

Seafood Industry Year in Review 2017




Newfoundland
Labrador
CANADA

Message from the Minister



As Minister of Fisheries and Land Resources, I am proud to present this year's Seafood Industry Year in Review. This document provides a comprehensive overview of our wild and farmed fisheries in 2017 and our vision for continued growth and diversification into the future.

The fishing and aquaculture industries of Newfoundland and Labrador had another successful year. The value of total fish and seafood production was \$1.3 billion in 2017, marking the third 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 16,619 people from over 400 communities in harvesting, processing, and aquaculture operations.

Through ongoing strategic investments in the province's fishing sector, our government continues to meet objectives outlined in *The Way Forward: A Vision for Sustainability and Growth in Newfoundland and Labrador*. Fostering growth in our fishing industry is a key component of this vision that will help strengthen the province's economic foundation and improve outcomes to promote a healthy and prosperous province.

As part of *The Way Forward* vision, the Provincial Government, in collaboration with the aquaculture industry, hosted an Aquaculture Industry Summit in 2017. The purpose of the Summit was to set a strategic direction to responsibly and sustainably grow the sector while creating new employment and economic activity in our rural communities.

As another initiative of *The Way Forward*, the Fisheries Advisory Council was established in 2017 and embarked on its mandate to advance current and emerging strategic fisheries and aquaculture matters. I look forward to continued meetings with the council as they inform and influence fisheries policy and programs on an ongoing basis.

Continued support from the Atlantic Fisheries Fund will also play a key role as our industry transitions to groundfish. Several enterprises have already received funding for modern equipment to produce high-value, high-quality fish and seafood products.

I look forward to working closely with the seafood sector again this coming year as we strategically position ourselves to secure maximum benefits for the people and communities in Newfoundland and Labrador who rely on the fishery for their livelihood.

Sincerely,

A handwritten signature in black ink, appearing to be 'Gerry Byrne', written in a cursive style.

Honourable Gerry Byrne, MHA
District of Corner Brook
Minister

A large, jagged iceberg floats in the middle of a deep blue ocean under a bright sky. The text 'Our COLD OCEAN Best' is overlaid on the right side of the image in a white, sans-serif font. 'Our' is smaller and positioned above 'COLD'. 'OCEAN' is the largest word, and 'Best' is below it.

Our
COLD
OCEAN
Best



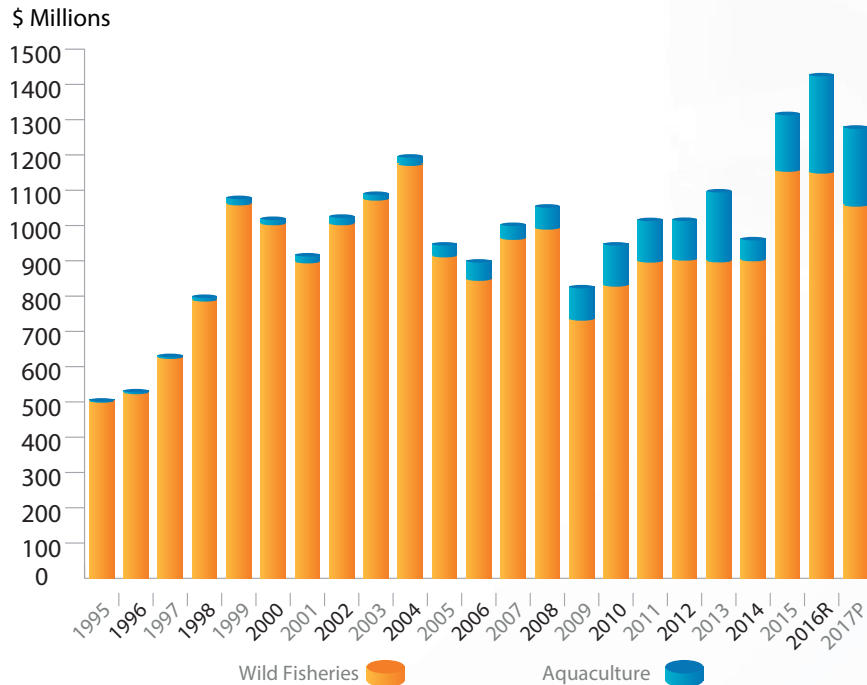
Table of Contents

6	Industry Performance
8	Wild Fisheries
19	Aquaculture
22	Special Feature: The Way Forward
24	Production Overview
29	Special Feature: International Trade Agreements
32	Market Overview
41	Resource Status
46	Departmental Initiatives
50	Outlook for 2018
53	Map of Licensed Fish Processing Plants
54	Map of Licensed Aquaculture Sites
55	Map of Fisheries Management Divisions
56	Map of Shrimp Fishing Areas
57	Contact Information
58	Photo References
59	Acronyms and Abbreviations

Industry Performance

The Newfoundland and Labrador fish and seafood industry had another successful year in 2017. The value of total fish and seafood production remained near the historical high of 2016, reaching close to \$1.3 billion, down 10 per cent from the previous year. The decline is due to a lower market value in both the commercial wild fishery and the aquaculture sector. Aquaculture represented 17 per cent of the total fish and seafood production value in 2017, in comparison to 19 per cent in 2016. The wild fisheries represented 83 per cent of the total production market value in 2017.

Production Market Value Newfoundland and Labrador



R=Revised; P=Preliminary
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 2017, particularly in rural areas of the province. The industry as a whole employed 16,619 people from over 400 communities in the province, down approximately four per cent relative to 2016. The number of registered fish harvesters remained on par with 2016, with 9,415 harvesters estimated to have registered with the Professional Fish Harvesters Certification Board (PFHCB) in 2017. Employment in the processing sector declined 10 per cent to 6,780 workers. The number of workers employed directly in the aquaculture sector is estimated to have remained the same as 2016, with 424 workers.

Seafood Industry Employment Newfoundland and Labrador

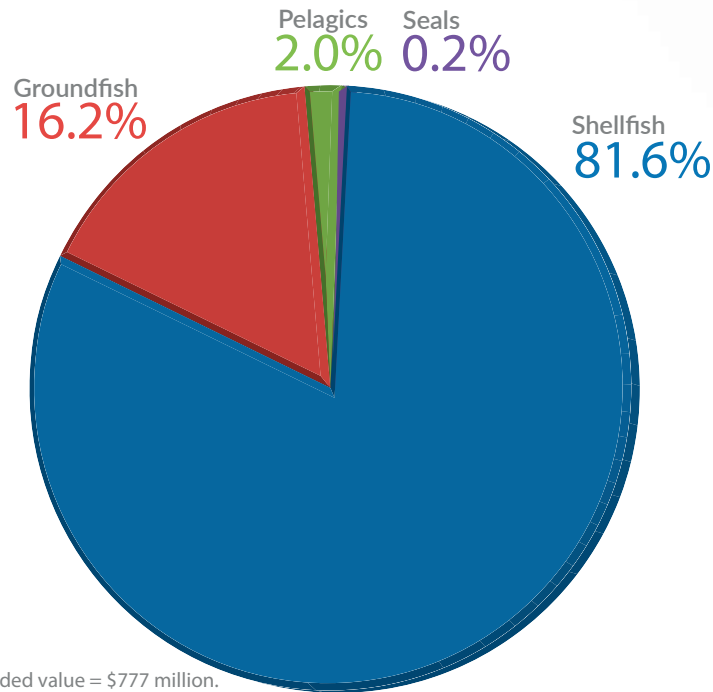
Industry Sector	2016R	2017P	% Change
Aquaculture	424	424	0
Harvesting (Wild Fisheries)	9,417	9,415	0
Processing (Aquaculture and Wild Fisheries)	7,557	6,780	-10
Total	17,398	16,619	-4

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

Wild Fisheries

The commercial fishery of Newfoundland and Labrador continues to be an important economic generator for the province. The value of landings increased four per cent to \$777 million in 2017, reaching the second highest landed value recorded in the history of the Newfoundland and Labrador fishery. This increase in value is the result of higher raw material prices for key species such as snow crab and lobster. Fish landings declined 15 per cent to 194,883 tonnes in 2017 as a result of lower pelagics landings and quota reductions in shellfish sectors. The table on page 17 provides a comparison of the volume and value of commercial fish landings for select species in Newfoundland and Labrador for 2016 and 2017.

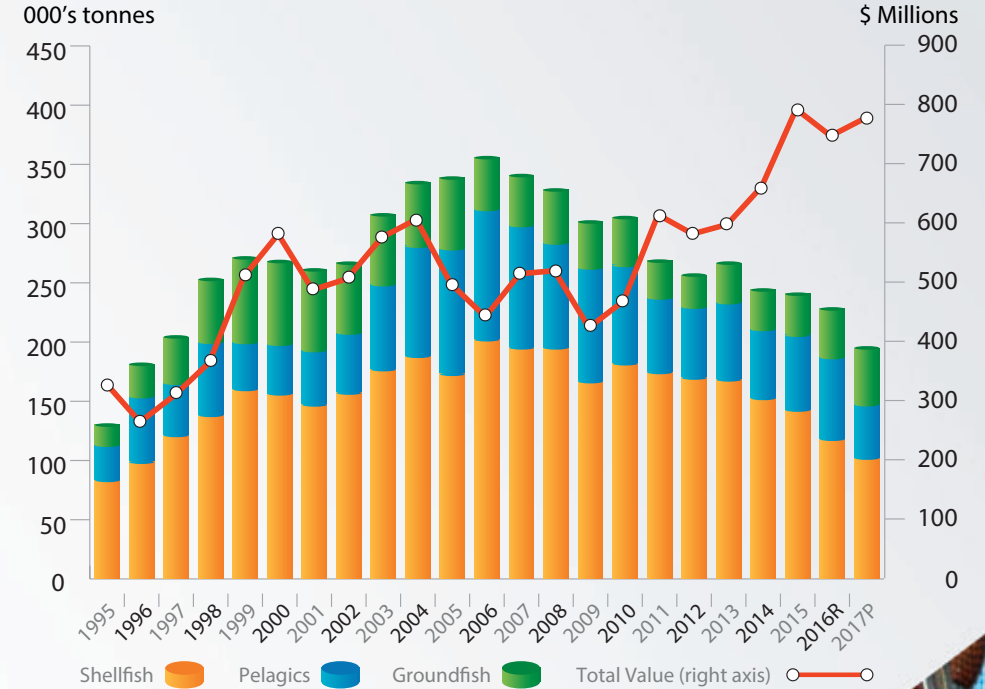
Wild Fisheries Landed Value by Species Group, 2017



Note: Total landed value = \$777 million.
Source: DFO; FLR

Fish Landings by Species Group

Newfoundland and Labrador



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



Shellfish

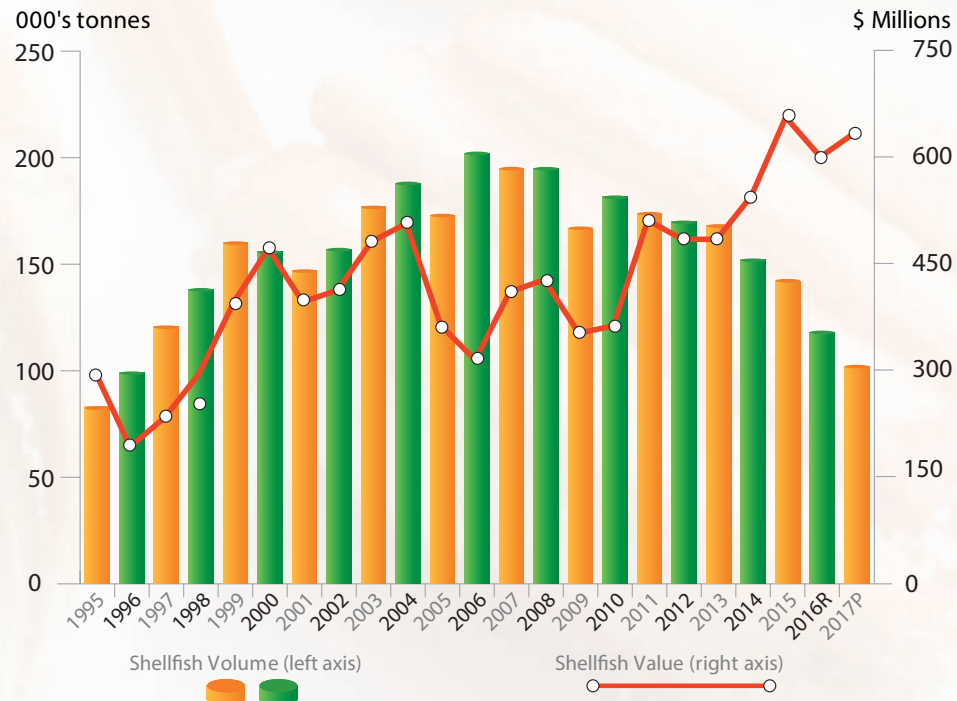
The shellfish sector continued to account for the majority of the commercial fishery in 2017, accounting for 52 per cent of total fish landings and 82 per cent of the associated value. Shellfish landings decreased 14 per cent to 101,992 tonnes in 2017 as a result of quota reductions for the snow crab and inshore shrimp fisheries. The corresponding landed value increased six per cent to \$634 million, due to higher raw material prices for snow crab and lobster.

Snow crab

Snow crab landings declined 20 per cent to 33,584 tonnes in 2017 as a result of a reduction of the Total Allowable Catch (TAC) of approximately 22 per cent. While landings were down, the corresponding landed value increased 19 per cent to \$325 million, due to higher raw material prices. The average raw material price for snow crab increased significantly from \$2.98 per pound in 2016 to \$4.39 per pound in 2017.

Shellfish Landings

Newfoundland and Labrador



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

Shrimp

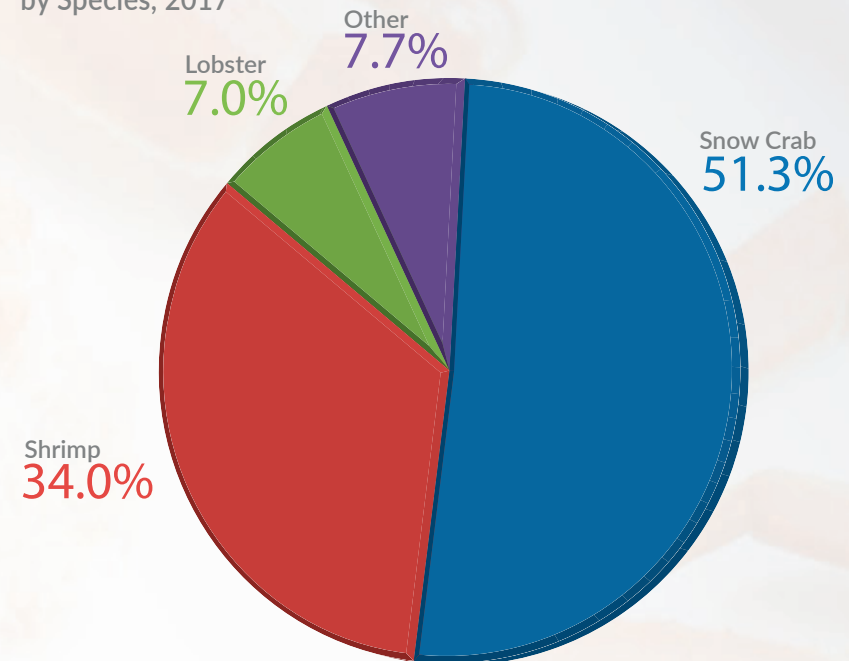
Total shrimp landings were down 12 per cent to 45,768 tonnes in 2017. This is largely due to inshore shrimp quota reductions in Shrimp Fishing Area (SFA) 6. While inshore shrimp landings declined, gulf landings remained on par with 2016 and offshore shrimp landings increased nine per cent. This increase is the result of higher catches of striped shrimp (*Pandalus montagui*) in northern areas. The total value of shrimp landings decreased seven per cent to \$216 million. In 2017, the shrimp fishery began in the summer with a minimum landed price of \$1.25 per pound for inshore and gulf shrimp, down from \$1.40 per pound for the same fishery in 2016. In the fall fishery, the minimum landed price was \$1.30 per pound, down from \$1.45 per pound in 2016. These prices were lower due to unfavourable exchange rates, high inventory in the global market, and substitution of other shrimp species.

Lobster

In 2017, lobster landings remained relatively on par with 2016, totalling 2,908 tonnes; however, the associated landed value increased 21 per cent to \$44 million, a result of higher raw material prices. The landed price for lobster averaged \$6.89 per pound in 2017, up 20 per cent from \$5.76 per pound in 2016, due to strong market prices and strong demand for lobster.

Shellfish Landed Value

by Species, 2017



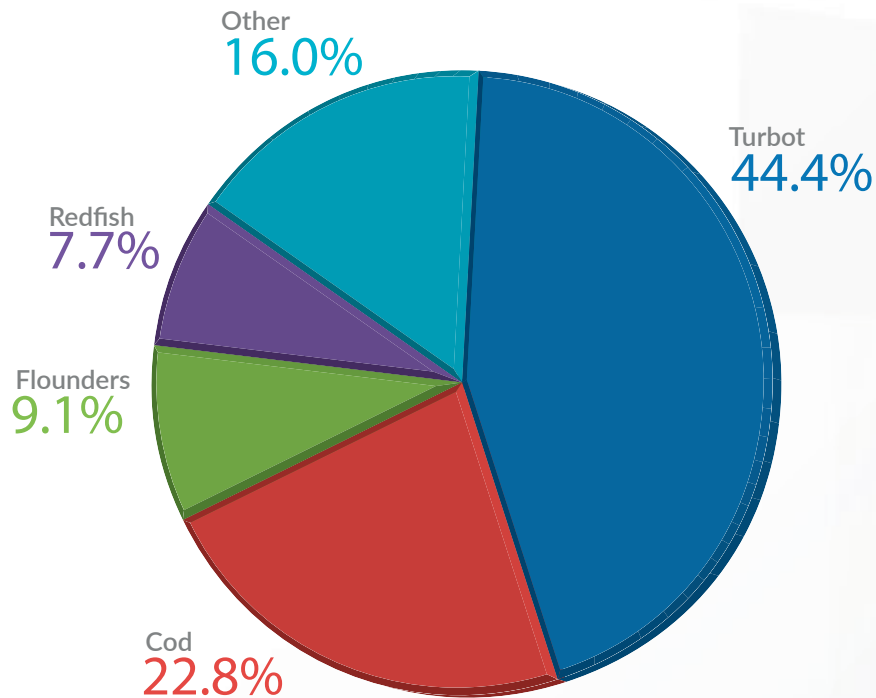
Note: Shellfish landed value = \$634 million.
Source: DFO; FLR

Groundfish

The groundfish share of the total wild fisheries landed volume and value in 2017 was 24 per cent and 16 per cent, respectively. The volume of groundfish landings increased 14 per cent to 47,306 tonnes in 2017, primarily the result of higher cod and redfish catches. Cod landings rose 28 per cent to 20,791 tonnes mainly due to higher catches in Northwest Atlantic Fisheries Organization (NAFO) Divisions 2J3KL. Redfish landings increased 68 per cent to 5,789 tonnes as a result of higher catches in NAFO Division 3LN. Landings of flounders and turbot decreased seven per cent and four per cent, respectively. The value of groundfish landings increased five per cent to \$126 million in 2017.



Groundfish Landed Value by Species, 2017



Note: Groundfish landed value = \$126 million
Source: DFO; FLR

Groundfish Landings Newfoundland and Labrador



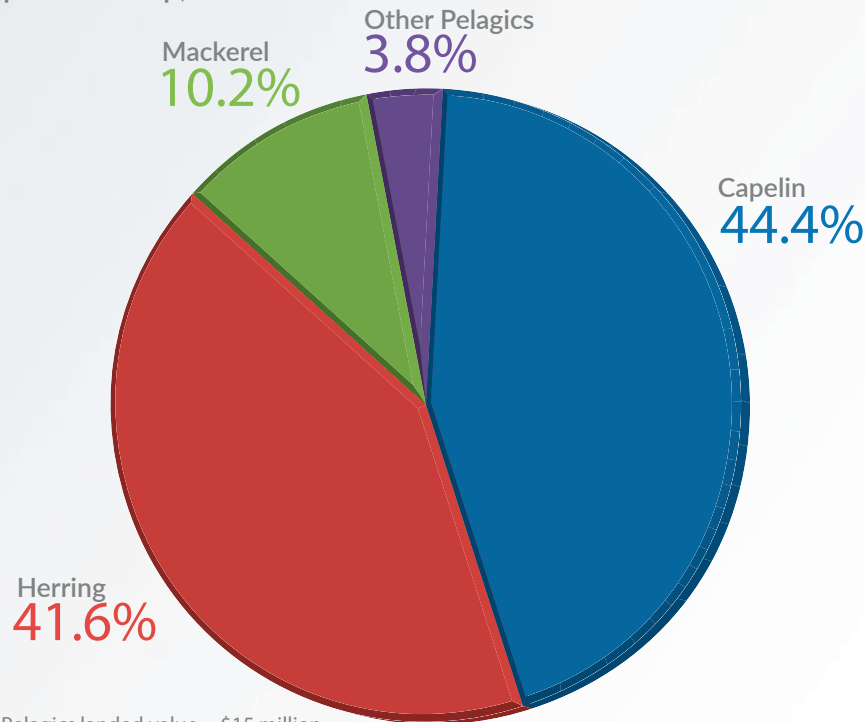
R=Revised; P=Preliminary
Source: DFO; FLR

Pelagics

Pelagics accounted for 23 per cent of total commercial fish landings and two per cent of the total value in 2017. Compared to 2016, pelagics landings decreased 34 per cent to 45,655 tonnes as a result of lower landings of capelin, herring, and mackerel. The associated landed value declined 40 per cent to \$15 million as a result of lower landings and a decline in the raw material price for capelin. Capelin landings and value decreased 40 per cent and 50 per cent respectively, to 21,871 tonnes and \$6.7 million as a result of lower availability and a lower average raw material price. Herring landings and value both declined 23 per cent, to 21,077 tonnes and \$6.3 million due to lower catches in the spring and fall fisheries. Mackerel landings and value were both down 43 per cent to 2,622 tonnes and \$1.5 million as a result of lower availability.

Pelagics Landed Value

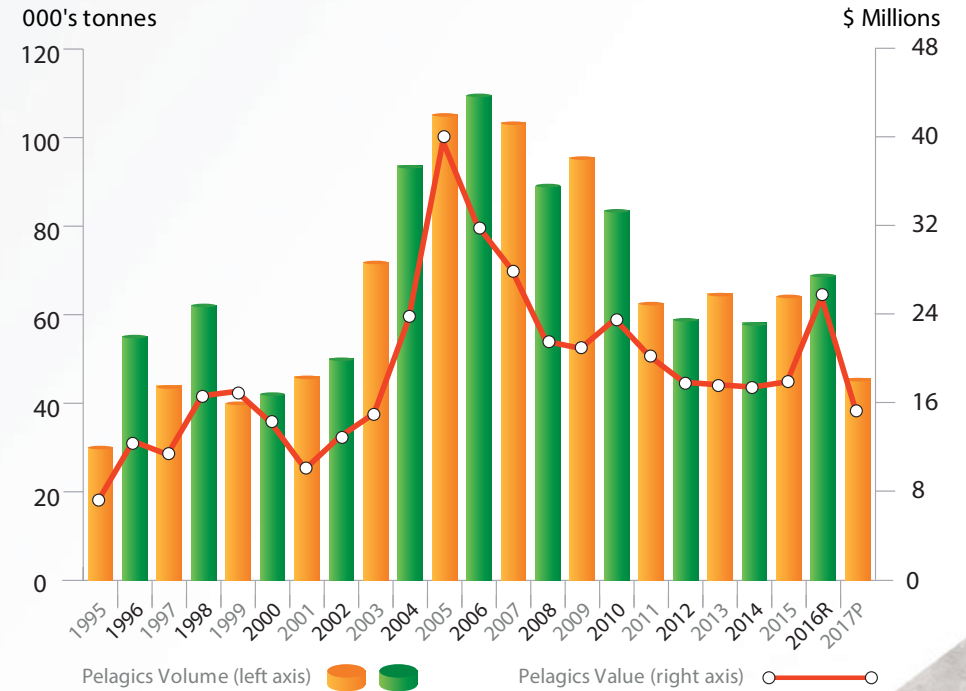
by Species Group, 2017



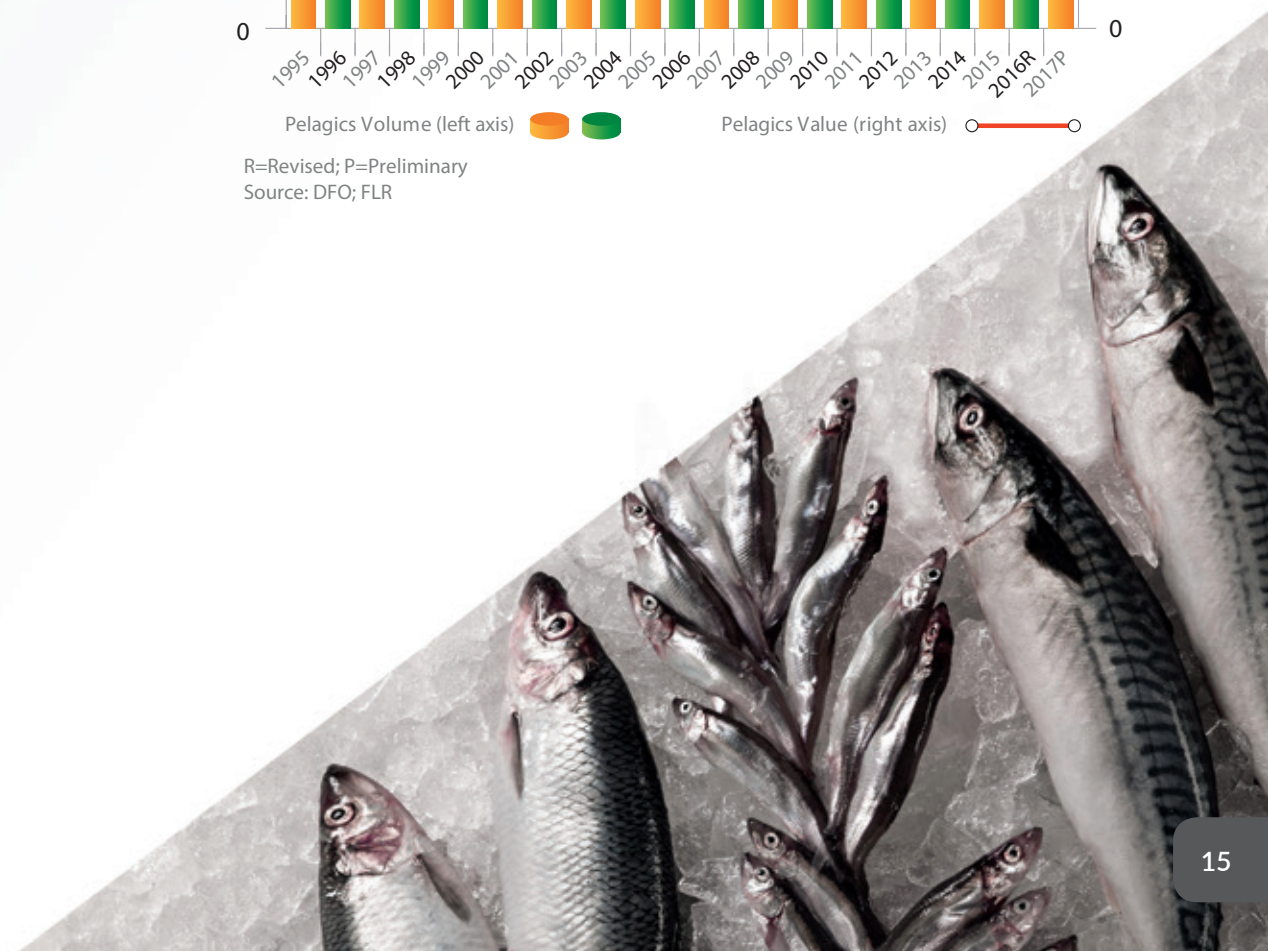
Note: Pelagics landed value = \$15 million.
Source: DFO; FLR

Pelagics Landings

Newfoundland and Labrador



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

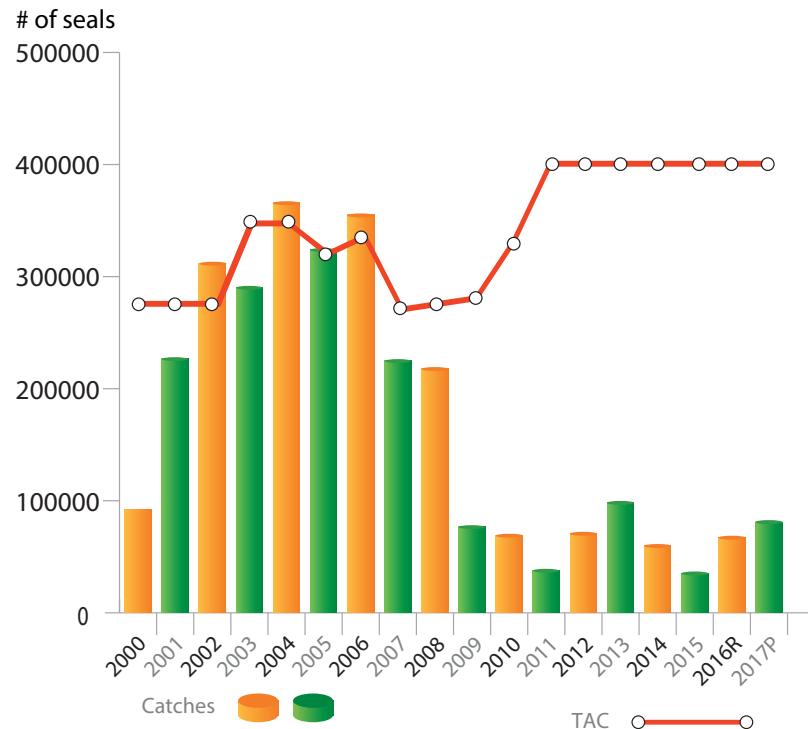


Harp seals

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 experienced a better year in 2017 in comparison to 2016, even as it continues to be challenged by market access restrictions. The number of seals harvested totalled 80,961, representing an increase of 22 per cent in comparison to 66,504 seals harvested in 2016. This was the result of increased demand from buyers. In 2017, the overall TAC for harp seals in eastern Canada was 400,000. The associated landed value of Newfoundland and Labrador seal harvest increased 22 per cent to \$2 million.

Harp Seal Landings & TAC Eastern Canada



R=Revised; P=Preliminary
Source: DFO

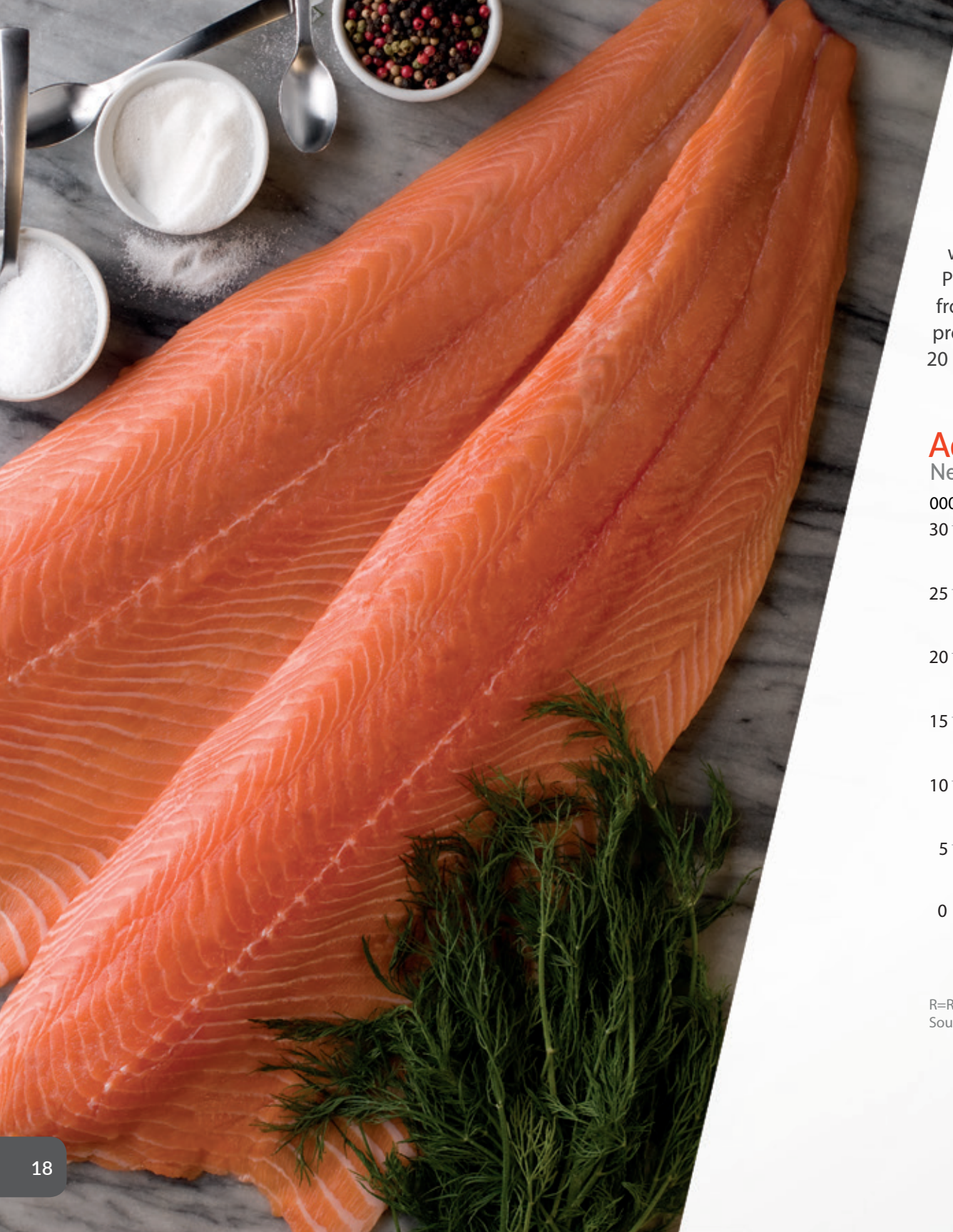
Landed Volume and Value Newfoundland and Labrador

Species	2016 Revised		2017 Preliminary		Comparison	
	Volume (tonnes)	Value (000's)	Volume (tonnes)	Value (000's)	Volume	Value
Snow Crab	41,746	\$274,012	33,584	\$325,050	-20%	19%
Shrimp	51,809	\$233,258	45,768	\$215,869	-12%	-7%
Lobster	2,878	\$36,555	2,908	\$44,168	1%	21%
Sea Cucumber	2,261	\$2,472	3,707	\$3,971	64%	61%
Scallops	1,467	\$3,532	1,457	\$3,268	-1%	-7%
Other Shellfish	17,910	\$50,475	14,498	\$41,798	-19%	-17%
SHELLFISH	118,070	\$600,303	101,922	\$634,125	-14%	6%
Turbot	10,277	\$57,086	9,825	\$55,837	-4%	-2%
Cod	16,213	\$23,370	20,791	\$28,663	28%	23%
Flounders	8,759	\$12,661	8,122	\$11,501	-7%	-9%
Redfish	3,454	\$6,796	5,789	\$9,691	68%	43%
Halibut	810	\$8,423	837	\$8,678	3%	3%
Haddock	437	\$938	564	\$1,165	29%	24%
Pollock	381	\$346	592	\$533	55%	54%
Hake	531	\$514	316	\$308	-40%	-40%
Skate	412	\$131	415	\$118	1%	-10%
Other Groundfish	121	\$9,378	56	\$9,204	-54%	-2%
GROUNDFISH	41,395	\$119,643	47,306	\$125,697	14%	5%
Capelin	36,683	\$13,504	21,871	\$6,749	-40%	-50%
Herring	27,342	\$8,198	21,077	\$6,319	-23%	-23%
Mackerel	4,633	\$2,727	2,622	\$1,543	-43%	-43%
Other Pelagics	178	\$1,062	86	\$586	-51%	-45%
PELAGICS	68,836	\$25,491	45,655	\$15,197	-34%	-40%
Seals (Number)	66,504	\$1,608	80,961	\$1,958	22%	22%
TOTAL	228,301	\$747,046	194,883	\$776,977	-15%	4%

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.

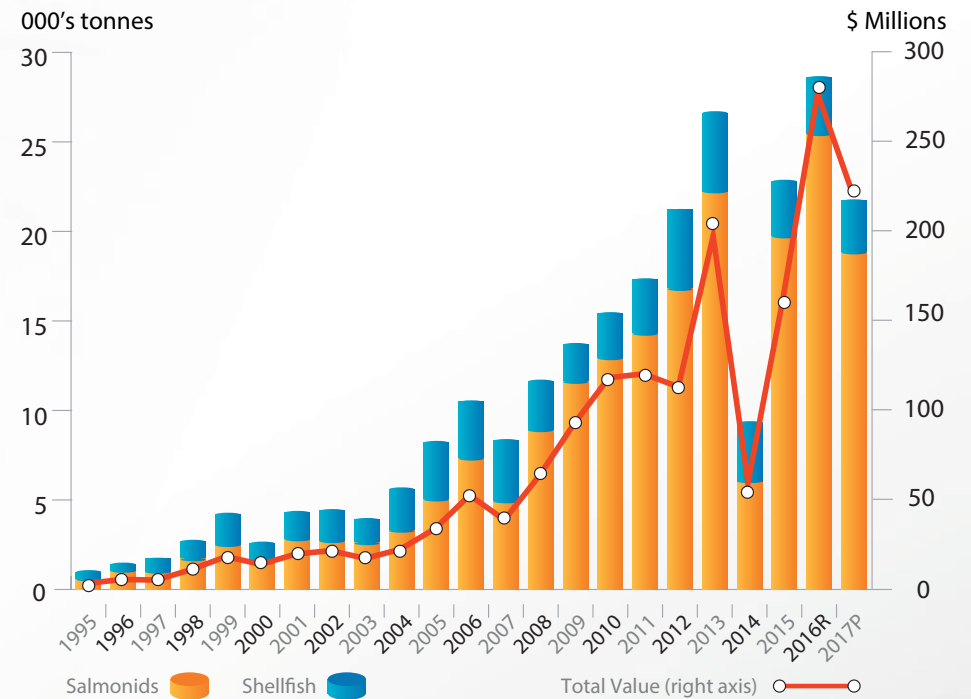
Source: DFO; FLR



Aquaculture

Preliminary data indicates that aquaculture production and value declined in 2017, after reaching peak production in 2016. However, by 2019, production is anticipated to rise above the peak of 2016 with progressive growth in the industry, particularly for salmonids. Production volume was 21,712 tonnes in 2017, down 24 per cent from 28,622 tonnes in 2016. This is largely the result of lower salmonid production. The corresponding market value is anticipated to decrease 20 per cent to \$221 million, down from \$276 million in 2016.

Aquaculture Production Newfoundland and Labrador



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

Salmonids

Atlantic salmon is the major commercial salmonid species in the province with a limited amount of steelhead trout also produced. In 2017, 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 26 per cent to 18,822 tonnes in 2017. The decline in production is largely due to the superchill event in 2014, lower stocking levels in 2015, and harvesting fish in 2016 that was planned to be harvested in 2017 as a result of favourable market conditions in 2016. The value of salmonid production declined 21 per cent to \$209 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 2017, there were 53 commercial shellfish site licences that covered a combined area of 4,403 hectares. See the map on page 54 for the location of these sites.

The production volume of shellfish decreased 10 per cent to 2,890 tonnes in 2017. The corresponding value declined eight per cent to \$12.5 million. 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 by seeking additional space.



Special Feature: The Way Forward

The Provincial Government launched The Way Forward: A Vision for Sustainability and Growth in Newfoundland and Labrador to guide actions to achieve greater efficiency, strengthen the province's economic foundation, enhance services, and improve outcomes to promote a healthy and prosperous province. The document is available online at: thewayforward.gov.nl.ca.

As part of The Way Forward vision, the Provincial Government directly engaged the aquaculture, agriculture, and technology sectors to address industry needs in ways that result in new employment and economic activity throughout the province.

The aquaculture industry in Newfoundland and Labrador is focused on the culture of Atlantic salmon, steelhead trout, and blue mussels. The salmon industry is estimated to have the potential to grow to 50,000 tonnes annually and the mussel industry to 10,750 tonnes annually. To facilitate this growth target, The Way Forward on Aquaculture: Sector Work Plan was announced in September 2017. It outlined twenty-eight initiatives in Aquaculture Production; Human Resources and Labour; Research, Innovation and Diversification; Market Access and Development; and Business Development and Risk Management. A list of specific actions to support growth of the aquaculture industry can be found at: flr.gov.nl.ca/aquaculturesummit/pdf/Sector-Workplan-Online.pdf

Some of these actions include:

- Responding to the human resource needs of the industry with tailored labour market supports, immigration attraction, and efforts to help make youth aware of opportunities in aquaculture;
- Responding to the capital and infrastructure needs of the industry by adjusting government funding programs and exploring partnership opportunities to develop facilities that strengthen the value chain for mussel and salmon producers;

- Responding to the public awareness and market access needs of the industry by developing a marketing strategy that promotes products and builds public trust;
- Responding to the needs of provincial entrepreneurs by promoting opportunities for aquaculture supply and service companies, which in turn creates new employment and maximizes industry competitiveness; and
- Responding to the public's need for sustainable aquaculture development by reviewing all provincial policies related to aquaculture, including the provincial Code of Containment and other measures used to promote sustainability, which ensures the province remains a leader in best practices for years to come.

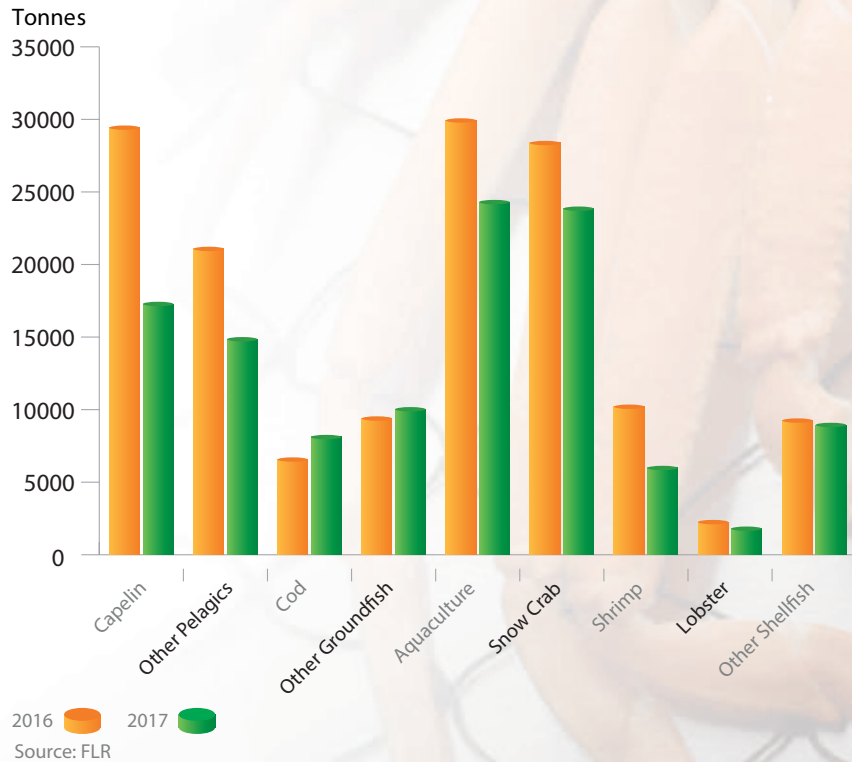


Production Overview

During 2017, there were 89 licensed fish processing plants, slightly lower than 92 in the previous year. Of these facilities, 69 were primary, two were secondary, six were aquaculture, and 12 were in-province retail establishments. See the map on page 53 for the location of these plants.

Total seafood production decreased 21 per cent to 115,161 tonnes in 2017, down from 146,575 tonnes in 2016. Production volume is calculated based on the end weight of all fish products which are reported by licenced fish processors.

Production of Key Species



Shellfish

In 2017, shellfish production, which includes snow crab, clam, lobster, sea cucumber, sea urchin, and shrimp, accounted for 35 per cent of the total production. Overall shellfish production decreased 19 per cent to 40,629 tonnes. The decrease is attributed to quota reductions for the snow crab and shrimp fisheries.

Groundfish

Groundfish production in 2017 contributed to 16 per cent of the overall production in Newfoundland and Labrador. Total groundfish production increased 14 per cent to 18,143 tonnes, due to higher catches of cod and redfish.

Pelagics

Pelagics production accounted for 28 per cent of the total production in 2017. Total pelagics production decreased by 36 per cent to 32,111 tonnes in 2017, resulting from lower landings of capelin, herring, and mackerel.

Aquaculture

Aquaculture production accounted for 21 per cent of the total final production volume in 2017. The final processing volume of aquaculture products decreased 19 per cent to 24,278 tonnes, mainly the result of a decrease in the production of Atlantic salmon.





Special Feature: International Trade Agreements

The demand for seafood is growing globally and Newfoundland and Labrador is competing on the international stage. Free Trade Agreements (FTAs) create a level playing field for Canadian fish and seafood producers to compete in international markets by reducing trade barriers. Canada has concluded a number of FTAs in the past several years, including the Canada-Korea Free Trade Agreement and the Canada-European Union Comprehensive Economic and Trade Agreement (CETA), which have provided new opportunities for fish and seafood producers of this province.

On September 21, 2017, provisional application of CETA began, providing Newfoundland and Labrador seafood producers with market access to the European Union – the world's largest importer of fish and seafood, with an import market of \$40.2 billion in 2016. Upon provisional application of CETA, over 99 per cent of European Union tariff lines for fish and seafood products relevant to Newfoundland and Labrador are effectively eliminated. The remaining tariffs will be eliminated after seven years. The additional market access in the European Union provides many opportunities for seafood producers of this province. For example, tariffs are immediately eliminated on:

- Frozen shrimp (12 per cent)
- Snow crab (7.5 per cent)
- Frozen mackerel (20 per cent)
- Salmon (from two to 15 per cent depending on species)
- Dried and salted cod (13 per cent)

By eliminating tariffs on value-added products like cooked and peeled shrimp (20 per cent tariff), frozen cod fillets (7.5 per cent tariff) and processed crab (8 per cent tariff), CETA offers Newfoundland and Labrador seafood producers the ability to be competitive in the European Union with value-added products.

The United States is the largest market destination for fish and seafood from this province accounting for 47 per cent of total seafood exports by value in the January to November 2017 period. Canada's trade with the United States and Mexico are governed by rules under the North American Free Trade Agreement (NAFTA). The three parties began re-negotiating NAFTA in 2017 and negotiations continue toward modernizing the agreement to create predictable rules for trade which will benefit all sectors including the seafood industry.

In 2017, China was the second most important market for seafood exports by value from this province, accounting for 19 per cent of total seafood exports. A growing middle class and a surge in e-commerce provide new market opportunities for Newfoundland and Labrador seafood. The Government of Canada is continuing exploratory discussions with China regarding a FTA. On December 1, 2017, China implemented temporary tariff cuts on 187 products, including several of importance to Newfoundland and Labrador, such as:

- Frozen northern Pandalus shrimp (from five per cent to two per cent)
- Frozen capelin (from 10 per cent to five per cent)

These tariff rates are temporary and in force for an undetermined duration. Negotiations toward a FTA with China could provide Canada with tariff reductions/eliminations on these seafood products and a predictable trading environment.

Canada continues to strive for international market access and strengthening its economic relationships with other nations by exploring and negotiating agreements. Canada recently concluded negotiations toward the Comprehensive and Progressive Trans-Pacific Partnership (CPTPP), an Asia-Pacific free-trade agreement among Australia, Brunei, Chile, Malaysia, New Zealand, Peru, Singapore, Vietnam, Mexico, Japan, and Canada. This agreement will provide new market access for provincial seafood producers in the lucrative markets of Japan and Vietnam by eliminating tariffs on key exports such as crab, shrimp, and frozen fish fillets. The United Kingdom also continues to be an important market for Newfoundland and Labrador, specifically for shrimp and cod. The province will seek equivalent market access in any future negotiations, as was achieved in CETA, once the United Kingdom formally leaves the European Union.



Market Overview

Newfoundland and Labrador's seafood products are exported to more than 40 countries around the globe. From January to November 2017, the province's seafood industry exported products valued at \$903 million, down eight per cent from the same period of 2016. The volume of seafood exports decreased 24 per cent to 86,531 tonnes.

The United States remains the largest export market for Newfoundland and Labrador fish and seafood products, representing 47 per cent of the export value in the January to November 2017 period. China was the second largest export market, representing 19 per cent of export value. Other key markets, in terms of export value, included Vietnam at six per cent, Denmark at five per cent, the United Kingdom at five per cent, and Japan at four per cent. Combined, these markets represented over 86 per cent of the province's total value of exports.

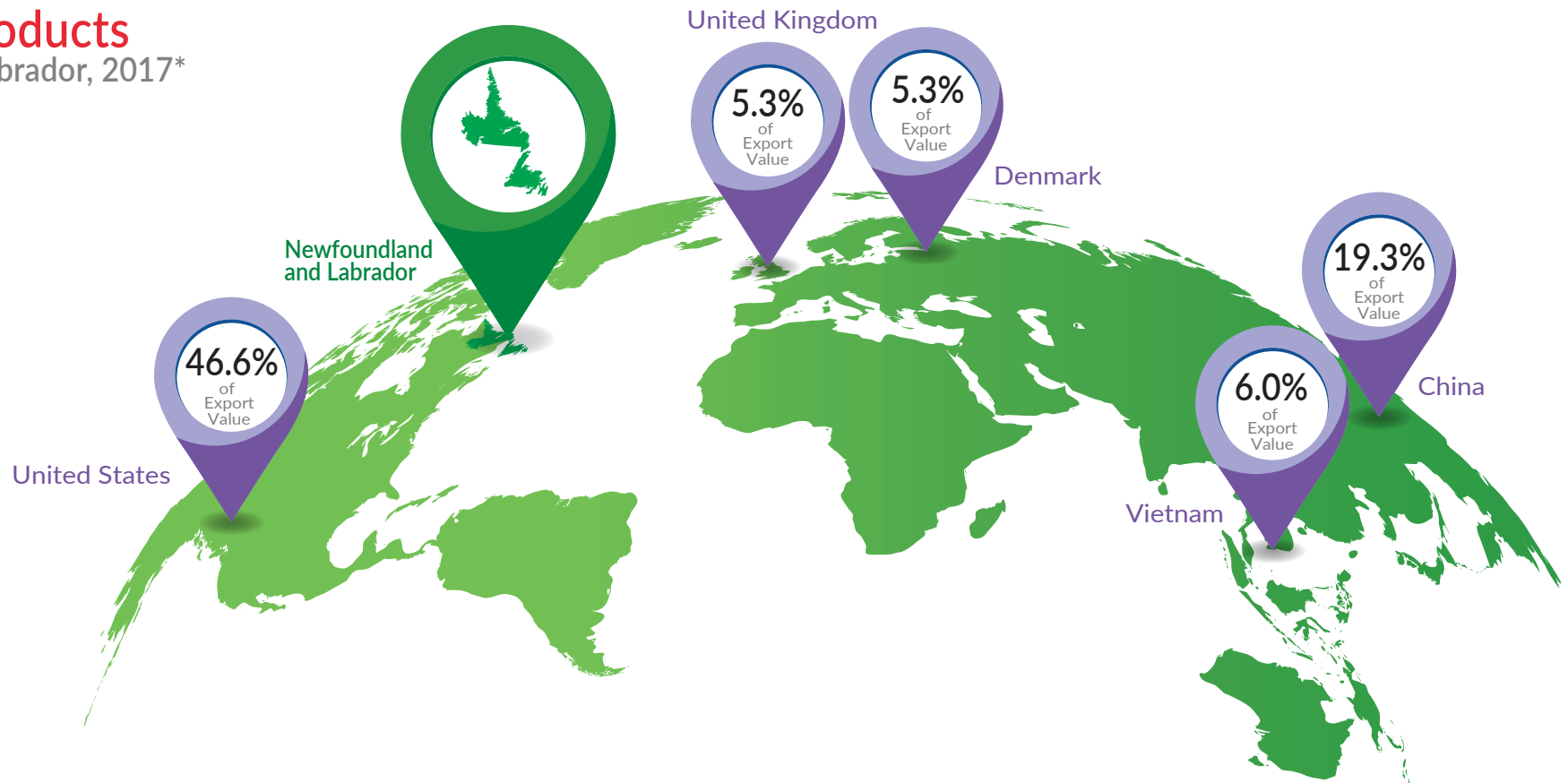
The United States continued to be a preferred export destination due to strong consumer demand and proximity to market. There is a continued emergence of China as a prominent market for seafood consumption and e-commerce has opened up significant potential for seafood sales. CETA came into force in September 2017, providing Newfoundland and Labrador exporters with opportunities and market access to the world's largest importer of fish and seafood.

In 2017, the average currency exchange for the Canadian dollar strengthened against the United Kingdom British pound (GBP) and the Yen. This means that these trading nations pay more for Canadian products in their respective currencies. The average Canadian dollar exchange for the United States Dollar and the Euro remained relatively on par with 2016. See the chart on page 36 for key foreign exchange rates.



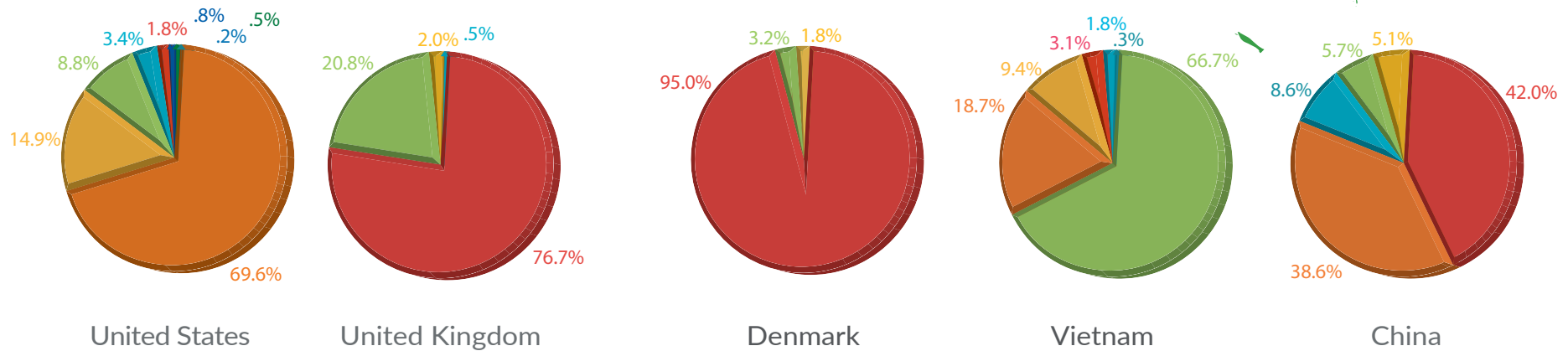
Key World Market Destinations for Seafood Products

Newfoundland and Labrador, 2017*



Export Species

- Shrimp
- Snow Crab
- Other Shellfish
- Pelagics
- Groundfish
- Atlantic Salmon
- Mussels
- Miscellaneous

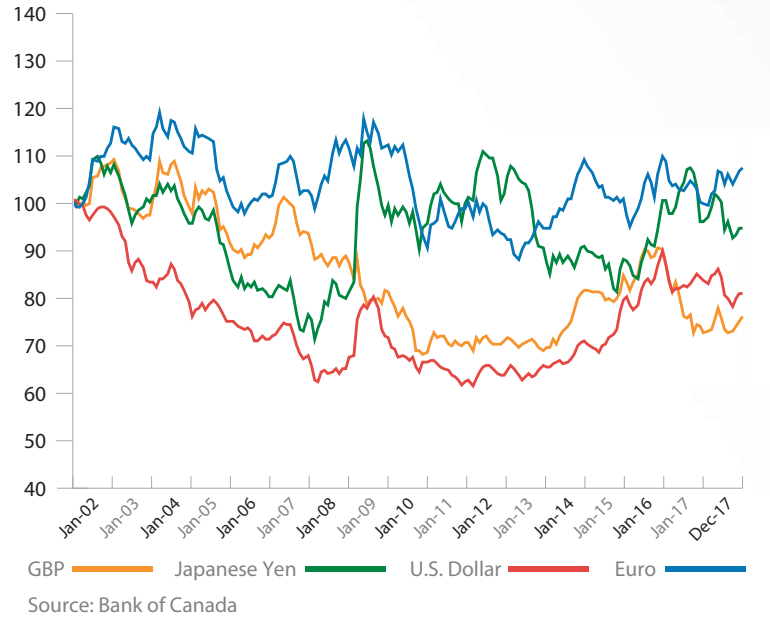


Note: Each pie chart represents the distribution of products within the identified country based on export value.
* January to November 2017.

Source: Statistics Canada

Selected Foreign Exchange Rates

Exchange Rate Against Canadian Dollar
(January 2002=100)

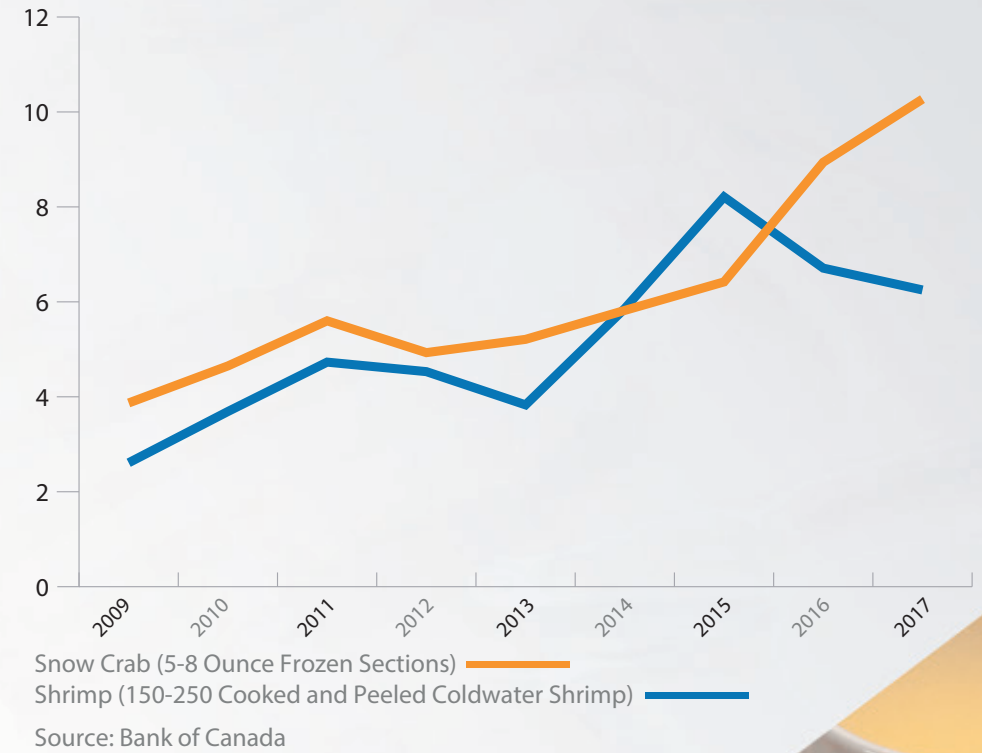


Snow Crab

Snow crab was the most valuable seafood export from the province in 2017, valued at \$403 million for the first eleven months of the year, which is down three per cent from the same time period in 2016. The volume of exported snow crab decreased 22 per cent to 18,958 tonnes. The United States remained the largest export destination for snow crab, accounting for 73 per cent of export value, with China following at 17 per cent. According to Urner Barry Publications Inc., the average market price for 5-8 ounce snow crab sections increased 17 per cent to US\$7.91 per pound in 2017, up from US\$6.75 per pound in 2016.

Average Market Prices for Snow Crab and Shrimp

CAD\$/lb.



Shrimp

The volume of shrimp exports decreased 44 per cent in the first 11 months of 2017, to 19,558 tonnes. This decrease was caused by the lower shrimp quota in Newfoundland and Labrador which resulted in less raw material available for processing. However, the value of shrimp exports was \$224 million for the same period, down eight per cent from the first 11 months of 2016. Shrimp sold and exported at the beginning of 2017, before the shrimp fishing season began, likely reduced the impact of lower landings on the export value in 2017. The key markets for cooked and peeled shrimp, in order by value, were Denmark (44 per cent), the United Kingdom (40 per cent), and the United States (eight per cent). The major markets by value for shell-on, frozen-at-sea shrimp were China (53 per cent), Iceland (17 per cent), and Japan (six per cent).

Average market prices for cooked and peeled shrimp declined in the beginning of 2017, and began to increase in the latter half of the year, particularly for larger sized shrimp. The United Kingdom, a major market for coldwater shrimp, faced competition from warm water shrimp due to higher availability and price. The average market price for cooked and peeled 150-250 count coldwater shrimp (the major product type for the Newfoundland and Labrador shrimp fishery) was approximately \$6.25 per pound in 2017, down seven per cent from 2016, according to Gemba Seafood Consulting.

Groundfish

Cod exports were valued at \$26 million for the first 11 months of 2017, up 23 per cent from the same period in 2016. The United States and the United Kingdom were the largest export destinations for Newfoundland and Labrador cod, representing 42 per cent and 35 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, value was \$34 million with the main export destinations being Vietnam, Japan, and China.

Pelagics

In January to November 2017, there was a 27 per cent decrease in export volume for major pelagic species. The value decreased 29 per cent, driven by lower volumes of mackerel, capelin, and herring. The value of capelin exports decreased 30 per cent to approximately \$25 million. China was the largest market for capelin, accounting for 60 per cent of export value, followed by the United States at 21 per cent. Due to lower landings, mackerel exports were down significantly from \$1.7 million for the first 11 months of 2016, to approximately \$828,000 for the same period in 2017. Herring exports decreased to \$10 million, down 22 per cent relative to the January to November period of 2016. The largest market for herring was the United States, representing 84 per cent of the export value.





Resource Status

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

An environmental shift over the past decade or more 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, signaling a return towards a groundfish dominated ecosystem. The yellowtail flounder and redfish stocks on the Grand Banks are considered to be fully recovered. Other groundfish stocks continue to show promising signs of rebuilding, including northern cod (NAFO Divisions 2J3KL), as well as redfish off the south coast of the island and in the Gulf of St. Lawrence.

Snow Crab

The snow crab resource continues to decline. The overall TAC for the snow crab fishery in 2017 was set at 35,419 tonnes, a reduction of approximately 22 per cent from 2016. The quota was reduced by two per cent in NAFO Division 3K, 50 per cent in NAFO Division 3Ps, 26 per cent in NAFO Divisions 3LNO, and six per cent in NAFO Divisions 4R3Pn. The quota in NAFO Divisions 2GHJ remained unchanged.

Northern Shrimp

The northern shrimp resource extends from the Grand Banks to the Davis Strait. Biomass estimates of northern shrimp in southern areas have declined over the past ten years from historically high levels. The TAC in SFA 6 decreased by 63 per cent from 27,825 tonnes in 2016 to 10,400 tonnes in 2017. 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 remained unchanged at 7,012 tonnes in 2017. The Newfoundland and Labrador-based fleet, which is allocated 65 per cent of the TAC in the Esquiman Channel, harvested its full quota of 4,564 tonnes in 2017.

Cod

The northern cod stock (NAFO Divisions 2J3KL) consists of an inshore and offshore component. The offshore component has been under a direct fishing moratorium since 1992. The overall stock biomass has increased about 600 per cent over the past decade, but remains below historic levels. A limited inshore fishery was conducted from 1998 to 2002, and again from 2006 to 2017. The management plan for the northern cod stewardship fishery in 2017 included an increase in the weekly landing limits and resulted in a harvest of about 12,280 tonnes in 2017, an increase of 27 per cent from 2016.

Cod in NAFO Division 3Ps is located off the south coast of the province. Due to a decline in the resource, the TAC for 3Ps cod was reduced by approximately 50 per cent to 6,500 tonnes in 2017. Catches are expected to be close to the TAC for the first time in several years.

The northern Gulf of St. Lawrence cod stock (NAFO Divisions 3Pn4RS) remains below its historic level. The stock has increased slightly and further growth is anticipated over the next couple of years. In accordance with the rebuilding plan for this stock, in 2017, the TAC was increased from 1,500 tonnes to 3,185 tonnes for a two-year period. 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 the island portion of the province in the Gulf of St. Lawrence. In 1995, redfish in Unit 1 was placed under moratorium following a stock decline. Since 1999, an index fishery of 2,000 tonnes has taken place.

Redfish in Unit 2 is located off the south coast of the island portion of the province 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 stock increase in the next few years.

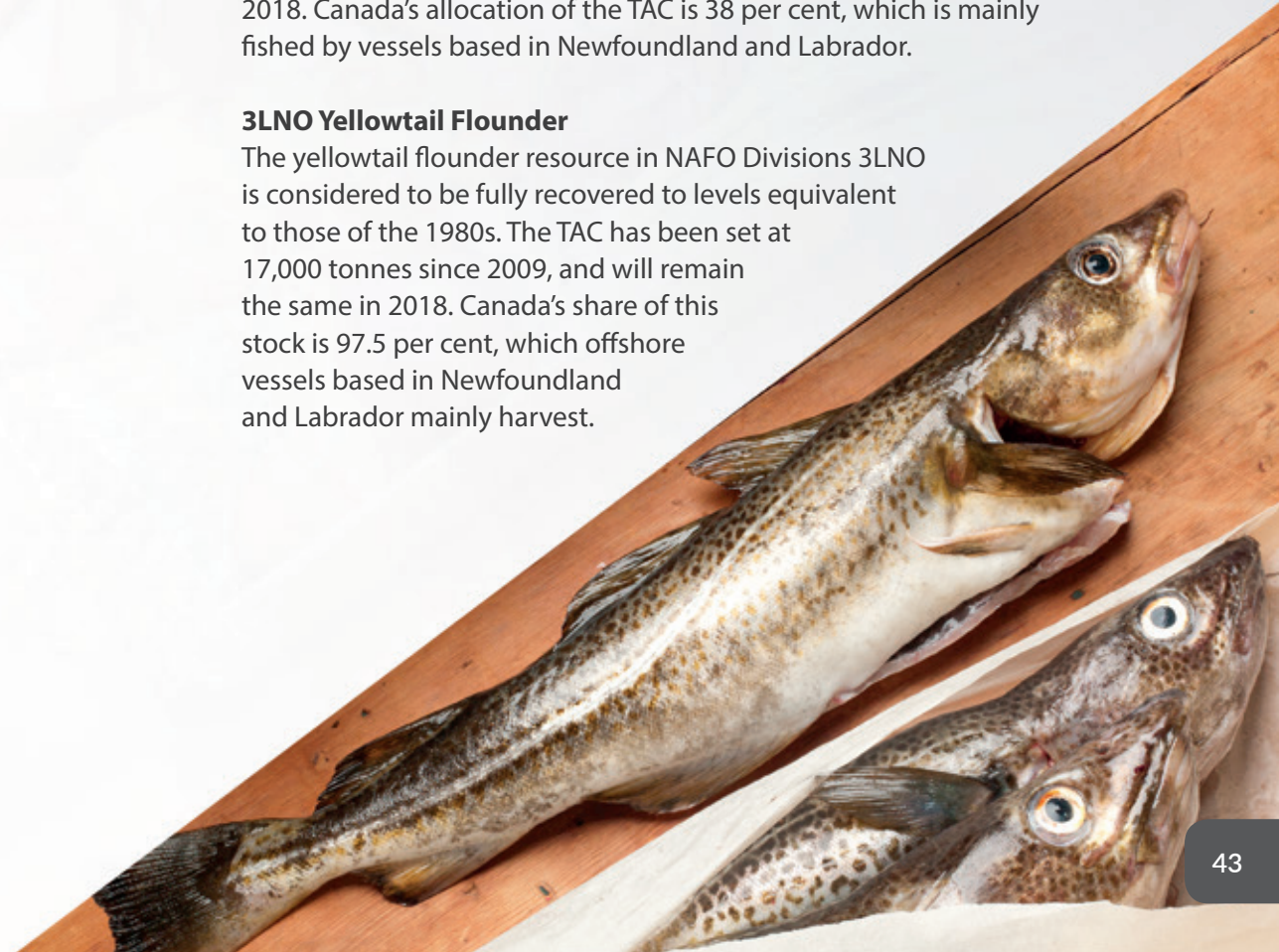
NAFO-Managed Groundfish Stocks

2+3KLMNO Turbot (Greenland Halibut)

The TAC for Greenland halibut remained the same in 2017, at 14,799 tonnes. NAFO adopted a new management plan for Greenland halibut in 2017, which includes management objectives and harvest control rules to guide decision making for this stock over a six-year period. In accordance with the plan, the TAC will increase to 16,500 tonnes in 2018. 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 the same in 2018. Canada's share of this stock is 97.5 per cent, which offshore vessels based in Newfoundland and Labrador mainly harvest.



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 had 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 decline in the stock, the TAC will be reduced to 1,116 tonnes in 2018. Canada's share of 3NO witch flounder is 60 per cent, which offshore vessels based in Newfoundland and Labrador mainly harvest.

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. The TAC was increased to 14,200 tonnes in 2017, and will remain at this level in 2018. Canada's share of this stock is 42.6 per cent, which offshore vessels based in Newfoundland and Labrador mainly harvest.



3O Redfish

The TAC for the redfish resource in NAFO Division 3O has been set at 20,000 tonnes since 2005, and will remain the same in 2018. 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.

Total Allowable Catch (tonnes)

Newfoundland and Labrador

Species	2016R	2017P
GROUNDFISH		
3Ps Cod (15.6% allocated to St. Pierre et Miquelon, France)	13,043	6,500
4RS3Pn Cod (Newfoundland and Labrador and Québec)	1,500	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	14,799
3LNO Yellowtail Flounder (Canada 97.5%)	17,000	17,000
3NO Witch Flounder (Canada 60%)	2,172	2,225
3LN Redfish (Canada 42.6%)	10,400	14,200
3O Redfish (Canada 30%)	20,000	20,000
PELAGICS		
Herring (Newfoundland and Labrador stocks and 4R)	34,291	34,842
Mackerel (Atlantic-wide)	8,000	10,000
Capelin (Newfoundland and Labrador stocks and 4R)	42,811	42,811
SHELLFISH		
Snow Crab (Newfoundland and Labrador)	45,667	35,419
Gulf (4R) Shrimp (Newfoundland and Labrador allocation)	4,564	4,564
Northern Shrimp		
- Newfoundland and Labrador Inshore (SFA 6)	18,614	7,061
- Canadian offshore/special allocations (SFAs 0 to 6)*	78,731	70,682

*Includes both *Pandalus borealis* and *Pandalus montagui*

R=Revised; P=Preliminary

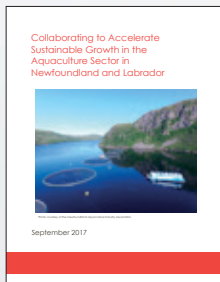
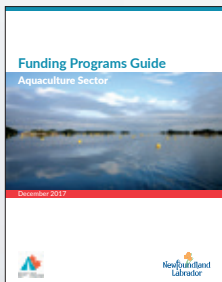
Source: DFO; FLR

Departmental Initiatives

In 2017, the department worked with stakeholders on a number of ongoing and new initiatives towards the vision of sustainable provincial fishing and aquaculture industries that achieve an optimum economic contribution to Newfoundland and Labrador. The following highlights the department's key initiatives.

Aquaculture

- The Department of Fisheries and Land Resources (FLR) began work on the initiatives outlined in The Way Forward on Aquaculture: Sector Work Plan that was announced in September 2017. FLR is the lead or co-lead on 13 of the 28 initiatives in the document.
- FLR completed a resource listing of all financial program supports available to aquaculture businesses and suppliers: Funding Programs Guide Aquaculture Sector.
- The Department and the Newfoundland Aquaculture Industry Association developed a document which outlined a variety of federal issues impacting aquaculture development in the province: Collaborating to Accelerate Sustainable Growth in the Aquaculture Sector in Newfoundland and Labrador.



Innovation and Development

- In 2017, the Atlantic Fisheries Fund was announced, making approximately \$140 million in Federal-Provincial funds available to the province to enhance innovation, infrastructure, and science activity. These funds will strengthen our fishery, protect and grow jobs for Newfoundlanders and Labradorians employed in the seafood sector, and assist with expediting the large-scale, industry-wide transition to groundfish that our province requires. Over 100 applications from the province's industry were submitted by the end of the calendar year. Funds were committed for eight of these projects totalling \$641,518, with more commitments to come in 2018.
- FLR invested \$2 million into research and development projects through the Seafood Innovation and Transition Program. The program offers funding support for the fishing and aquaculture sectors throughout all levels of the value chain, with a focus on revitalization of the groundfish sector, innovation and technology, industry research and development, and strategic marketing initiatives. Key initiatives include:
 - In the harvesting sector, funding initiatives included purchase of auto jigger and cod pot technology; vessel upgrades to improve storing and on-board handling; completion of the third year of a province-wide cod quality study; and a stock assessment to determine the harvesting potential of whelk in NAFO Division 3N0.
 - In the processing sector, funding initiatives included support for the purchase of innovative Icelandic scallop and Atlantic salmon processing technology.
 - Marketing initiatives included the development of markets for cod in Qatar and marketing materials for organic mussels.
 - In the aquaculture industry, funding initiatives included processing technology for marinating mussels and market development and ongoing research on using cleaner fish as a means to reduce sea lice on farmed salmon.

Marketing

- FLR and the provincial seafood industry participated in key international seafood trade shows, including Seafood Expo North America, Boston, Massachusetts; Seafood Expo Global, Brussels, Belgium; Seafood Expo Asia, Hong Kong; and the China Fisheries and Seafood Expo, Qingdao, China.
- 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, Hong Kong, Japan, and Taiwan. These events included cooking classes, retail promotions, and Export Cafes, and were targeted towards a variety of potential customers such as foodservice buyers, chefs, food journalists, bloggers, seafood buyers, consumers, and importers.

- In partnership with the Restaurant Association of Newfoundland and Labrador and the Newfoundland and Labrador Chef's Association, 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 and provided seafood for the Premier's Council of the Federation Reception in Washington, D.C.
- FLR continued to support the Newfoundland and Labrador seal industry by providing funds to the Craft Council of Newfoundland and Labrador to host an event in Ottawa on National Seal Products Day. The department also supported Carino Processing Limited in undertaking a Canada-wide seal meat restaurant promotion.
- The department supported the Marine Stewardship Council re-certification of Northern shrimp, led by the Association of Seafood Producers, and provided assistance to several companies to explore market opportunities in Europe and Asia.

Compliance and Inspections

- Over 2,700 inspections were conducted pertaining to raw product requirements; handling and holding conditions on vessels and unloading sites; buyers' and processing licence compliance checks; aquaculture sites; and products shipped through Channel - Port aux Basques.



Outlook for 2018

The Province will continue to support the fishing and aquaculture industries in Newfoundland and Labrador, particularly through The Way Forward: A Vision for Sustainability and Growth in Newfoundland and Labrador. 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 Province to support a sustainable and viable industry. The Way Forward on Aquaculture: Sector Work Plan was announced in 2017, to support growth of aquaculture in the Newfoundland and Labrador (see page 22 for additional information).

The Newfoundland and Labrador fishing and aquaculture industries are anticipated to be positively impacted by continued global demand for fish and seafood products in 2018. The European Union and Asian markets have promising opportunities for the province's seafood industry, particularly given recent tariff reductions and eliminations. CETA, 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. All remaining tariffs will be removed after seven years. In December 2017, China implemented temporary tariff cuts on 187 products, including a number of key species for Newfoundland and Labrador such as coldwater shrimp and capelin. It is expected that market prices for many seafood products will continue the trend of 2017 and remain high in 2018.

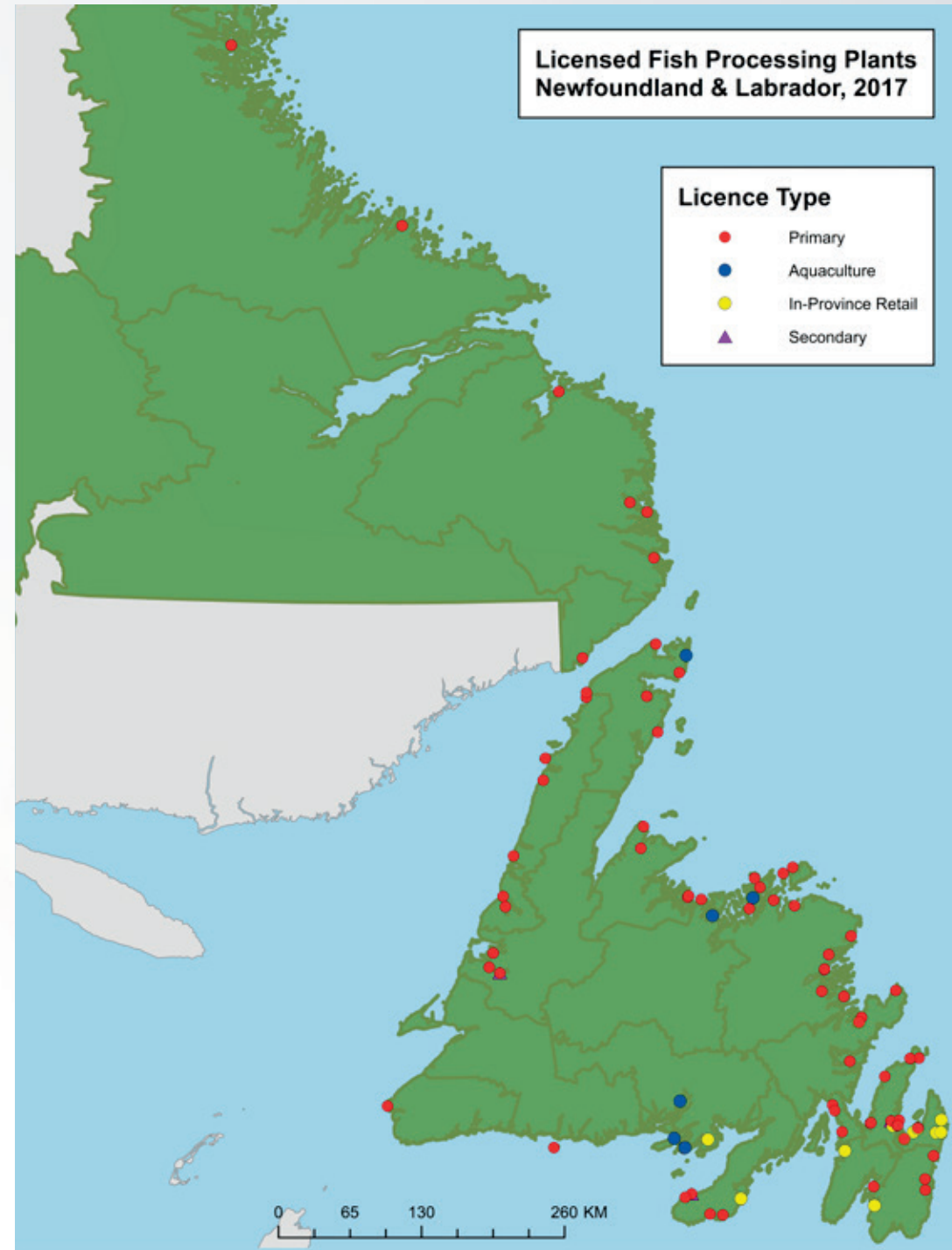


Wild Fisheries

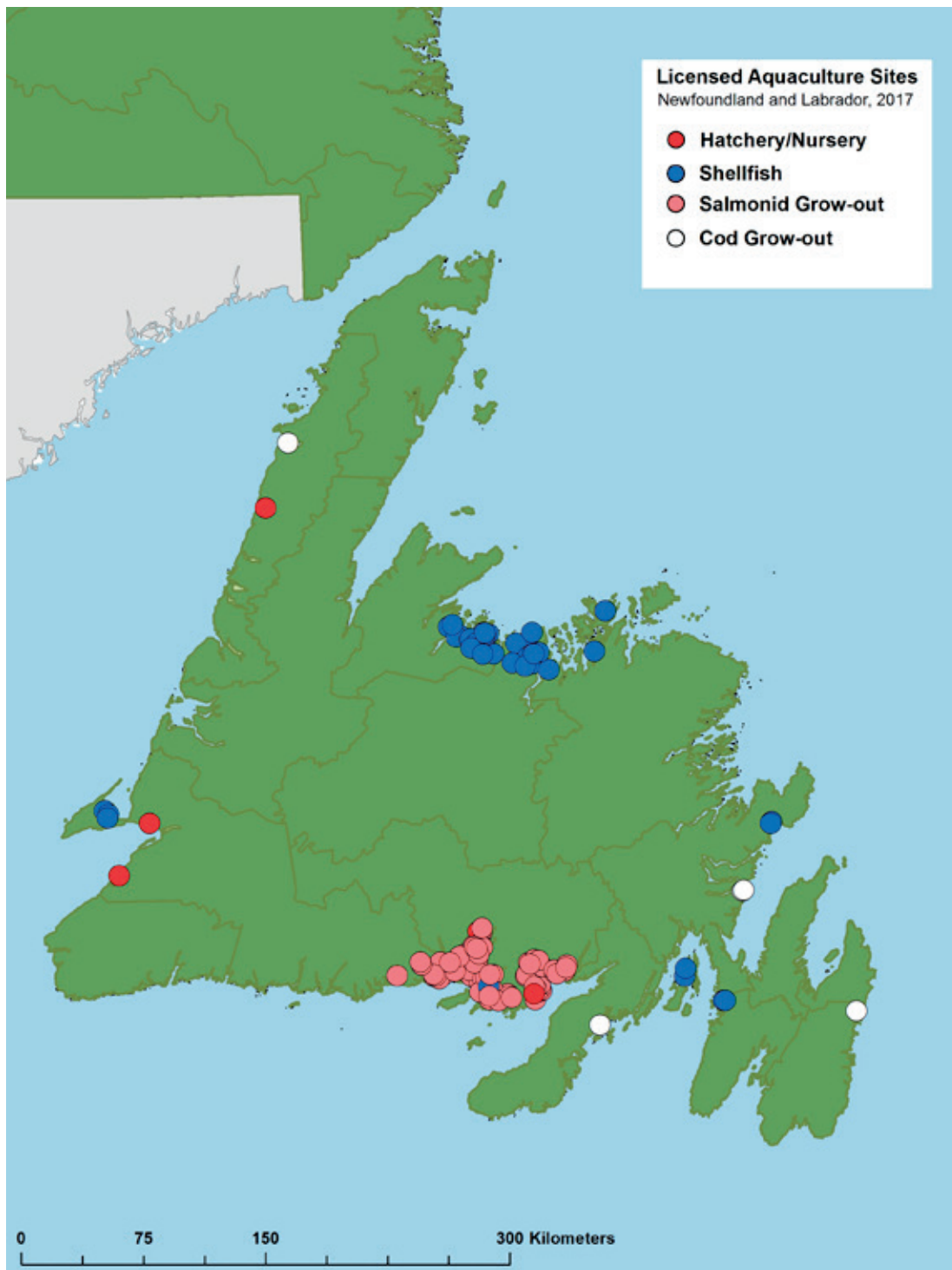
Total fish landings may increase slightly in 2018, relative to 2017. It is anticipated that an increase in landings of pelagics and groundfish will offset lower landings of shellfish. Landings of snow crab and coldwater shrimp will likely decline in 2018. Canadian snow crab prices were at a historical high in 2017 and coldwater shrimp prices were strong. These prices could remain high if global supply does not increase in 2018 for coldwater shrimp and snow crab, offsetting impacts from lower landings.

Aquaculture

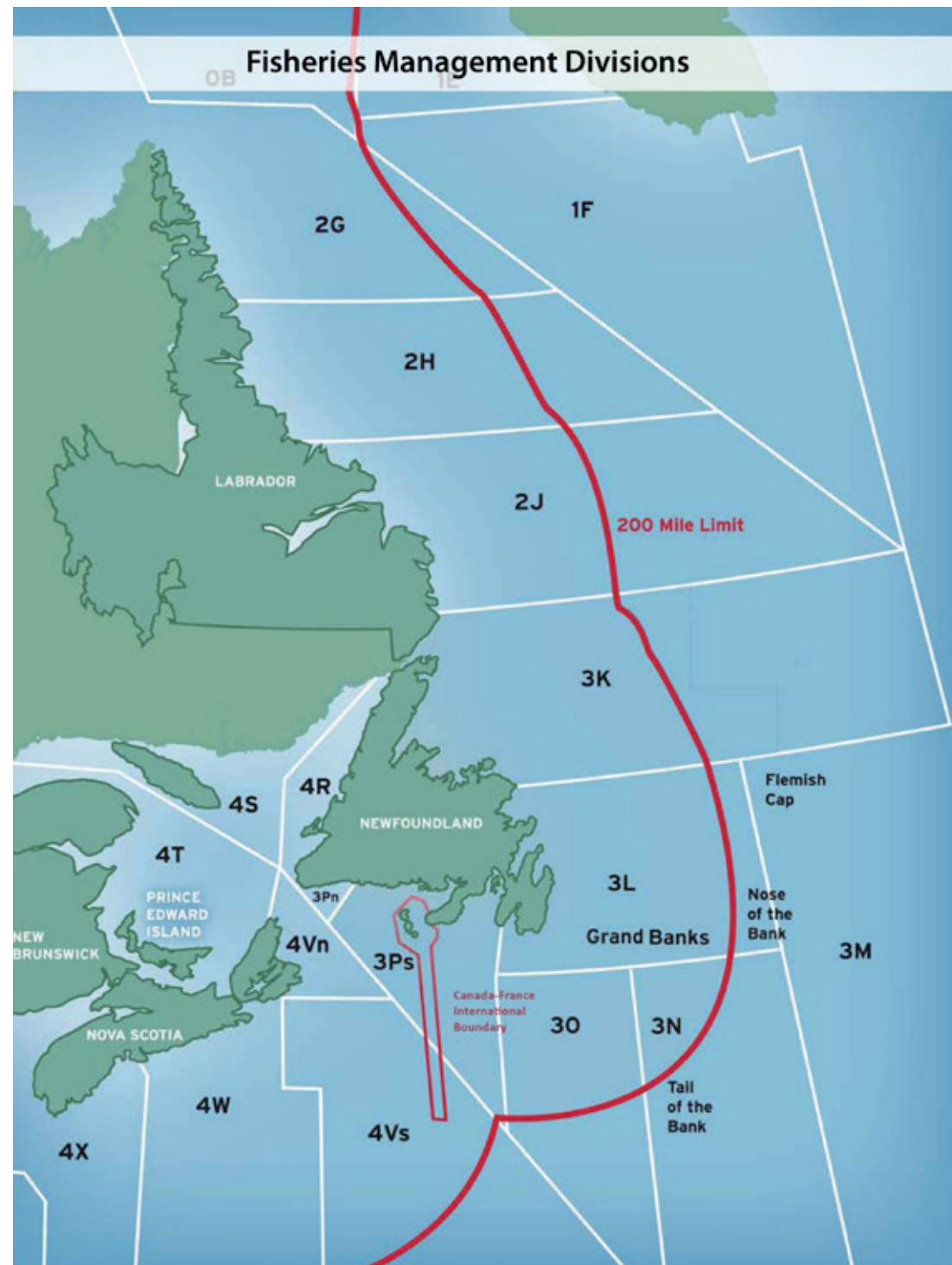
In 2018, the production and value of the Newfoundland and Labrador aquaculture industry is expected to begin to recover from production losses in 2017. Further growth in Atlantic salmon production is anticipated, reaching a new high in 2019, and surpassing 50,000 tonnes by 2022. Trout production is expected to remain stable at 2017 levels. In 2018, overall market prices for salmonids are expected to remain relatively on par with 2017. In the shellfish sector in 2018, production is projected to remain at 2017 levels. Market prices for blue mussels are anticipated to remain stable.



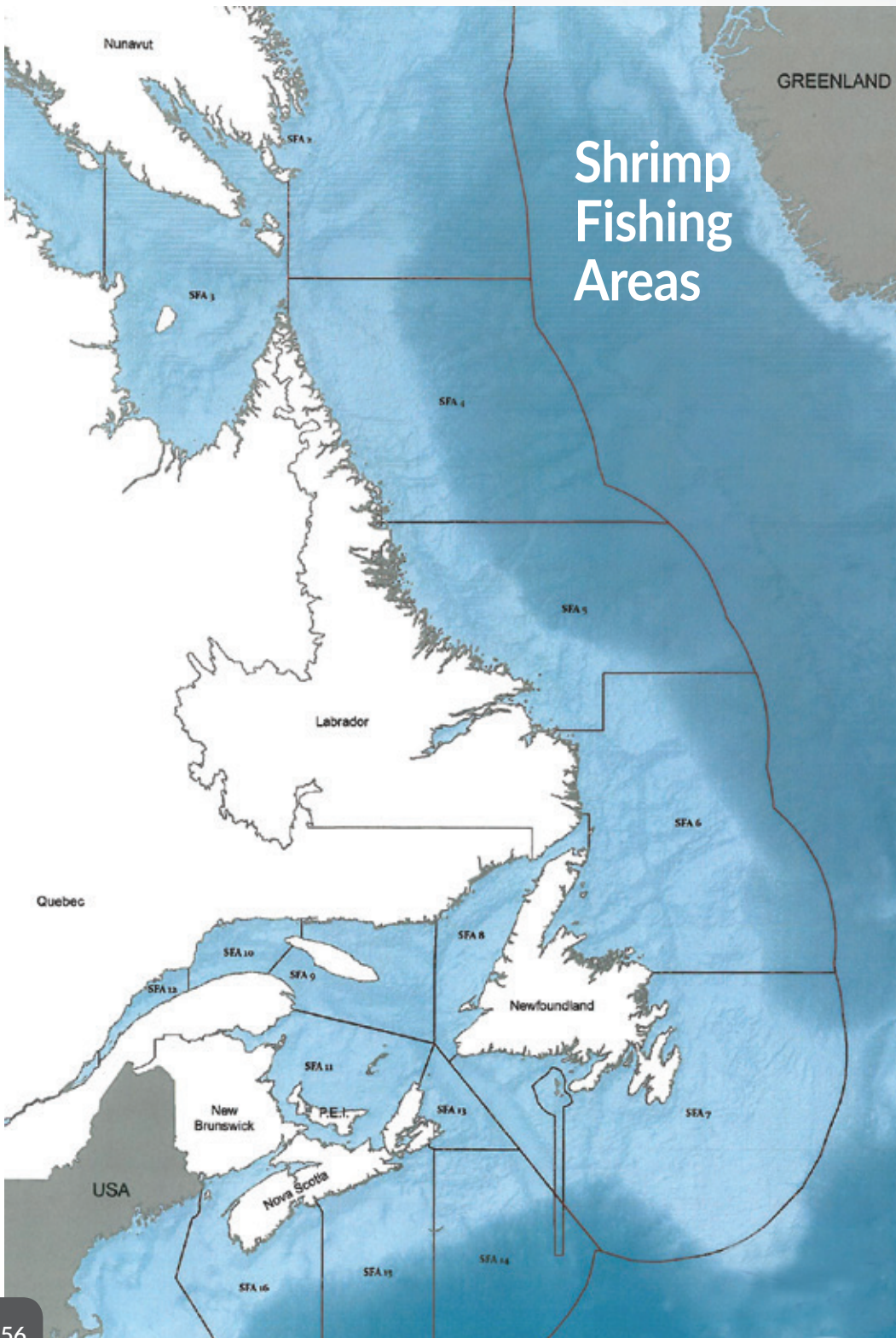
Note: Some locations may contain more than one licensed fish processing plant.
Source: FLR



Source: FLR



Source: NAFO
Edited by: FLR



Shrimp Fishing Areas

Contact Information

Honourable Gerry Byrne
Minister
709.729.3705
gerrybyrne@gov.nl.ca

Ms. Lori Anne Companion
Deputy Minister
709.729.3707
loriannecompanion@gov.nl.ca

Ms. Wanda Wiseman
Assistant Deputy Minister, Fisheries and Aquaculture
709.729.1725
wandaleewiseman@gov.nl.ca

Mr. John Tompkins
Director of Communications
709.729.3733
jtompkins@gov.nl.ca

Department of Fisheries and Land Resources
30 Strawberry Marsh Road
P.O. Box 8700
St. John's, NL, Canada A1B 4J6
709.729.3723
flr.gov.nl.ca
Twitter@FLR_GovNL

Photo References

Cover	Seafood platter	33	Assorted seafood
3	Iceberg	37	Snow crab sections
4	Farmed Atlantic salmon	38-39	Coldwater shrimp
7	Cod processing	40	Snow crab harvesting
9	Capelin harvesting	43	Cod
13	Whole cod and cod fillets	44	Redfish
15	Herring, capelin, mackerel	47	Atlantic salmon aquaculture site
18	Salmon fillets	49	China Fisheries and Seafood Expo
20-21	Blue mussels	51	Twillingate Harbour, courtesy of John Manuel
23	Aquaculture mussel farm	52	Sea cucumber
25	Snow crab	57	Sea urchin
26-27	Shrimp processing	58-59	Lobster
28	Assorted seafood		
30-31	Inshore fishing vessels		

Acronyms and Abbreviations

CETA	Canada-European Union Comprehensive Economic and Trade Agreement
CPTPP	Comprehensive and Progressive Trans-Pacific Partnership
DFO	Fisheries and Oceans Canada
FLR	Department of Fisheries and Land Resources
FTA	Free Trade Agreement
NAFO	Northwest Atlantic Fisheries Organization
NAFTA	North American Free Trade Agreement
PFHCB	Professional Fish Harvesters Certification Board
SFA	Shrimp Fishing Area
TAC	Total Allowable Catch





Fisheries and Land Resources

30 Strawberry Marsh Road, St. John's, NL, Canada A1B 4J6

Tel 709.729.3723

fisheries@gov.nl.ca

flr.gov.nl.ca