

BRITISH COLUMBIA SEAFOOD INDUSTRY
Year in Review 2008



2008



BRITISH
COLUMBIA
Canada's Pacific Gateway

British Columbia Seafood Production 2006 – 2008

	HARVEST ('000 tonnes)			LANDED VALUE (\$ millions)			WHOLESALE VALUE (\$ millions)		
	2006 ^P	2007 ^P	2008 ^E	2006 ^P	2007 ^P	2008 ^E	2006 ^P	2007 ^P	2008 ^E
Chinook	2.0	1.4	0.9	14.4	10.2	8.2	29.2	22.2	17.6
Chum	9.9	4.9	1.7	10.3	6.7	3.0	51.1	29.8	18.0
Coho	0.6	0.8	0.3	2.4	2.6	1.8	21.6	19.8	21.2
Pink	1.4	11.2	0.4	0.5	5.1	0.2	8.5	42.9	12.9
Sockeye	10.4	1.8	1.8	33.3	6.1	7.1	114.0	63.9	64.7
Wild Salmon¹	24.3	20.1	5.1	60.9	30.7	20.3	225.7	179.4	135.2
Atlantic	71.0	73.3	77.2	370.1	352.1	381.8	398.6	420.2	455.5
Pacific ²	7.0	5.6	4.2	37.3	32.0	24.3	51.8	49.1	39.7
Cultured Salmon	78.0	78.9	81.4	407.4	384.1	406.1	450.4	469.3	495.2
Salmon	102.3	99.0	86.5	468.3	414.8	426.4	676.1	648.7	630.4
Spawn on Kelp	0.31	0.21	0.14	4.3	6.5	3.5	5.2	7.1	4.2
Roe Herring	22.3	10.5	10.5	13.5	12.8	10.9	51.2	45.3	40.5
Food and Bait	0.9	1.1	0.8	0.5	0.9	0.8	3.5	3.8	3.0
Herring	23.5	11.8	11.4	18.3	20.2	15.5	59.9	56.2	47.7
Arrowtooth Flounder	5.9	4.6	3.5	1.5	1.5	1.5	2.2	2.5	2.5
Dogfish	2.4	4.1	2.1	2.9	2.0	1.0	6.6	6.6	4.6
Hake	96.8	73.4	73.8	29.8	22.4	25.8	69.7	60.9	66.9
Halibut	7.2	5.9	4.5	51.8	48.5	36.5	124.9	160.3	124.1
Lingcod	2.5	2.6	2.3	5.0	5.5	5.0	10.0	11.7	10.6
Pacific Cod	1.0	0.5	0.4	1.5	1.0	1.0	3.1	2.4	2.4
Pollock	3.1	3.2	1.3	1.5	2.0	1.0	2.8	4.3	2.4
Rockfish	18.7	19.1	17.7	22.0	22.5	21.0	35.3	36.2	35.1
Sablefish	3.9	3.3	3.1	27.0	22.0	23.5	33.1	27.8	30.0
Soles	5.4	4.4	4.2	5.0	4.0	4.0	11.2	11.0	10.5
Other ³	1.6	1.3	1.0	1.5	1.5	1.5	16.2	10.9	13.4
Groundfish	148.5	122.4	113.9	149.5	132.9	121.8	315.1	334.6	302.5
Clams	1.7	1.7	1.3	8.9	9.3	7.0	11.3	10.2	8.9
Oysters	8.2	7.5	5.3	8.6	8.6	6.2	18.1	17.2	13.1
Scallops & Other ⁴	0.3	0.6	0.6	1.5	3.4	2.5	4.3	5.4	5.0
Cultured Shellfish	10.2	9.8	7.2	19.0	21.3	15.7	33.7	32.8	27.0
Clams	1.1	0.9	1.0	3.3	2.6	3.0	4.2	2.9	3.8
Crabs	4.3	6.9	6.6	23.9	38.9	37.4	43.1	53.2	56.2
Geoducks	1.6	1.6	1.6	32.2	31.0	25.8	38.9	38.6	33.6
Scallops	0.02	0.02	0.02	0.1	0.1	0.1	0.6	0.4	0.3
Sea Cucumbers	1.5	1.5	1.5	2.6	2.5	2.9	4.7	3.8	4.7
Sea Urchins: Red	3.1	2.1	1.8	4.2	2.9	2.7	9.9	7.2	7.9
Sea Urchins: Green	0.03	0.06	0.07	0.1	0.2	0.2	0.3	1.0	0.8
Shrimp	0.9	0.8	0.6	3.0	2.8	1.9	8.0	8.2	5.7
Prawns	2.4	2.8	2.4	41.1	28.7	26.3	45.2	37.8	35.9
Other ⁵	0.1	0.2	0.2	0.3	0.4	0.3	0.5	1.1	2.5
Wild Shellfish	15.1	16.9	15.8	110.8	110.1	100.6	155.4	154.2	151.4
Shellfish	25.3	26.7	23.0	129.8	131.4	116.3	189.1	187.0	178.4
Tuna	6.0	6.4	5.2	16.7	16.6	16.7	32.4	25.9	30.4
Sardines	1.6	1.5	10.4	0.4	0.3	3.2	1.4	1.3	11.0
Other-Wild ⁶	0.3	0.3	0.4	1.3	1.5	2.5	5.1	6.3	8.2
Other-Cultured ⁷	0.8	1.1	2.3	3.8	5.0	7.1	5.2	5.6	7.7
Other	8.7	9.3	18.3	22.2	23.4	29.5	44.1	39.1	57.3
Grand Total B.C.	308.3	269.2	253.1	788.1	722.7	709.5	1,284.3	1,265.6	1,216.3

^E ESTIMATES - Volume and value estimates are derived from information available to July 2009 that has been adjusted to account for missing data.

^P PRELIMINARY - Volume and values are revised from the previously published estimates but are not yet final.

¹ The total wholesale value of wild salmon includes the value of offal, meal and oil which cannot be identified by species.

² Pacific cultured salmon includes chinook, coho, sockeye and marine trout.

³ "Other" includes skate, flounder and the value of groundfish meal and oil which cannot be identified by species.

⁴ Includes abalone and mussels.

⁵ Includes octopus, squid and other unspecified shellfish.

⁶ "Other-Wild" includes marine plants, mackerel, and other unspecified finfish.

⁷ "Other-Cultured" includes marine plants, freshwater trout and all non-salmonid species cultured in fresh and marine waters.



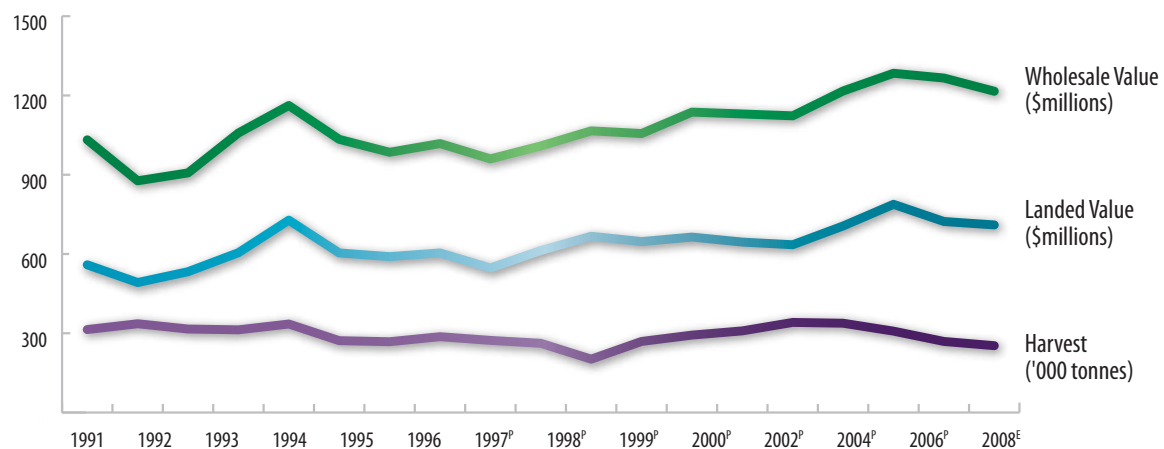
2008 Industry Highlights

British Columbia, Canada's Pacific Gateway, is one of the world's finest sources of more than 470 seafood products – diverse, sustainable and delicious.

In 2008, British Columbia's capture fisheries and aquaculture operations produced 253,100 tonnes of fish, shellfish and marine plants. The harvest generated \$709.5 million and for the fourth consecutive year, the wholesale value of our processed seafood products exceeded \$1.2 billion.

More than 170,000 tonnes of B.C. fish products were exported to 81 countries in 2008, generating \$911.0 million in export value. Eight per cent (or 13,700 tonnes) of the exports were non-edible commodities such as fish meal and oil while 92 per cent (156,600 tonnes) was seafood. Seafood from British Columbia was served as 1.6 billion meals worldwide – that's 4.3 million meals every day.

BRITISH COLUMBIA SEAFOOD



HARVEST

The round (whole) weight of the fish harvested from British Columbia capture fisheries and aquaculture operations. One tonne equals 2,204.6 pounds.

LANDED VALUE

The price paid to the commercial fishers and/or aquaculturists for the whole fish. In aquaculture this can also be referred to as farmgate value.

WHOLESALE VALUE

The value of the fish post processing. All of the British Columbia harvest is included in the wholesale value as well as any fish imported from outside British Columbia that has undergone processing within the province.



Halibut and Hake Fisheries Achieve Marine Stewardship Council (MSC) Certification in 2009

MSC certification will help to increase industry's ability to meet customers' desire for a sustainable source of seafood.



HALIBUT

On September 30th the Canada Pacific halibut fishery of British Columbia passed its assessment to earn Marine Stewardship Council (MSC) certification for being a sustainable and well-managed fishery. During assessment, the three principles of the MSC standard were evaluated in detail: the status of the fish stock, the impact of the fishery on the marine ecosystem and the management system overseeing the fishery.

It was the first fishery in British Columbia to earn this distinction.

The hook-and-line fishery catches Pacific halibut (*Hippoglossus stenolepis*), a large flatfish that ranges offshore of California, northward to the Bering Sea and westward into Russian and Japanese waters. British Columbia halibut products are sold to the United States, Europe and across Canada, and are available fresh or frozen as whole fish, steaks, boneless fillets and roasts, and cheeks.



HAKE

On October 21st the Pacific hake mid-water trawl fishery earned MSC certification.

It was the second fishery in British Columbia to earn this distinction.

This fishery is the largest on the west coast of both the United States and Canada. Pacific hake (*Merluccius productus*, also commonly known as Pacific whiting) is sold internationally, with North America, Europe and Asia being the foremost markets. This popular whitefish has long been used in producing surimi and more recently has filled an important niche in the frozen fillet, dressed, and whole fish block markets.

ABOUT THE MARINE STEWARDSHIP COUNCIL (MSC)

The Marine Stewardship Council (MSC) is an international non-profit organization set up to promote solutions to the problem of overfishing. The MSC runs the only certification and eco-labeling program for wild-capture fisheries consistent with the ISEAL Code of Good Practice for Setting Social and Environmental Standards and the Food and Agriculture Organization of the United Nations (FAO) guidelines for fisheries certification.

Industry Performance

Overall, British Columbia's seafood harvest declined six per cent from 269,200 tonnes in 2007 to 253,100 tonnes in 2008.

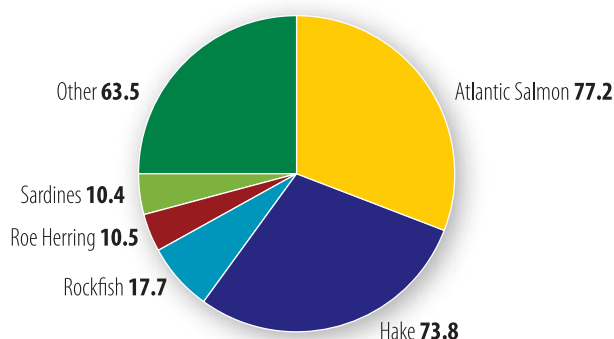
Most fisheries experienced small to moderate (three to 14 per cent) declines in harvest levels from the previous year; the wild salmon harvest experienced the greatest reduction with landings down 74 per cent.

Notable exceptions occurred in the cultured salmon harvest (up three per cent) and the wild sardine harvest which rose from 1.5 tonnes in 2007 to 10.4 tonnes in 2008 – an eight-fold increase.

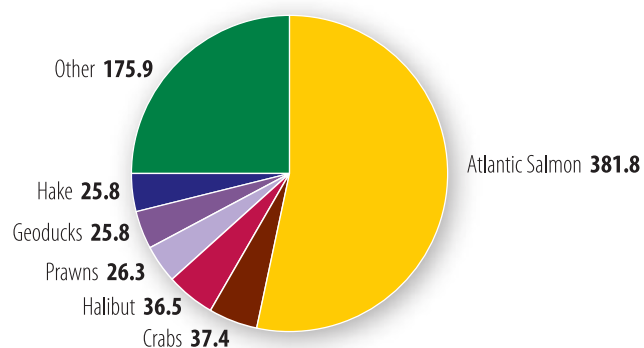
Landed prices were relatively strong in 2008 as the total landed value remained similar to 2007 even in the face of lower harvest levels. While groundfish, herring, wild and cultured shellfish and wild salmon fisheries all pulled in lower total landed values, cultured salmon and pelagic fish such as tuna and sardines showed significant increases. On the whole, the landed value of British Columbia seafood fell only two per cent from \$722.7 million in 2007 down to \$709.5 million in 2008.

The wholesale value of British Columbia's processed seafood commodities fell slightly (four per cent) from \$1.27 billion in 2007 to \$1.22 billion in 2008. Wild salmon, groundfish, shellfish and herring experienced declines ranging from five to 25 per cent while three species recorded notable increases in their total wholesale value: cultured salmon (six per cent), tuna (17 per cent) and sardines (746 per cent).

TOP SPECIES BY HARVEST ('000 TONNES)



TOP SPECIES BY LANDED VALUE (\$ MILLIONS)



British Columbia Commercial Capture (Wild) & Cultured Seafood Production 2006 – 2008

	HARVEST ('000 tonnes)			LANDED VALUE (\$ millions)			WHOLESALE VALUE (\$ millions)		
	2006 ^P	2007 ^P	2008 ^E	2006 ^P	2007 ^P	2008 ^E	2006 ^P	2007 ^P	2008 ^E
Commercial Capture	219.3	179.4	162.2	357.9	312.3	280.6	795.0	757.9	686.4
Cultured	89.0	89.8	90.9	430.2	410.4	428.9	489.3	507.7	529.9
Grand Total B.C.	308.3	269.2	253.1	788.1	722.7	709.5	1,284.3	1,265.6	1,216.3

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Capture Fisheries

Sixty-four per cent (162,200 tonnes) of British Columbia's seafood was produced from the commercial capture fisheries in 2008.

Overall the harvest was down 10 per cent from the previous year's 179,400 tonnes. The landed value generated by the fishery, \$280.6 million, also experienced a 10 per cent decline from the \$312.3 million recorded in 2007. The marine commercial fishery made up 40 per cent of the total landed value of British Columbia seafood.



SALMON

The 2008 wild salmon harvest came in at 5,100 tonnes – down 75 per cent from the 20,200 tonnes recorded in 2007. In recent years wild salmon harvest limits have been reduced to ensure long-term health and abundance of local salmon stocks.

Sockeye made up 35 per cent (1,800 tonnes) of the harvest followed by chum at 33 per cent (1,700 tonnes), chinook at 18 per cent (900 tonnes), pinks at eight per cent (400 tonnes) and coho the remaining six per cent (300 tonnes).

Each of the five species of salmon receives a very different price when delivered to the plants – in 2008 landed prices ranged from \$0.50 per kg for pinks to \$9.11 per kg for chinook. Chinook generated the highest total landed value of all wild salmon species in 2008 with \$8.2 million (a contribution of 40 per cent of the total value of salmon from capture fisheries). Sockeye generated \$7.1 million (a 35 per cent share) followed by chum with \$3.0 million (15 per cent), coho with \$1.8 million (9 per cent) and pinks with \$200,000 which accounted for the remaining one per cent.

The total landed value of wild salmon, at \$20.3 million, contributed seven per cent of the value of the capture fisheries harvest and three per cent of the provincial total.



HERRING

British Columbia's herring industry has three separately managed fisheries: roe herring, food and bait, and spawn-on-kelp. In 2008, these three fisheries recorded a combined harvest of 11,400 tonnes – down slightly from the previous year. Prices for herring roe and spawn-on-kelp were down in 2008 and the herring total landed value fell 23 per cent from \$20.2 million to \$15.5 million.

Ninety-two per cent (10,500 tonnes) of British Columbia's herring production came from the roe herring fishery in 2008. Although the harvest held steady compared to 2007, the landed value declined 15 per cent from \$12.8 million to \$10.9 million and contributed 70 per cent of the total landed value of herring.

The herring food and bait fishery made up seven per cent of the herring harvest in 2008 as production fell 27 per cent from 1,100 tonnes to 800 tonnes. This fishery was a minor contributor to the economic value of the species - in 2008 sales were down 11 per cent from \$900 thousand to \$800,000.

Herring spawn-on-kelp (SOK) harvests were down 33 per cent in 2008 to 210 tonnes (one per cent of the herring catch). In general, SOK carried a high price per kg and this small harvest generated 25 per cent of the total landed value of the herring fishery - \$3.8 million.

Capture Fisheries



GROUND FISH

Groundfish was by far the largest species group in terms of harvest volumes. In 2008, 113,900 tonnes of groundfish were harvested in capture fisheries in British Columbia.

Hake is B.C.'s most abundant species and the annual fluctuations in harvest have a large influence on overall totals for the groundfishery and ultimately the provincial totals as well. In 2008, the hake harvest was similar to 2007 at 73,800 tonnes and contributed 65 per cent of the groundfish harvest, 45 per cent of all capture fisheries landings and 30 per cent of the total British Columbia seafood harvest. The average price paid for hake in 2008 was \$0.35/kg – which made it a relatively low value fish by weight. However, the price was sufficient for hake sales to reach \$25.8 million in 2008, ranking it as the fourth highest generator of landed value of all British Columbia seafood species.

The next three most notable species in the 2008 groundfishery were rockfish, sablefish and halibut. While harvest levels for these species were much smaller than hake (17,700, 4,500, and 3,100 tonnes respectively), they garner strong prices to the fisher and post-production. In 2008, halibut was the No. 1 species in terms of landed value at \$36.5 million, followed by sablefish at \$23.5 million and rockfish at \$21.0 million. Combined these three species made up almost one-half of the landed value of the groundfishery in 2008.



SHELLFISH

British Columbia's shellfishery, at 15,800 tonnes, contributed 10 per cent of the total capture fishery landings in 2008. The shellfish catch and its corresponding landed value were both seven per cent lower than in 2007. The landed value, at \$100.6 million, represented 36 per cent of the landed value of wild British Columbia fisheries.

In 2008, the top three species in terms of harvest volume were crabs at 6,600 tonnes, followed by prawns at 2,400 tonnes and red sea urchins at 1,800 tonnes. These species contributed 42 per cent, 15 per cent and 11 per cent, respectively, of the capture shellfish total harvest.

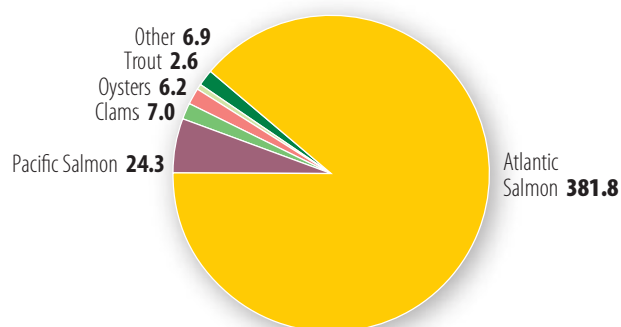
Eighty-nine per cent of the landed value of capture shellfisheries was generated by three species: crabs, prawns and geoduck clams. In 2008 the crab fishery contributed \$37.4 million (37 per cent), prawns brought in \$26.3 million (26 per cent) and geoduck clams raised \$25.8 million (26 per cent) of the wild shellfish landed value.



In recent years wild salmon harvest limits have been reduced to ensure long-term health and abundance of local salmon stocks.

Cultured Seafood – Aquaculture

TOP CULTURED SPECIES BY FARMGATE VALUE (\$ MILLIONS)



In 2008, 90,900 tonnes (36 per cent) of British Columbia's seafood was produced in culture facilities – a slight increase from the previous year's 89,800 tonnes.

The operations generated a farmgate value \$428.9 million – 5 per cent higher than the \$410.4 million reported in 2007. The aquaculture sector made up 60 per cent of the total landed value of British Columbia seafood.

SALMON

In 2008, the cultured salmon harvest (from marine and freshwater operations) was 81,400 tonnes, a three per cent increase over the 78,900 tonnes recorded in 2007. Similarly, the landed (farmgate) value of cultured salmon was up six per cent - from \$384.1 million in 2007 to \$406.1 million in 2008.

Atlantic salmon is the province's single-most significant commodity with the largest harvest and highest landed value of any other species – wild or cultured. In 2008, Atlantic salmon (at 77,200 tonnes) made up 95 and 31 per cent of the cultured and provincial seafood harvests respectively. Atlantic salmon sales rose from \$352.1 million in 2007 to \$381.8 million 2008 (an eight per cent increase). This species contributed 54 per cent of the total landed value of all British Columbia seafood and 94 per cent of the value of cultured seafood production.

Pacific salmon (chinook, coho and sockeye) production fell 25 per cent from 5,600 tonnes in 2007 to 4,200 tonnes in 2008 for a five per cent share of the culture seafood harvest. The corresponding farmgate value for Pacific salmon fell 24 per cent from \$32 million to \$24.3 million and generated six per cent of the landed value of aquaculture.

OTHER SPECIES

Sablefish, tilapia, rainbow trout, abalone and marine micro-algae are all produced on a smaller scale in British Columbia. In 2008, these species combined made up a harvest of 2,300 tonnes and generated \$7.1 million in farmgate sales.



SHELLFISH

Cultured shellfish production fell from 9,800 tonnes in 2007 to 7,200 tonnes in 2008 – a 27 per cent decline. The harvest contributed three per cent of the total provincial seafood harvest and eight per cent of cultured production. Pacific oysters made up 74 per cent of the harvest at 5,300 tonnes, followed by clams (geoduck, Manila and littlenecks) with 1,300 tonnes (18 per cent) and the final 600 tonnes (eight per cent) derived from scallop and mussel harvests.

The farmgate values for all cultured shellfish species were down in 2008 and the sector experienced an overall decline of 26 percent in value generating \$15.7 million in 2008 compared to \$21.3 million in 2007. Clams generated \$7.0 million in sales and made up 45 per cent of the landed value of cultured shellfish; oyster sales were reported at \$6.2 million (39 per cent) and scallops and mussels came in at \$2.5 for a 16 per cent share.

British Columbia Cultured Seafood Production 2008

Operation Type (water- & land-based combined)	Harvest (tonnes)	Farmgate Sales (\$'000)
Atlantic	77,200	381,800
Chinook & Coho	4,200	24,300
Other Finfish	*	*
Shellfish	7,200	15,700
Marine Plants	*	*
Marine Growout¹	90,200	425,900
Freshwater Growout (Tilapia, Trout & Sockeye)	700	3,000
Total	90,900	428,900

¹Includes confidential items.

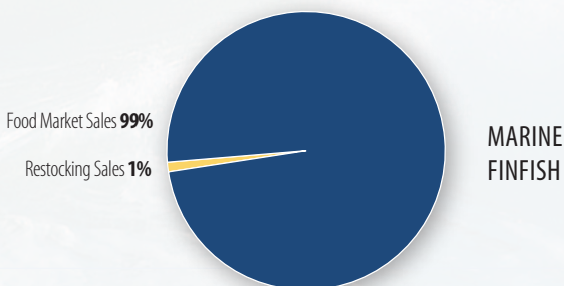
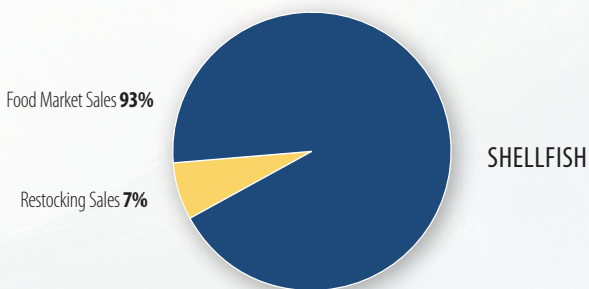
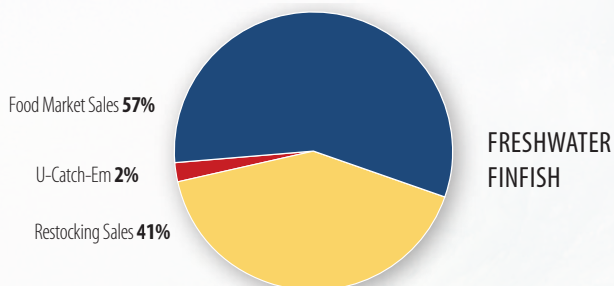
* Confidential

Industry Profile: British Columbia Aquaculture

British Columbia Aquaculture Licences by Culture Type 2008

Operation Type (water- & land-based combined)	Number of Licensed Operations	Actively Cultured Species
Marine Growout		
Salmon & Other Finfish	133	4
Shellfish	494	10
Marine Plants	9	3
Freshwater Growout		
Salmon & Other Finfish	80	12
Shellfish	2	1
Marine Hatchery		
Other Finfish	4	1
Shellfish	10	6
Freshwater Hatchery		
Salmon & Other Finfish	56	10
Shellfish	1	1
Total	788	30

REVENUE SHARES BY SECTOR



British Columbia's cultured seafood industry has come a long way from the operations of the early 1900s producing beach oysters for shucking. Today, British Columbia boasts a highly diversified aquaculture industry with 788 licensed operations actively culturing 30 species of finfish, shellfish and marine plants in marine and freshwater operations using land- and water-based culture systems. British Columbia's cultured marine salmon industry (including Atlantic, chinook and coho production) ranked fourth in the world behind producing nations of Norway, Chile and the United Kingdom.

The aquaculture sector generates revenue through three types of sales: food market, restocking and fee fishing. Food market sales (farm production destined for sales in domestic or export food chains) come from marine and freshwater finfish and shellfish growout operations. In 2008, 392 operations (293 shellfish and 98 finfish) reported food market sales.

Sales of cultured stock sold to local and out-of-province destinations for further growout are categorized as sales for restocking. While the bulk of these transactions are sales of juveniles from hatcheries to growout facilities, revenue generated by the transfer of stock between growout sites is also included. In 2008, 62 operations (31 finfish and 31 shellfish) reported \$3.7 million in revenues generated through sales for restocking.

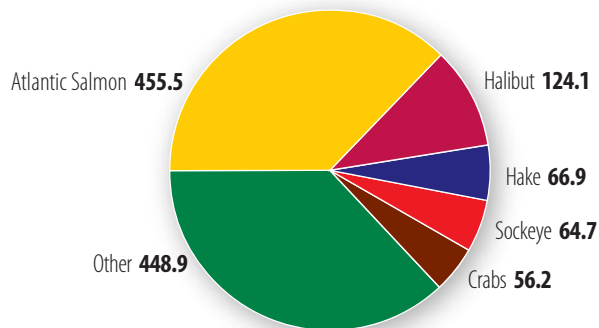
Commercial aquaculture operations may also have a recreational fishing component that is classified as a "U-Catch-Em" operation. These operations stock their freshwater ponds with rainbow trout and offer opportunities for tourists to fish, land and take their fresh catch home for their personal use. In 2008, 15 operations reported U-Catch-Em sales totalling \$113.2 thousand in farmgate revenues.

British Columbia Commercial Hatchery Sales 2008

Operation Type	Farmgate Sales (\$'000)
Clams	2
Oysters	102
Mussels	515
Abalone, Scallops & Sablefish	664
Marine Hatchery	1,283
Atlantic	91
Chinook & Kokanee	969
Trout	177
Freshwater Hatchery	1,237
Total	2,520

Processing Sector Overview

TOP SPECIES BY WHOLESAL VALUE (\$ MILLIONS)



In 2008, the total wholesale value of British Columbia seafood products fell four per cent from \$1.27 billion to \$1.22 billion.

Almost every major species group experienced declines in wholesale value with the exception of cultured salmon. Some individual species that showed significant sales growth over 2007 were Atlantic salmon, tuna, sardines, hake, crab, and sea cucumbers.

The wholesale value of salmon was down slightly (three per cent) from \$648.7 million to \$630.4 million. Wild salmon products (including those derived from imports) fell 25 per

cent from \$179.4 million to \$135.2 million. Sockeye and coho showed marginal rises in sales value in 2008. Sockeye was the single-most important species (at \$64.7 million) and generated 48 per cent of the wild salmon wholesale value. Cultured salmon contributed 70 per cent of the wholesale value of all British Columbia salmon products. In 2008, cultured salmon products experienced a six per cent increase in wholesale value rising to \$495.2 million from the \$469.3 million in 2007. Atlantic salmon was the most significant commodity in British Columbia seafood sales in 2008. This single species generated \$455.5 million, and contributed 37 per cent of the total wholesale value of BC seafood.

Herring product values were down 15 per cent overall – falling from \$56.2 million in 2007 to \$47.7 million. Herring roe products generated \$40.5 million in wholesale value (an 11 per cent drop from 2007) and made up over 80 per cent of the value of all herring products. The wholesale value of packaged spawn-on-kelp was down from \$7.1 million in 2007 to \$4.2 million in 2008 and contributed 10 per cent of the wholesale value of all herring products.

Groundfish product sales were down 10 per cent from \$334.6 million in 2007 to \$302.5 million in 2008 and made up a 25 per cent share of the provincial total seafood value. Halibut product sales (at \$124.1 million) were by far the largest of all the groundfish species followed by hake at \$66.9 million, rockfish \$35.1 million and sablefish at \$30 million.

Shellfish experienced a five per cent drop in wholesale value from \$187 million in 2007 to \$178.4 million in 2008. Although culture shellfish products realized an increase in prices in 2008, the depressed production levels affected the total wholesale value falling from \$32.8 million to \$27 million. Individual species showed declines of between eight and 13 per cent compared to 2007 values. The wholesale value of wild shellfish products fluctuated among species while overall this segment dropped marginally from \$154.2 million to \$151.4 million.



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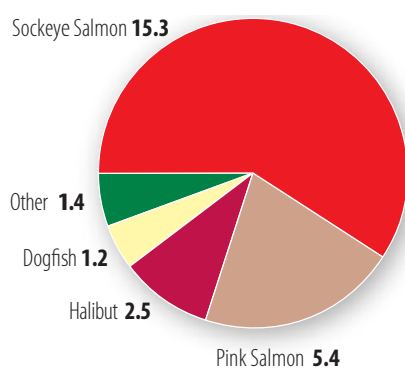
Markets

With a total value of \$911.0 million, 216 separate British Columbia seafood export commodities were tracked in 2008.

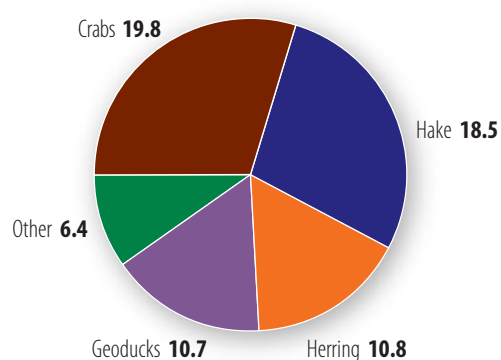
The United States continued to be the primary export destination for British Columbia seafood products, followed by Japan, China, Hong Kong and the United Kingdom. In 2008, these five countries received 89 per cent of our exports with a combined value of \$808 million. Some British Columbia products that were distributed extensively in 2008 included frozen hake shipped to 32 countries, frozen chum salmon (to 28 countries), canned pink salmon (to 20 countries), and frozen sardines (to 18 countries).

TOP 5 EXPORT MARKETS (\$ MILLIONS)

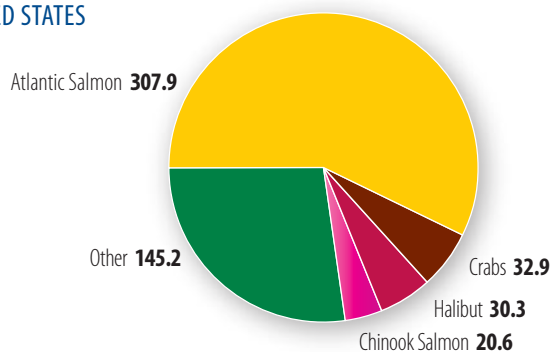
UNITED KINGDOM



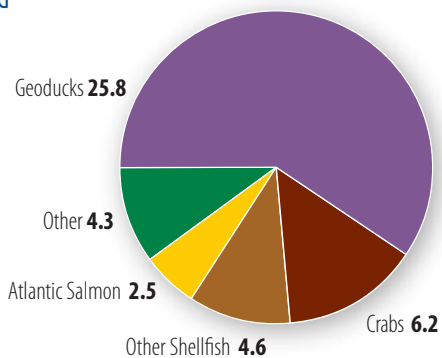
CHINA



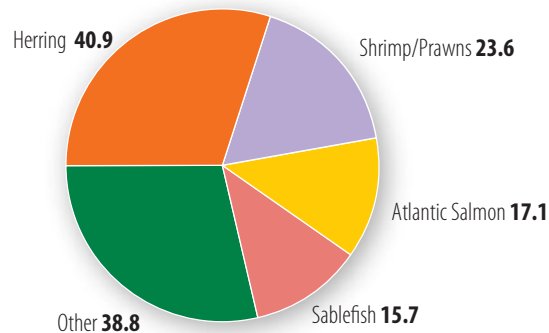
UNITED STATES



HONG KONG



JAPAN



Significant Events in British Columbia's Seafood Sector – 2008/9

BRITISH COLUMBIA'S COMMITMENT TO ECO-CERTIFICATION

British Columbia is active in the new National Strategy on Eco-certification. Efforts are focused on the Marine Stewardship Council (MSC) certification process as it is currently the only approach which is fully compliant with the provisions of the Fisheries and Agriculture Organization of the United Nations' Guidelines for Fisheries Eco-Certification.

Current status of MSC certification efforts:

- British Columbia achieved MSC certification for the Pacific halibut fishery in September 2009
- British Columbia achieved MSC certification for the Pacific hake mid-water trawl fishery October 2009
- six fisheries are in the full assessment stage including: sockeye, pink and chum salmon, spiny dogfish, sablefish, and albacore tuna
- a number of other fisheries are in the confidential pre-assessment stage

For domestic markets we maintain liaison with other eco-labeling approaches to ensure consumer understanding of sustainable fisheries.

BC SEAFOOD REP TO CHAIR ASSOCIATION OF SUSTAINABLE FISHERIES (ASF) – JUNE 2009

The ASF elected Christina Burridge as its first chair on June 4, 2009. Burridge is the executive director of the British Columbia Seafood Alliance, which represents nearly all the production of commercially harvested seafood on Canada's Pacific Coast. Launched during the European Seafood Exposition in Brussels in April 2009, the ASF is a collection of 20 fisheries participating in the MSC program that partnered to foster a constructive dialogue between the London-based non-profit and its client fisheries. Better communication with the MSC will help advance British Columbia's sustainability goals.

SEAFOOD MARKETING - 2008/9

Seafood Expositions and Trade Shows

As a part of its role to assist British Columbia's seafood producers to market their products in the global marketplace, representatives from the Ministry of Environment managed the BC Seafood booth in the Canada Pavilion at the European Seafood Exposition (ESE) in Brussels, in April 2008. The annual ESE has more than 1,600 exhibiting companies from 87 countries, and brings together seafood buyers and sellers from all over Europe and the world.

Participation in the ESE, as well as the Boston Seafood Show and China Seafood Expositions in 2008 provided an opportunity for British Columbia seafood companies to showcase their products, meet with trade officers from the Canadian consulates and embassies, and conduct business with new buyers.

BC Seafood on Twitter

Following on the success of its seafood marketing website BC Seafood expanded its web presence with the launch of its Twitter site in August 2009. Daily posts increase the profile of British Columbia seafood and highlight good news items, recipes, suppliers, and sustainability initiatives.

- www.bcseafood.ca
- twitter.com/bcseafood

U.S.-CANADA ALBACORE TREATY – DECEMBER 2008

Canadian and United States officials initialed amendments to the Canada-U.S. Pacific Albacore Tuna Treaty which will be in force for the 2009 fishing season. The Treaty is a 1981 agreement between the governments of Canada and the United States, amended in 2002, and codified by law in April, 2004.

The Treaty allows for:

- each country's vessels to fish for albacore in the other country's waters seaward of 12 miles from shore
- vessels from one country to use designated ports in the other country to obtain supplies and services and to land fish
- exchange of fisheries data between the governments of the two nations
- vessel marking, record keeping, and reporting requirements for U.S. albacore tuna fishing vessel operators and for Canadian albacore tuna fishing vessel operators when they are fishing in U.S. waters
- agreed-to limits on reciprocal fishing access so that, over a three-year-period, the number of fishing vessels that will be permitted to fish under the Treaty will be maintained

NEW EUROPEAN UNION (EU) IMPORT REQUIREMENTS FOR CANADIAN FISHERIES PRODUCTS

The EU has enacted a regulation with the objective of establishing a system to prevent, deter and eliminate illegal, unreported and unregulated (IUU) fishing. The regulation will require Canadian exporters to obtain a DFO-validated catch certificate attesting that fish and fish products originate from non-IUU fisheries. The regulation will apply to all marine fishery products from catch landed after January 1, 2010. Notable exclusions include products from freshwater fisheries, aquaculture, as well as scallops, mussels, oysters and some snails.

DFO, in collaboration with federal and provincial governments and industry, has developed a process to facilitate the issuance of the catch certificates necessary for Canadian exporters to meet the EU IUU regulation.

- <http://www.dfo-mpo.gc.ca/fm-gp/peches-fisheries/fish-ren-peche/index-eng.htm>

B.C. SUPREME COURT DECISION REGARDING AQUACULTURE AND CONSTITUTIONAL ROLES OF GOVERNMENT

In February 2009, the British Columbia Supreme Court ruled that finfish aquaculture on the coast of British Columbia is a fishery and a matter of exclusive federal jurisdiction. The court further ruled that affected provincial aquaculture legislation would remain in place until December 18, 2010, at which time it would become without effect. The decision did not strike down all British Columbia aquaculture-related legislation as the Province continues to be responsible for Crown land tenure and its use. As a result, management of the coastal finfish aquaculture industry remains shared between the two levels of government, but the balance of responsibility to manage the operational aspects of aquaculture has shifted to Fisheries and Oceans Canada. Both governments are working together to implement the Court decision.



AQUACULTURE CANADA CONFERENCE

In May, 2009, the Aquaculture Association of Canada (AAC) held its 26th annual meeting in Nanaimo with the theme "Aquaculture: Meeting the Challenges". Highlights included:

- Dr. Barry Costa-Pierce speaking on the need to move forward in an economically and environmentally sustainable manner
- Tim Davies with insights from the mining industry
- Dr. Richard Beamish on the importance of aquaculture and hatcheries to British Columbian fisheries
- topics relevant to improving the industry's social license
- First Nations presenters shared experiences and lessons learned from their involvement in aquaculture
- an environmental interactions session addressing sea lice and closed containment
- other sessions focused on aquatic invasive species and fish welfare.

Presentations and discussions also exemplified opportunities such as genomic tools, ecosystem approaches for management, and certification and traceability solutions. The AAC will be publishing the conference proceedings and a bulletin on genomic applications to sustainable aquaculture.

INVESTMENT IN AQUACULTURE RESEARCH, DEVELOPMENT AND INNOVATION

The federal and provincial governments, research institutions and industry continued to invest in research and innovation to improve aquaculture industry performance, sustainability and competitiveness in the global marketplace. Federal funding programs include the Aquaculture Collaborative Research and Development Program (ACRDP) and the Aquaculture Innovation and Market Access Program (AIMAP). In 2008 and 2009 these programs invested over \$3.8 million towards a large number of research projects that attracted an additional \$3.4 million in industry investment. Projects included: new technologies for shellfish and finfish harvesting and processing, fish health and environmental impact studies, closed containment aquaculture, and integrated multi-trophic aquaculture.

- ACRDP: <http://www.dfo-mpo.gc.ca/science/enviro/aquaculture/acrdp-pcrda/index-eng.htm>
- AIMAP: <http://www.dfo-mpo.gc.ca/aquaculture/sustainable-durable/index-eng.htm>

Integrated Multi-Trophic Aquaculture (IMTA)

A 5-year research program to fund the Canadian IMTA Network (CIMTAN) was announced at the Aquaculture Canada '09 conference in May 2009. This pan-Canadian academic/government/industry partnership will provide the interdisciplinary research and development and training needed for the commercialization of IMTA in Canada. Primary focus of the program includes:

- 1) ecological design, ecosystem interactions and bio-mitigation efficiencies
 - 2) system innovation and engineering
 - 3) economic viability and societal acceptance
 - 4) regulatory science – the key B.C. partner is Dr. Steve Cross of Kyuquot Seafoods Ltd/Pacific SEA Labs
- <http://www.pacificsea-lab.com/current.html>
 - http://bcsga.ca/wp-content/uploads/2008/10/drsteve_cross_seasystem_cart_sea-lab.pdf

Center for Shellfish Research – Deep Bay Field Station Update

Industry Canada, the Canada Foundation for Innovation, the Ministry of Advanced Education and the Island Coastal Economic Trust provided investment towards completion of the Deep Bay Field Station for Shellfish Research. The Field Station will become a centre of excellence for scientific, environmental, economic and public engagement in support of shellfish aquaculture, training and environmental sustainability in British Columbia. Construction began after a ground-turning ceremony at the site on May 21, 2009 and the new building and laboratories are expected to be completed in July 2010.

- <http://www.youtube.com/watch?v=F5ClmZVFx1Q>
- <http://www.viu.ca/deepbay/index.asp>

Genomics in Lice and Salmon Research

Genome BC with funding support from University of Victoria, Vancouver Island University, industry and the Ministry of Agriculture and Lands launched the Genomics in Lice and Salmon project. The goal of the 3-year-project is to look at sea louse issues of worldwide interest and of particular relevance to British Columbia.

- <http://web.uvic.ca/grasp/gils/>
- <http://www.dfo-mpo.gc.ca/science/publications/article/2009/03-23-09-eng.htm>

REPORTS AND PUBLICATIONS

2007 Report for Regulatory Compliance of B.C.'s Marine Finfish Aquaculture Facilities – Fall 2008

The Ministry of Agriculture and Lands report reaffirms British Columbia's commitment to hold the province's aquaculture industry to a high standard of environmental compliance.

- www.agf.gov.bc.ca/fisheries/aqua_report/2007/aquaculture_inspect2007.pdf

B.C. Pacific Salmon Forum Final Report and Recommendations on Provincial Fisheries Management – February 2009

The B.C. Pacific Salmon Forum released its Final Report and Recommendations addressing issues surrounding the economic, social and environmental sustainability of British Columbia wild salmon stocks and salmon aquaculture on the coast. The release of the Final Report marked the culmination of over 4 years work by the Forum to which the British Columbia government allocated \$5 million.

- www.pacificsalmonforum.ca/final/index.php

2007 Fish Health Report – September 2008

Increased fish audits and a decline in sea lice numbers were reported in the 2007 Fish Health Report, released by the Ministry of Agriculture and Lands. The report confirms British Columbia's commitment to uphold high standards of fish health in the province's aquaculture industry.

- www.al.gov.bc.ca/ahc/fish_health/fish_health2007.pdf

State of the Salmon Conference Proceedings – February 2009

The State of the Salmon conference is a joint program of Ecotrust and the Wild Salmon Center. The 2009 conference goal was to strengthen the conservation status of salmon in the Pacific Rim. Salmon are trans-boundary species, so it's important for the five nations of the North Pacific Anadromous Fish Commission (NPAFC) to work together on ocean research and what is needed to study the effects of climate change on salmon in the North Pacific.

- www.stateofthesalmon.org/conference2009/downloads/SoS_2009_Conference_Proceedings_FINAL.pdf



2008 B.C. SEAFOOD FAST FACTS

Number of Aquaculture Operations	788
Number of Processing Facilities	233
Number of Fishing Vessels	3,200
.....	
Total Harvest (Tonnes)	253,100
Value of Harvest (\$ Millions)	\$709.5
Value of Processed Seafood Products (\$ Millions)	\$1,216.3
Total Seafood Products Exported (Tonnes)	170,225
Value of Exports (\$ Millions)	\$911.0
.....	
Average Serving Size (Ounces)	3
Meals/Year Produced From Exports	1,563,435,695
Meals/Day Produced From Exports	4,283,385



DATA SOURCES

- All aquaculture industry harvests and farmgate values compiled by the Ministry of Environment
- All seafood finished products and wholesale values compiled by the Ministry of Environment
- All capture fisheries landings provided by Fisheries and Oceans Canada, Pacific Region. (Preliminary values for 2006 and 2007 and estimates for 2008 have been adjusted by the Ministry of Environment)
- Aquaculture and processing facility licensing data provided by the Ministry of Agriculture and Lands
- Export data provided by Statistics Canada

We encourage you to email us your comments and any suggestions for future issues to fishstats@gov.bc.ca or by mail to:

Oceans and Marine Fisheries Branch
Ministry of Environment
PO Box 9309 Stn Prov Govt
Victoria BC V8W 9N1