landings also dropped, compared to 2017, while offshore shrimp landings showed a slight increase. Although landed volumes were lower, the total value of shrimp landings increased three per cent to \$222 million. In 2018, the shrimp fishery began in the spring with a minimum landed price of \$1.58 per pound for inshore and gulf shrimp, up from \$0.95 per pound for the same period in 2017. In the fall fishery, the minimum landed price was \$1.70 per pound, up from \$1.30 per pound in 2017.

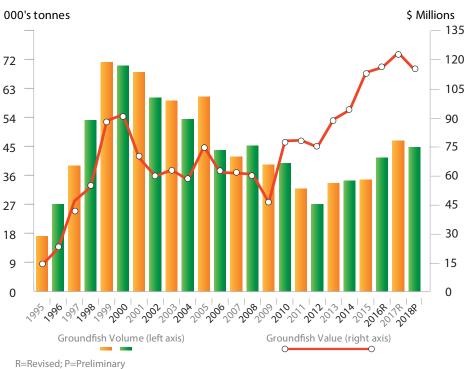
Lobster

In 2018, lobster landings increased nine per cent to 3,150 tonnes, compared to 2017; however, the associated landed value remained on par at \$44 million, as a result of lower raw material prices. The landed price for lobster averaged \$6.05 per pound in 2018, down 13 per cent from \$6.95 per pound in 2017.



Groundfish

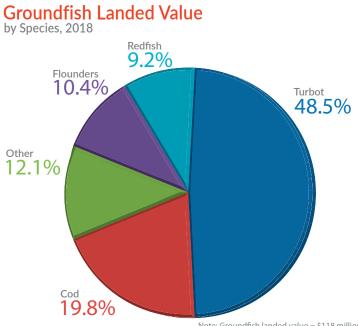
The groundfish share of the total wild fisheries landed volume and value in 2018 was 23 per cent and 16 per cent, respectively. The volume of groundfish landings decreased four per cent to 44,608 tonnes in 2018, primarily the result of lower cod catches. Cod landings dropped 22 per cent to 16,184 tonnes mainly due to lower catches in Northwest Atlantic Fisheries Organization (NAFO) Divisions 2J3KL. Redfish landings increased 19 per cent to 6,283 tonnes as a result of higher catches in NAFO Division 3LN. Landings of flounders and turbot increased 11 per cent and seven per cent, respectively. The overall value of groundfish landings declined in 2018 by seven per cent from 2017 to \$118 million.



Groundfish Landings Newfoundland and Labrador

New Ioundiand and Labrad

Source: DFO; FLR



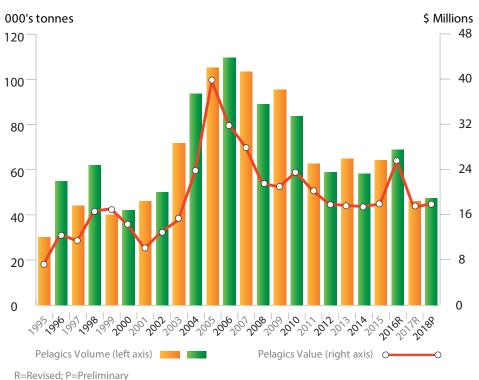
Note: Groundfish landed value = \$118 million Source: DFO; FLR



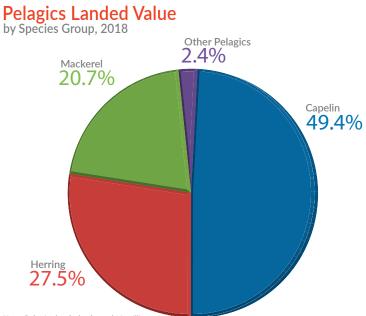
Pelagics

Pelagics accounted for 25 per cent of total commercial fish landings and two per cent of the total value in 2018. Compared to 2017, pelagics landings increased three per cent to 47,337 tonnes and landed value increased four per cent to \$18 million as a result of higher landings of capelin and mackerel. Capelin landings and value increased 28 per cent and 27 per cent respectively, to 27,889 tonnes and \$8.8 million, as a result of higher catches in the Gulf (4R) fishery. Herring landings and value both declined 35 per cent, to 13,772 tonnes and \$4.9 million due to lower catches in the fall fisheries. Mackerel landings and value both saw a significant increase of 112 per cent to 5,626 tonnes and \$3.7 million, as a result of improved catch rates.

Pelagics Landings Newfoundland and Labrador



Source: DFO; FLR



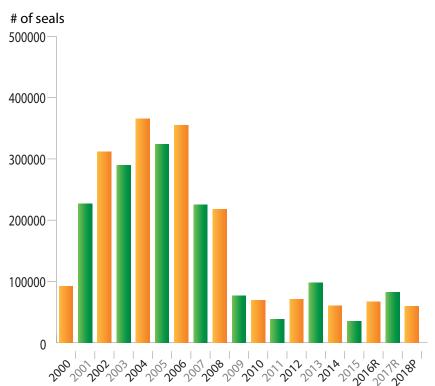
Note: Pelagics landed value = \$18 million. Source: DFO; FLR



Harp seals

The northwest Atlantic harp seal population is healthy and abundant, with an estimated population of 7.4 million animals. The Canadian seal harvest is one of the best managed harvests of animals in the world. Strict science-based regulations are in place and mandatory training is required for harvesters to ensure the humaneness and sustainability of the Canadian seal harvest.

The seal harvest in Newfoundland and Labrador saw a decrease in 2018, in comparison to 2017. The number of seals harvested totaled 59,554, representing a decline of 28 per cent in comparison to 82,721 seals harvested in 2017. The associated landed value of the Newfoundland and Labrador seal harvest decreased 25 per cent to \$1.5 million.



Harp Seal Landings

Newfoundland and Labrador

Landed Volume and Value Newfoundland and Labrador

	2017 Revised		2018 Preliminary		Comparison	
	Volume	Value	Volume	Value	Volume	Value
Species Group	(tonnes)	(\$000's)	(tonnes)	(\$000's)		
Snow Crab	33,605	\$325,261	28,062	\$295,030	-16%	-9%
Shrimp	45,768	\$215,869	44,696	\$222,337	-2%	3%
Lobster	2,881	\$44,147	3,150	\$43,607	9%	-1%
Sea Cucumber	3,707	\$4,069	5,543	\$6,085	50%	50%
Scallops	1,503	\$3,447	591	\$1,447	-61%	-58%
Other Shellfish	15,242	\$39,488	17,771	\$45,799	17%	16%
SHELLFISH	102,706	\$632,282	99,813	\$614,306	-3%	-3%
Turbot	9,791	\$55,471	10,457	\$57,477	7%	4%
Cod	20,747	\$30,734	16,184	\$23,401	-22%	-24%
Flounders	8,123	\$11,523	8,982	\$12,275	11%	7%
Redfish	5,286	\$9,619	6,283	\$10,911	19%	13%
Halibut	822	\$8,483	814	\$8,421	-1%	-1%
Haddock	554	\$1,184	229	\$468	-59%	-60%
Pollock	542	\$446	342	\$263	-37%	-41%
Hake	314	\$291	346	\$320	10%	10%
Skate	421	\$100	915	\$219	117%	118%
Other Groundfish	55	\$9,325	56	\$4,648	2%	-50%
GROUNDFISH	46,655	\$127,176	44,608	\$118,402	-4%	-7%
Capelin	21,862	\$6,939	27,889	\$8,844	28%	27%
Herring	21,303	\$7,609	13,772	\$4,919	-35%	-35%
Mackerel	2,653	\$1,749	5,626	\$3,708	112%	112%
Other Pelagics	142	\$957	50	\$432	-65%	-55%
PELAGICS	45,960	\$17,253	47,337	\$17,903	3%	4%
Seals (Number)	82,721	\$2,005	59,554	\$1,497	-28%	-25%
TOTAL	195,321	\$778,716	191,758	\$752,108	-2%	-3%

Note:

- Species components may not sum to total due to independent rounding.

- The values of flounders may be understated as they may not be representative of port prices.

- Total volume does not include the number of seals

- Data prepared January 4, 2018

Source: DFO; FLR

Special Feature: Canadian Council of Fisheries and Aquaculture Ministers' Meeting



December 4-5, 2018, the Canadian Council of Fisheries and Aquaculture Ministers (CCFAM) met in St. John's, Newfoundland and Labrador to discuss shared priorities and goals to support the sustainable growth of Canada's marine resources.

The Honourable Gerry Byrne, Minister of Fisheries and Land Resources for Newfoundland and Labrador, co-chaired the meeting, along with the Honourable Jonathan Wilkinson, Minister of Fisheries, Oceans and the Canadian Coast Guard. Also in attendance for day one of the meeting were national and provincial Indigenous leaders.

Topics addressed during the two day meeting included seafood market development and trade opportunities in both the wild capture fishery and aquaculture sectors. Ministers renewed their commitment to develop new trade opportunities for Canadian seafood products in new markets resulting from recently established bilateral and multi-lateral trade agreements. CCFAM members recognized challenges such as marine debris, plastic pollution and climate change impacting Canada's marine and freshwater bodies of water. It was agreed that greater collaboration is needed among Indigenous communities, industry, not-for-profit organizations, provincial and federal governments, and others to ensure that these challenges are addressed to sustain productivity for future generations. Specifically, Ministers discussed the need to combat aquatic invasive species, such as green crab and zebra mussels, and pursue a more inclusive process on marine conservation, which seeks a balance between ocean protection and sustainable economic diversification.

Aquaculture was also a key topic of discussion. Outcomes included directing officials to work together to clarify and improve regulatory oversight and consistency through the implementation of the CCFAM Aquaculture Development Strategy, including the development of federal legislation that respects federal, provincial and territorial jurisdiction.

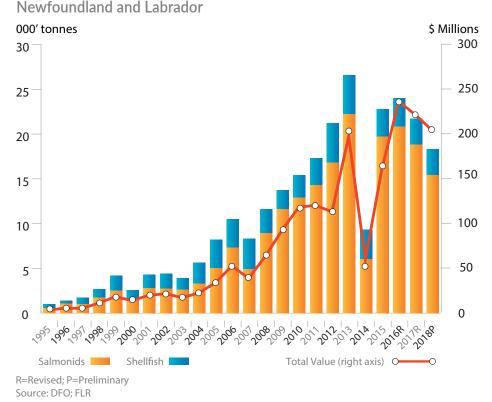




Aquaculture

Aquaculture production and value was lower in 2018. Production volume was 17,978 tonnes in 2018, down 17 per cent from 21,712 tonnes in 2017. This was the result of lower salmonid production. The corresponding market value decreased eight per cent to \$204 million, down from \$221 million in 2017.

Aquaculture Production Newfoundland and Labrador



Salmonids

Atlantic salmon is the major commercial salmonid species in the province, with a limited amount of steelhead trout produced. In 2018, there were 88 commercial salmonid site licences, covering a combined area of 2,500 hectares. The map on page 54 shows licensed aquaculture sites by sector.

Salmonid production decreased 20 per cent to 15,107 tonnes in 2018. The decrease in production is largely due to impacts from weather events, early harvesting activity and Infectious Salmon Anaemia virus in 2017. The value of salmonid production decreased eight per cent to \$192 million. It is anticipated that salmonid production will exceed 50,000 tonnes by 2022, as industry further develops and expands salmonid operations in the province.





Shellfish

In Newfoundland and Labrador, the blue mussel is the main shellfish aquaculture species. In 2018, there were 47 licensed commercial shellfish sites that covered a combined area of 3,967 hectares. See the map on page 54 for the location of these sites.

The production volume of shellfish was 2,871 tonnes in 2018, on par with 2017. The corresponding value decreased five per cent to \$12 million, due to unfavourable exchange rates in 2018. It is projected that mussel production will exceed 10,000 tonnes by 2022. The major mussel producers of the province have plans to expand operations by utilizing existing leased water and seeking additional space.

Special Feature: Salmon Aquaculture Expansion

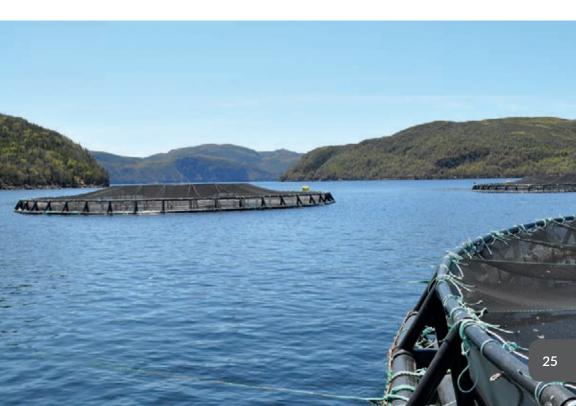
As a part of **The Way Forward**, the Provincial Government committed to double employment and production by 2022. Through this initiative, the government released **The Way Forward on Aquaculture: Sector Work Plan** (Work Plan) in September 2017, aimed at cultivating the conditions required to foster new and expanding aquaculture business activity by pursuing opportunities to support sector growth. In 2018, the Department of Fisheries and Land Resources announced investments in the salmon aquaculture sector from two international aquaculture producers.

Marine Harvest Canada East (MOWI Canada East), the world's largest salmon aquaculture producer, employs over 12,000 people in 24 countries. MOWI Canada East invested \$15 million to purchase Gray Aqua Group Ltd.'s assets in Newfoundland and Labrador (NL) and New Brunswick (NB). This purchase, finalized in late 2017, included a hatchery in NB, sites in NB and NL, and a processing plant in NL. The company further invested in this province with the purchase of Northern Harvest Sea Farms Ltd., a \$315 million deal finalized in July 2018. The purchase included 33 farm sites in the province and a hatchery in Stephenville. The company has indicated its intention to expand operations through full utilization of its farming assets along the southern coast of Newfoundland and Labrador.

In September 2018, Grieg NL Ltd. (Grieg NL) announced a \$250 million aquaculture project in Placentia Bay. The Government of Newfoundland and Labrador will provide repayable financial assistance of up to \$30 million through the Aquaculture Capital Equity Program to support development. Provincial support will complement a \$10 million repayable federal investment made through the Atlantic Canada Opportunities Agency's Business Development Program. The company plans to invest more than \$210 million in the project, including the development of a hatchery and land-based smolt production facility as well as sea-based operations. Grieg NL is partnering with a local company, Ocean Choice International, to accommodate processing requirements for the project. The project is expected to generate more than 830 new jobs once full production is reached. This estimate is based on the company's expectation that the project will generate approximately 445 direct jobs at Grieg NL's growing and processing facilities, and approximately 385 other jobs in affiliated sectors. A Provincial Government economic impact assessment estimated that this project will generate \$33 million in labour income and \$82.5 million in gross domestic product annually, when fully operational.

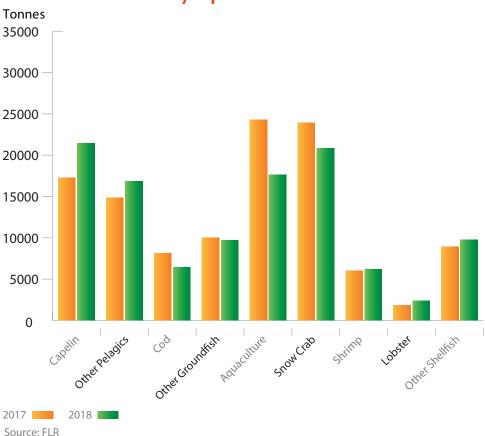
These projects will make Newfoundland and Labrador the largest aquaculture producer in eastern Canada, and second only to British Columbia within Canada. The projects directly align with the mandate of the Cabinet Committee on Jobs under the Way Forward. Employment within the provincial aquaculture industry supports the creation of significant spin-off employment opportunities in processing, transportation, service and supply.

These projects will more than double the current employment levels in the provincial aquaculture industry, and assist the Provincial Government in achieving a strong, diversified provincial economy and meeting food self-sufficiency targets as set out in The Way Forward.



Production Overview

During 2018, there were 88 active fish processing plants, slightly lower than 89 in the previous year. Of these facilities, 69 were primary, two were secondary, five were aquaculture, and 12 were in-province retail establishments. See the map on page 53 for the location of these plants.



Production of Key Species





Shellfish

Shellfish production, which includes snow crab, clam, lobster, sea cucumber, sea urchin, whelk and shrimp, accounted for 35 per cent of the total production volume in 2018. Overall, shellfish production decreased four per cent to 39,169 tonnes, slightly lower from 40,674 tonnes reported in 2017. The decrease is mainly attributed to quota reductions for snow crab.

Groundfish

Groundfish production in 2018, contributed to 15 per cent of the overall production volume in Newfoundland and Labrador. Total groundfish production decreased 11 per cent to 16,110 tonnes due to lower catches of cod. In 2017, 18,150 tonnes was reported.

Pelagics

Pelagics production accounted for 34 per cent of the total production volume in 2018. Total pelagics production volume increased by 19 per cent to 38,255 tonnes due to higher landings of capelin and mackerel. In 2017, 32,131 tonnes was reported.

Aquaculture

Aquaculture production accounted for 16 per cent of the total final production volume in 2018. The final processing volume of aquaculture products decreased 27 per cent to 17,629 tonnes, mainly the result of a decrease in the production of Atlantic salmon. In 2017, 24,278 tonnes was reported.



Market Overview

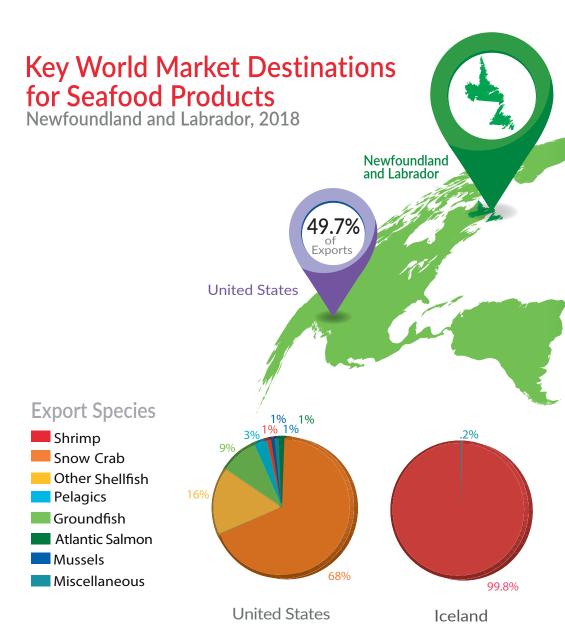
Newfoundland and Labrador's seafood products are exported to more than 40 countries around the globe. From January to November 2018, the province's seafood industry exported products valued at \$860 million, down five per cent from the same period in 2017. The volume of seafood exports increased five per cent to 90,696 tonnes.

The United States remains the largest export market for Newfoundland and Labrador fish and seafood products, representing 50 per cent of the export value in the January to November 2018 period. China was the second largest export market, representing 24 per cent of export value. Other key markets, in terms of export value, included Denmark and the United Kingdom at four per cent each and Iceland and Japan at three per cent each. Combined, these markets represented over 87 per cent of the province's total value of exports.

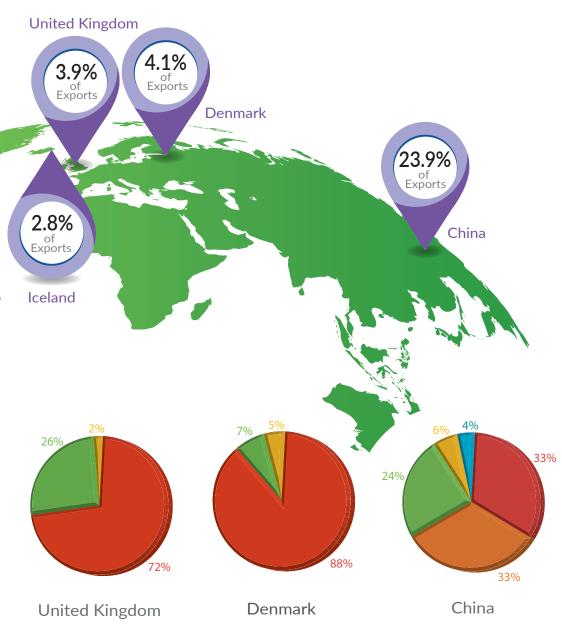
The United States continued to be a preferred export destination due to strong consumer demand and proximity to market. There is a continued emergence of China as a prominent market for seafood consumption and e-commerce has opened up significant potential for seafood sales.

In 2018, the average currency exchange for the Canadian dollar weakened against the United Kingdom British pound (GBP), Euro, and Japanese Yen. This means that these trading nations pay less for Canadian products in their respective currencies. The average Canadian dollar exchange rate for the United States dollar remained relatively on par with 2017. See the chart on page 34 for key foreign exchange rates.





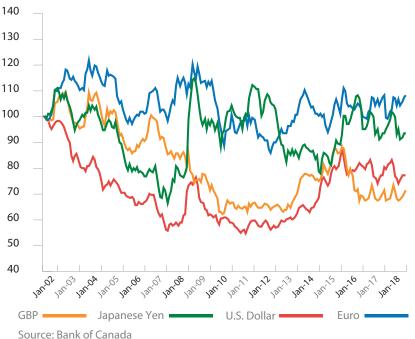
Note: Each pie chart represents the distribution of products within the identified country based on export value. * January to November 2018.



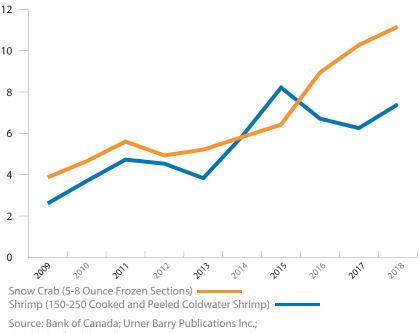
Source: Statistics Canada

Selected Foreign Exchange Rates

Exchange Rate Against Canadian Dollar (January 2002=100)



Average Market Prices for Snow Crab and Shrimp CAD\$/Ib.



Gemba Seafood Consulting



Snow Crab

Snow crab was the most valuable seafood export from the province in 2018, valued at \$384 million for the first 11 months of the year, which is down five per cent from the same time period in 2017. The volume of exported snow crab decreased 16 per cent to 15,866 tonnes. The United States remained the largest export destination for snow crab, accounting for 75 per cent of export value, with China following at 18 per cent. The average market price for five to eight ounce snow crab sections increased nine per cent to US\$8.61 per pound in 2018, up from US\$7.91 per pound in 2017. See the chart on page 34 for average market prices for snow crab.



Shrimp

The volume of shrimp exports decreased 21 per cent in the first 11 months of 2018, to 26,964 tonnes compared to 34,204 tonnes for the same period in 2017. The value of shrimp exports was \$192 million for the same period, down 19 per cent from the first 11 months of 2017. The key markets for cooked and peeled shrimp, by value, were the United Kingdom (42 per cent), Denmark (39 per cent), and the United States (12 per cent). The major markets, by value, for shell-on, frozen-at-sea shrimp were China (48 per cent), Iceland (17 per cent), and Denmark (seven per cent).

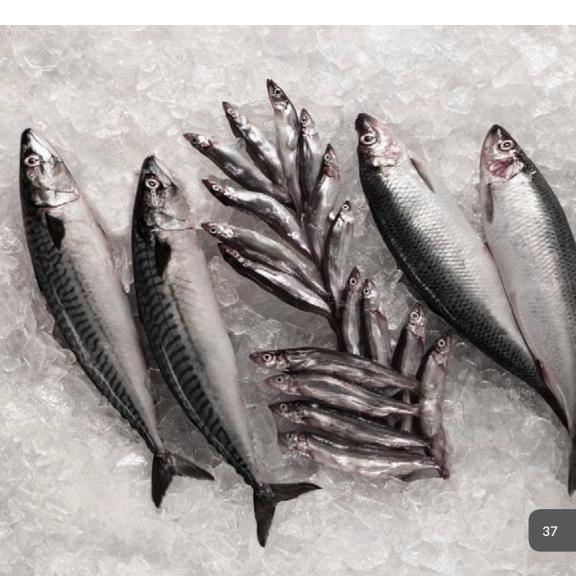
Average market prices for cooked and peeled shrimp have been increasing since mid-2017. The average market price for cooked and peeled 150-250 count coldwater shrimp (the most representative category for the Newfoundland and Labrador shrimp fishery) was approximately \$7.50 per pound in 2018, up 21 per cent from 2017, according to Gemba Seafood Consulting. See the chart on page 34 for average market prices for shrimp.

Groundfish

Cod exports were valued at \$29 million for the first 11 months of 2018, up 11 per cent from the same period in 2017. The United States and the United Kingdom were the largest export destinations for Newfoundland and Labrador cod, representing 44 per cent and 30 per cent of total cod export value, respectively. Turbot is the most valuable groundfish species exported from this province. In the first 11 months of 2017, export value was \$70 million with the main destinations being China, Japan, and Vietnam.

Pelagics

From January to November 2018, there was a seven per cent decrease in export volume and five per cent decrease in export value for major pelagic species, over the same period in 2017. The value of capelin exports decreased three per cent to approximately \$24 million. China was the largest market for capelin, accounting for 35 per cent of export value, followed by the United States at 25 per cent, and Taiwan at 19 per cent. Mackerel landings increased in 2018, resulting in exports valued at \$2 million for the first 11 months of 2018, an increase of 145 per cent compared to the same period in 2017. Herring exports decreased to \$8 million, down 21 per cent relative to the January to November period of 2017. The largest export market for herring was the United States, representing 88 per cent of the export value.



Special Feature: Atlantic Fisheries Fund

In March 2017, the Minister of Fisheries, Oceans, and the Canadian Coast Guard announced the establishment of the Atlantic Fisheries Fund (AFF). The seven-year, cost-shared (70/30) agreement was signed between the Government of Canada and the Atlantic provinces, with a \$325 million federal contribution.

The AFF was developed to support innovation in the seafood sector in the four Atlantic provinces. Funding from the program is aimed at driving sector innovation to better meet growing market demands for sustainably sourced, high-quality products.

In 2018, 73 projects with an AFF contribution of over \$19.2 million were announced for Newfoundland and Labrador.



Harvesting Sector – More than \$4.3 million for 65 cod projects throughout the province, focusing on commercial and stewardship fisheries. Projects are focused on improving the quality of landings through the adoption of harvesting and on-board handling technologies for inshore groundfish fisheries.

Processing Sector – Over \$4.6 million for five projects throughout the province. Projects focus on cutting-edge technology, automation, and improving quality and productivity in the processing sector.

Aquaculture Sector – More than \$1.5 million for four projects focused on improved technology and increased aquaculture research to improve sustainability.

Science Partnerships – Over \$4.3 million for a five-year scientific research project focused on filling key knowledge gaps to improve stock assessments, contribute to fisheries certification, and inform strategies for managing the impacts of climate and competitiveness changes.

Innovation/Research and Development – \$4.5 million for a multi-year applied research and development project focused on driving innovation in the seafood sector by linking the demands of industry to the capacities of universities.

These investments target the inshore harvesting, shellfish and finfish aquaculture, and processing sectors to support the acquisition of innovative harvesting, handling, and production technologies and the latest generation of seafood processing equipment. In addition, investments focus on research and development, driving innovation and filling key knowledge gaps to improve our seafood sector for the future.

On December 5, 2018, the Canadian Fish and Seafood Opportunities Fund was announced by the Honourable Gerry Byrne, Minister of Fisheries and Land Resources and the Honourable Jonathan Wilkinson, Minister of Fisheries, Oceans and the Canadian Coast Guard. The \$43 million national program is focused on promoting market access and development for the seafood industry, thereby expanding seafood exports, increasing employment and supporting coastal and inland communities.

Resource Status

Management measures for commercial fish stocks, including the TAC, are established and regulated by the Federal Government through DFO. Fish stocks that straddle Canada's 200-mile limit are managed by NAFO.

An environmental shift over the past two decades appears to be having a notable impact on the province's marine ecosystem. While some shellfish stocks have declined in recent years, particularly snow crab and shrimp, many groundfish stocks have increased. On the Grand Banks, the yellowtail flounder and redfish stocks are considered to be fully recovered. Other groundfish stocks continue to show promising signs of rebuilding, particularly redfish off the south coast of the island and in the Gulf of St. Lawrence.



Snow Crab

The overall snow crab resource continued to decline in the province in 2018. The total TAC for the snow crab fishery in 2018 was set at 29,390 tonnes, a reduction of approximately 17 per cent from the TAC of 2017. The quota was reduced by 24 per cent in NAFO Divisions 3LNO and 50 per cent in 4R3Pn. The quota was increased by two per cent in NAFO Division 3K, increased by 19 per cent in NAFO Division 3Ps, and remained unchanged in NAFO Division 2HJ.

Northern Shrimp

The northern shrimp resource extends from the Grand Banks to the Davis Strait. Biomass estimates of northern shrimp in the southern areas have declined over the past 10 years from historically high levels. The TAC in SFA 6 decreased by 16 per cent from 10,400 tonnes in 2017, to 8,730 tonnes in 2018. Northern shrimp in SFA 7, which is managed by NAFO, has been under a directed fishing moratorium since 2015 due to a continued decline in the resource.

Gulf Shrimp

The Gulf of St. Lawrence shrimp fishery is managed in four separate areas. The Newfoundland and Labrador fleet fishes exclusively in the Esquiman Channel (NAFO Division 4R). The TAC in the Esquiman Channel was reduced from 7,012 tonnes in 2017 to 5,960 tonnes in 2018. The Newfoundland and Labrador-based fleet, which is allocated 65 per cent of the TAC in the Esquiman Channel, harvested the full quota of 3,879 tonnes in 2018.

Cod

The northern cod stock (NAFO Divisions 2J3KL) consists of an inshore and offshore component. The stock has increased over the past decade, but remains well below historic levels. A limited fishery was conducted from 1998 to 2002, and again from 2006 to 2018. The management plan for the northern cod stewardship fishery in 2018 included weekly landing limits and resulted in a harvest of about 9,000 tonnes.

Cod in NAFO Division 3Ps is located off the south coast of the province. In recent years, the TAC for 3Ps cod has been reduced from 13,000 tonnes in 2016 to 5,980 tonnes in 2018.

The northern Gulf of St. Lawrence cod stock (NAFO Divisions 3Pn4RS) remains below its historic level. The stock increased slightly in 2015 and 2016 and, in accordance with the rebuilding plan for this stock, the TAC was increased from 1,500 tonnes in 2016 to a two-year TAC of 3,185 tonnes for 2017 and 2018. Newfoundland and Labrador is allocated 72 per cent of the inshore quota for this stock.

Redfish

Unit 1 redfish is located off the west coast of Newfoundland in the Gulf of St. Lawrence. Following a stock decline, redfish in Unit 1 was placed under moratorium in 1995. Since 1999, an index fishery of 2,000 tonnes has taken place. In 2018, an additional 2,500 tonnes was made available for experimental fishery projects.

Redfish in Unit 2 is located off the south coast of Newfoundland and on the eastern Scotian Shelf. Since 2006, the TAC for Unit 2 redfish has been set at 8,500 tonnes. Landings over the past number of years have been lower than the TAC due to reduced fishing effort and availability of fish to the commercial fishery.





The resource outlook for redfish in Units 1 and 2 is very encouraging due to evidence of large numbers of young fish, which is expected to lead to a rapid increase in spawning biomass in the coming years. DFO is developing a management strategy for Units 1 and 2 redfish, together with industry and provincial representatives from Atlantic Canada and Quebec, to guide decision-making for these stocks going forward.

NAFO-Managed Groundfish Stocks

2+3KLMNO Turbot (Greenland Halibut)

The TAC for Greenland halibut was set at 14,799 tonnes in 2017. NAFO adopted a new management plan for Greenland halibut in 2017, which included management objectives and harvest control rules to guide decisionmaking for this stock over a six-year period. In accordance with the plan, the TAC was increased to 16,500 tonnes in 2018 and remained relatively unchanged in 2019 at 16,521 tonnes. Canada's allocation of the TAC is 38 per cent, which is mainly fished by vessels based in Newfoundland and Labrador.

3LNO Yellowtail Flounder

The yellowtail flounder resource in NAFO Divisions 3LNO is considered to be fully recovered to levels equivalent to those of the 1980s. The TAC has been set at 17,000 tonnes since 2009 and will remain at this level in 2019. Canada's share of this stock is 97.5 per cent, which is harvested by offshore vessels based in Newfoundland and Labrador.

3NO Witch Flounder

The witch flounder stock in NAFO Division 3NO was closed to directed fishing in 1995 and remained under moratorium for two decades. The stock has grown in recent years and re-opened to directed fishing activities in 2015 with a TAC of 1,000 tonnes. The TAC was increased to 2,172 tonnes in 2016 and to 2,225 tonnes in 2017. Due to a recent decline in the stock, the TAC was reduced to 1,116 tonnes in 2018, and remains relatively unchanged in 2019 at 1,175 tonnes. Canada's share of 3NO witch flounder is 60 per cent, which is mainly harvested by offshore vessels based in Newfoundland and Labrador.

3LN Redfish

The redfish fishery in NAFO Division 3LN was under moratorium from 1998 to 2009. The stock has since increased to a healthy level and the fishery was reopened in 2010 with a TAC of 3,500 tonnes. Under the current management plan, the TAC was set at 14,200 tonnes for 2017 and 2018, and increased to 18,100 tonnes in 2019. Canada's share of this stock is 42.6 per cent, which is mainly harvested by offshore vessels based in Newfoundland and Labrador.



30 Redfish

The TAC for the redfish resource in NAFO Division 3O has been set at 20,000 tonnes since 2005 and will remain at this level in 2019. Canada's share of 3O redfish is 30 per cent. Harvest levels associated with this stock are low due to the size of the fish and available fishing grounds.

Other Stocks

Other straddling groundfish stocks such as 3NO cod, 2J3KL witch flounder, and 3LNO American plaice were under moratoria in 2018 and will remain closed to direct fishing in 2019.

Total Allowable Catch (Tonnes)

Newfoundland and Labrador 2018

Species Group	2017R	2018P
GROUNDFISH		
3Ps Cod (15.6% allocated to St. Pierre et Miquelon, France)	6,500	5,980
4RS3Pn Cod (Newfoundland and Labrador and Québec)	3,185	3,185
Redfish Unit 2 (3.6% allocated to St. Pierre et Miquelon, France)	8,500	8,500
2+3KLMNO Turbot (Canada 38%)	14,799	16,500
3LNO Yellowtail Flounder (Canada 97.5%)	17,000	17,000
3NO Witch Flounder (Canada 60%)	2,225	1,116
3LN Redfish (Canada 42.6%)	14,200	14,200
30 Redfish (Canada 30%)	20,000	20,000
PELAGICS		
Herring (Newfoundland and Labrador stocks and 4R)	34,842	34,842
Mackerel (Atlantic-Wide)	10,000	10,000
Capelin (Newfoundland and Labrador stocks and 4R)	42,811	27,828
SHELLFISH		
Crab	35,419	29,390
Gulf (4R) Shrimp (Newfoundland and Labrador allocation)	4,564	3,879
Northern Shrimp		
- NL Inshore (SFA 6)	7,088	5,927
- Canadian offshore/special allocations (SFAs 0 to 6)*	70,682	74,157
*Total includes both Pandalus borealis and Pandalus montagui		

*Total includes both Pandalus borealis and Pandalus montagui Source: DFO, FLR



Departmental Initiatives

In 2018, the department worked with stakeholders on a number of ongoing and new initiatives aimed at fostering sustainable fishing and aquaculture industries that achieve an optimum economic contribution to Newfoundland and Labrador. The following highlights the department's key initiatives.

Aquaculture

- In 2018 FLR continued work on the initiatives outlined in The Way
 Forward on Aquaculture: Sector Work Plan, announced in September
 2017. FLR is the lead or co-lead on 13 of the 28 initiatives in the
 document.
- FLR has completed a comprehensive review of aquaculture policies, including moving to a multi-year licence, and are in the process of modernizing the provincial aquaculture licensing policy and procedures manual.
- FLR completed a review of the provincial licence cancellation policy in consultation with industry.
- FLR has worked in consultation with federal counterparts at Transport Canada to review and update the site marking process to reflect vessel size and site parameters.

Innovation and Development

- The Atlantic Fisheries Fund is a federal-provincial fund available over a seven-year period, commencing in 2017, aimed at enhancing innovation, infrastructure and science partnerships in the provincial seafood sector.
- The Seafood Innovation and Technology Program (SITP) invested \$3.5 million for 113 projects before the two-year program concluded in March 31, 2018.

Marketing

- FLR and the provincial seafood industry participated in key international seafood trade shows, including Seafood Expo North America (SENA), Boston, Massachusetts; Seafood Expo Global (SEG), Brussels, Belgium; and the China Fisheries and Seafood Expo (CFSE), Qingdao, China. The department organized other promotional activities around the shows, including the Newfoundland and Labrador Seafood Industry Reception at SENA, and participated in the organizing of similar Canadian Networking events at SEG and CFSE.
- In collaboration with other Atlantic provinces and the Canadian Trade Commissioner Service, FLR organized promotional and matchmaking events at trade shows in the United Kingdom, Japan, and China.
 - In London, UK, marketing staff and their Atlantic provincial counterparts organized the Atlantic Canada Seafood Showcase, an event targeting foodservice buyers, chefs, and food writers to allow them to work hands-on with a range of seafood products available from Atlantic Canada. The session included presentations from seafood companies, cooking demonstrations, and product sampling at the prestigious Billingsgate Fish Market Seafood School.
 - In Hong Kong, marketing staff partnered with other provinces, Agriculture and Agri-Food Canada and the Canadian Trade Commissioner Service on a promotion with retailer AEON. The Canadian food promotion took place in 11 stores for a ten-day period in late summer 2018. The promotion included in-store displays and print and social media promotion. Four Newfoundland and Labrador seafood products (mussels, turbot, lobster and flounder) were included in the promotion.
- In partnership with the Restaurant Association of Newfoundland and Labrador, FLR supported "From This Rock' culinary events promoting agrifood and seafood products from this province. The department also promoted seafood products at the "Perfectly Centered Culinary Festival" held in Grand Falls-Windsor.
- FLR continued to support the Newfoundland and Labrador seal industry by providing funds to the Craft Council of Newfoundland and Labrador to host events in Ottawa and St. John's to celebrate National Seal Products Day.



Outlook for 2019

The Provincial Government will continue to support the fishing and aquaculture industries in Newfoundland and Labrador, particularly through **The Way Forward**. The Fisheries Advisory Council, which was established in 2017, will focus on current and emerging strategic fisheries and aquaculture matters in the coming years. Through a collaborative stakeholder approach, the council will provide policy advice to the Provincial Government to support a sustainable and viable industry. **The Way Forward on Aquaculture: Sector Work Plan**, announced in 2017, will continue to support the growth of aquaculture in Newfoundland and Labrador.

The Newfoundland and Labrador fishing and aquaculture industries are anticipated to be positively impacted by continued growing global demand for fish and seafood products in 2019. The European Union and Asian markets have promising opportunities for the province's seafood industry, particularly given recent tariff reductions and eliminations. The Comprehensive and Progressive Agreement for Trans-Pacific Partnership is a free trade agreement between Canada and ten other countries in the Asia-Pacific region. The agreement provides preferential access to several key markets for Newfoundland and Labrador seafood, including Japan and Vietnam. The Canadian-European Union Comprehensive Economic and Trade Agreement, which came into force on September 21, 2017, effectively eliminated 99 per cent of tariffs for seafood products from the province to the European Union. In July 2018, China implemented a new round of temporary tariff cuts on hundreds of products, including a number of key species for Newfoundland and Labrador such as coldwater shrimp, capelin, mussels and turbot. It is expected that market prices for many seafood products will continue the trend of 2018 and remain high in 2019.

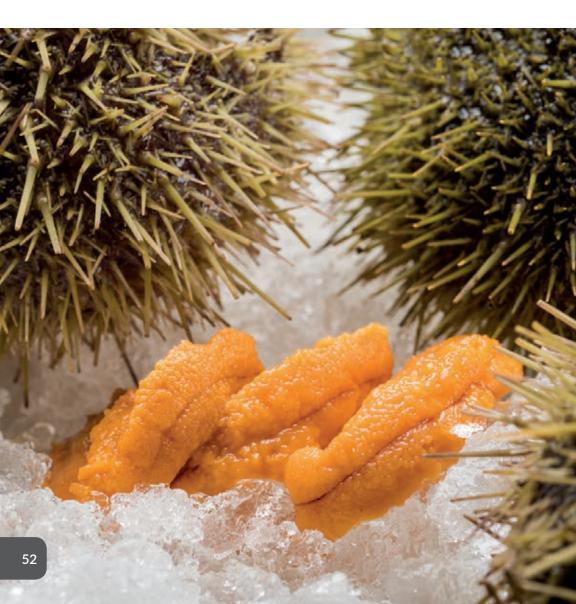


Wild Fisheries

Total fish landings in 2019 are anticipated to be relatively on par with 2018. It is anticipated that an increase in landings of groundfish, particularly in redfish and flounders, will offset lower landings of snow crab in 2019.

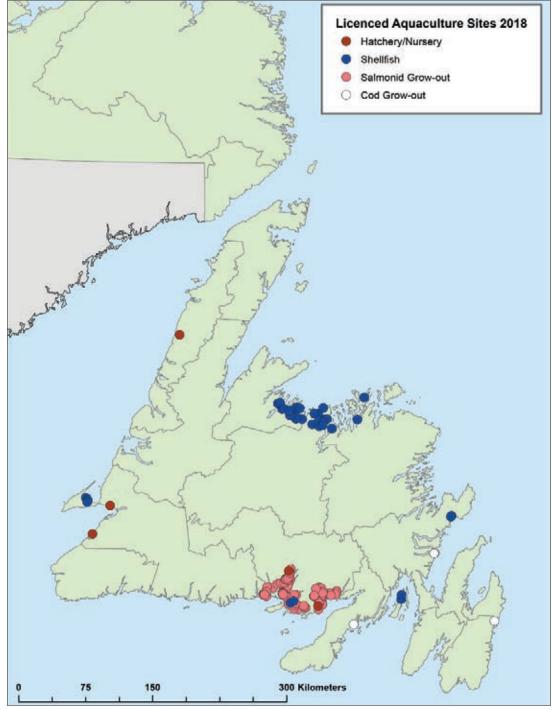
Aquaculture

The production and value of the Newfoundland and Labrador aquaculture industry is expected to rebound by 2020. Further growth in Atlantic salmon production is anticipated, reaching a new high in 2020, and surpassing 50,000 tonnes of annual production by 2022. In the shellfish sector, production in 2019 is expected to remain on par with 2018.

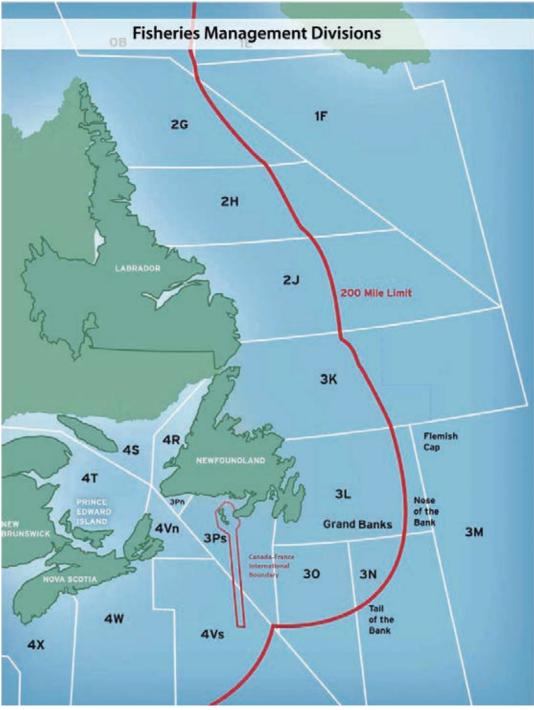




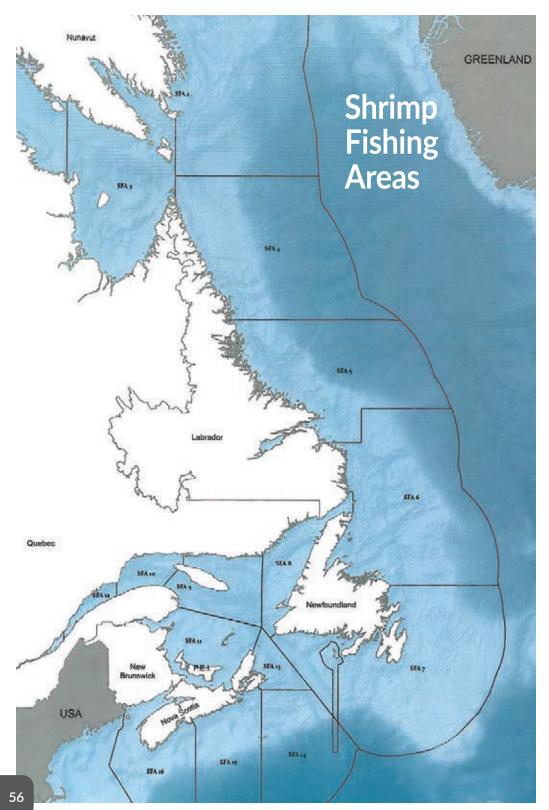
Note: Some locations may contain more than one licensed fish processing plant. Source: FLR



Source: FLR



Source: NAFO Edited by: FLR



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Photo References

- Cover Farmed Atlantic salmon, Atlantic cod, blue mussels
- 4 Lobster
- 7 Harvester
- 9 Sea Urchin, farmed Atlantic salmon, scallops
- 13 Atlantic cod
- 15 Mackerel
- 18 Canadian Council of Fisheries and Aquaculture Ministers (CCFAM)
- 19 Seafood platter
- 20 Blue mussel harvesting
- 22 Farmed Atlantic salmon
- 23 Blue mussels
- 25 Farmed Atlantic salmon aquaculture site
- 27 Farmed Atlantic salmon processing
- 28 Coldwater shrimp salad
- 29 Lobster
- 31 Family preparing snow crab
- 35 Snow crab sections
- 36 Coldwater shrimp
- 37 Mackerel, capelin, herring
- 38 Atlantic cod pot
- 40 Snow crab harvesting
- 42 Redfish with sea urchin sauce
- 43 Turbot
- 44 Redfish
- 46 Scallops, coldwater shrimp, snow crab, whelk, lobster
- 49 Seafood Expo North America
- 51 Sea cucumber
- 52 Sea urchin

Acronyms and Abbreviations

AFF	Atlantic Fisheries Fund
CCFAM	Canadian Council of Fisheries and Aquaculture Ministers
DFO	Fisheries and Oceans Canada
FLR	Department of Fisheries and Land Resources
FTA	Free Trade Agreement
NAFO	Northwest Atlantic Fisheries Organization
PFHCB	Professional Fish Harvesters Certification Board
SFA	Shrimp Fishing Area
TAC	Total Allowable Catch



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