

The 1998 British Columbia Seafood Industry Year in Review



BRITISH
COLUMBIA

Ministry of Fisheries

A Resilient Industry

British Columbia's seafood products are derived from over 80 different species of finfish, shellfish and plants from both the freshwater and marine environments. Commercial seafood operations are found province-wide and encompass a diverse range of enterprises from family-owned and operated trout farms to corporately owned state-of-the-art processing facilities.

In recent years the seafood sector has responded to competitive challenges in the world market through improved utilization of the fish resources. New production technologies, new products and new fisheries have provided opportunities to increase both the landed value of the harvest and the wholesale value of seafood products destined for both domestic and export markets.

Despite drastic declines in the abundance of some fish species and implementation of new management regimes, the sector continues to make a significant contribution to the provincial economy. Over 17,000 people are employed in full-and part-time positions in commercial fishing, fish processing and aquaculture enterprises throughout the province.

In 1998, seafood was the province's number one food export with an export value of \$813 million. British Columbia shipped more seafood than any other province and accounted for 25 percent of the total value of all seafood exports from Canada.

This report is focused on the commercial seafood industry. British Columbia's freshwater and tidal sport fishing sectors provide substantial social, cultural and economic benefits for the province. The British Columbia Ministry of Fisheries (BC Fisheries) will be working with BC Statistics to provide a comprehensive set of economic measures for all aspects of the fisheries sector.

BC Fisheries is working to ensure the long-term viability of recreational fisheries in British Columbia through enhancement of quality of angling, facilitating business opportunities, operating hatcheries and supporting effective resource management initiatives.

British Columbia Seafood Production 1996 to 1998

	WHOLESALE VALUE ¹ ... \$ Millions ...			LANDED VALUE ... \$ Millions ...			LANDINGS ... '000 Tonnes ...		
	1998 ^E	1997 ^E	1996 ^P	1998 ^E	1997 ^E	1996 ^P	1998 ^E	1997 ^E	1996 ^P
Salmon²									
Chinook	8.0	7.7	6.9	5.2	5.8	1.6	1.4	1.7	0.5
Sockeye	66.0	209.6	165.9	32.6	89.2	78.0	5.0	25.3	15.4
Coho	6.0	7.2	24.2	<0.1	1.8	10.2	<0.1	0.8	3.9
Pink	53.0	45.0	51.4	2.8	6.6	4.6	3.9	12.2	8.4
Chum	46.0	36.1	34.5	12.8	6.4	4.8	19.9	8.7	6.4
Subtotal	180.0	306.2	285.3	53.4	109.8	99.2	30.2	48.7	34.6
Farmed Salmon	244.9	191.5	162.2	228.9	176.3	155.9	42.3	36.6	27.8
Farmed Trout	0.4	0.7	0.5	0.3	0.6	0.4	0.06	0.14	0.07
Herring									
Spawn on Kelp	8.8	17.7	22.2	8.8	17.7	22.2	0.36	0.41	0.35
Roe Herring	94.0	97.8	166.3	17.4	37.4	77.3	23.0	31.2	21.7
Food and Bait	2.0	1.7	2.5	0.2	0.2	0.2	0.3	0.3	0.4
Subtotal	104.8	117.2	191.0	26.4	55.3	99.7	23.7	31.9	22.5
Halibut	68.0	58.7	50.9	29.0	38.2	32.7	5.3	5.1	4.1
Groundfish	133.2	133.1	115.1	87.8	85.0	73.2	131.1	138.1	146.7
Shellfish³	138.3	159.2	159.3	98.6	118.0	125.2	24.4	23.9	31.0
Other	7.0	7.7	9.0	1.5	2.1	2.7	1.5	1.8	2.3
Grand Total	876.6	974.3	973.3	525.9	585.3	589.0	258.6	286.2	269.1

E Estimates
P Preliminary

1 The wholesale values of individual species include the value of products derived from imported fish.

2 The total wholesale value of wild salmon includes the value of salmon products such as offal meal and oil which cannot be identified by species.

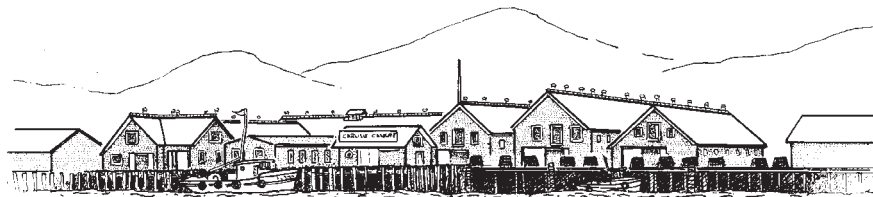
3 Includes farmed shellfish.

1998 Performance Highlights

OVERVIEW

The 1998 British Columbia commercial seafood harvest from wild and farmed sources was down 10 percent from 1997 to 259,000 tonnes. Although harvest levels rose for farmed salmon and most groundfish and shellfish species, these were negated by the notable declines in the commercial salmon (down 38 percent) and herring harvests (down by 26 percent). All species groups, except for groundfish and farmed salmon, experienced a drop in landed values as the provincial total fell to \$526 million.

The 1998 wholesale value of British Columbia's processed seafood products was \$877 million. The value of wild salmon products showed a marked drop in total value in 1998 from over \$300 million in 1997 down to \$180 million. Even though provincial processors accessed shipments of salmon, groundfish, shellfish, and herring from outside the province for value-added processing, the total value of all British Columbia seafood products was 10 percent lower than the previous year.

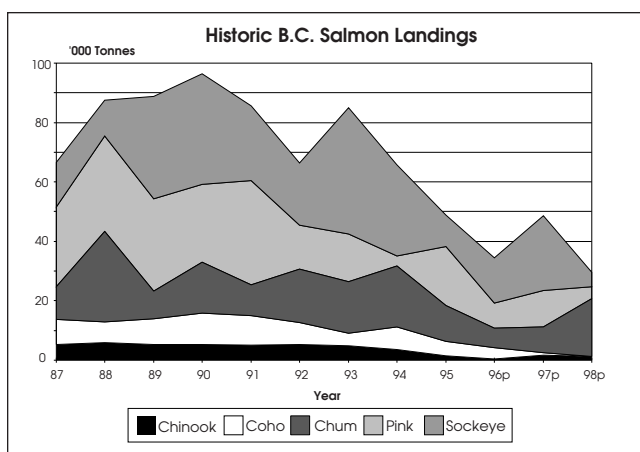


WILD SALMON

The 1998 wild salmon catch of 30,000 tonnes was the lowest in 50 years. In 1998 the federal Department of Fisheries and Oceans (DFO) developed and implemented the Salmon Management Plan in an effort to protect and conserve threatened salmon stocks. The stringent fisheries regime severely curtailed British Columbia's commercial salmon harvest.

The change in harvest strategies altered the species mix of the catch for 1998, with chum accounting for 66 percent of all salmon landed. The high volume of low valued chum brought down the overall average prices paid to harvesters from \$2.25 per kilogram in 1997 to \$1.77 per kilogram in 1998. Low prices and the low overall harvest translated into a very depressed total landed value as the 1998 commercial salmon fishery generated \$53 million - less than half of the 1997 value.

While wholesale prices were actually higher in 1998 for most species and products, the limited supply of domestic salmon, especially sockeye, kept the total wholesale value down. British Columbia processors realized only \$180 million in salmon product sales in 1998, a 41 percent drop from 1997.



Sockeye

Sockeye stocks were the focus of conservation concerns in 1998. Warm water temperatures and low water levels upstream resulted in higher than usual mortalities, which in turn required higher than normal escapement targets. With the harvest restrictions in place to protect the co-migrating coho and the extreme environmental conditions affecting the route to the spawning grounds, there were very limited opportunities for fishers to target sockeye. The commercial sockeye harvest for 1998 was down 80 percent from 1997 to 5,000 tonnes, accounting for only 17 percent of the total provincial salmon harvest, compared to a 52 percent share the previous year.

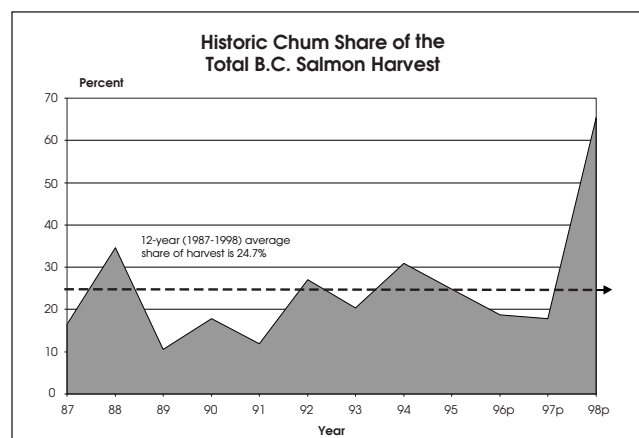
The high-valued sockeye is historically a primary generator of income for the British Columbia salmon industry and in 1998 contributed \$32.6 million or 61 percent of the landed value of all wild salmon. Sockeye products, valued at \$66 million, generated 37 percent of the total wholesale value of wild salmon. This important canning species derived over half, or \$28 million of its total wholesale value from canned products.

Pink

Historically, pink salmon has been British Columbia's second most important commercial salmon species. The 1998 season was a low run year for pinks, this, coupled with the limited opportunities in the commercial salmon fishery, resulted in only 3,900 tonnes being harvested. Pinks on average contribute at least 30 percent of the total commercial fishery harvest but in 1998 they made up only 13 percent of the salmon catch. Pink salmon are typically a canning species, and over 80 percent of the 1998 domestic harvest was routed to the can. Landed prices for pinks were much stronger this year at \$0.72 per kilogram compared to \$0.54 per kilogram in 1997. Market prices were higher due to supply shortfalls in both British Columbia and Alaska.

Chum

The 1998 chum salmon harvest, at 19,900 tonnes, was more than 20 percent higher than the long-term average. Although chum harvests have been known to fluctuate dramatically the average harvest share has usually been under 25 percent, however in 1998 the share was up to 66 percent. Prices paid to fishers for this low valued species generated only \$13 million or 24 percent of the total wild salmon landed value. Similarly, the wholesale value of chum products at \$46 million contributed only 26 percent to the total value of salmon products in 1998.



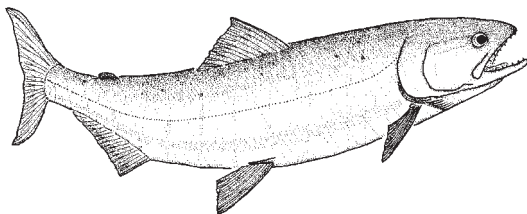
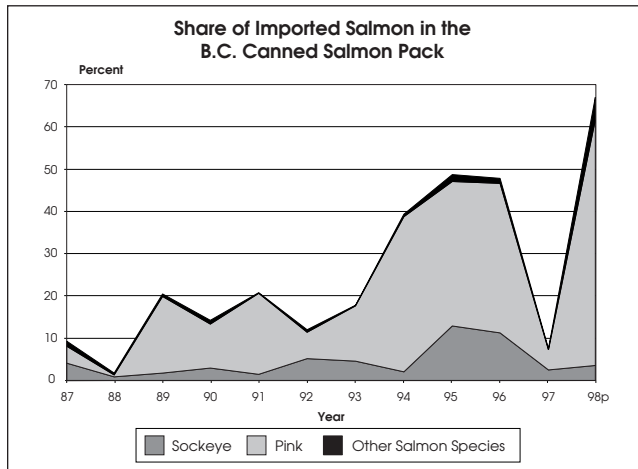
Coho

There were no directed fisheries for coho during 1998. Concerns over the health and abundance of many of British Columbia's coho stocks resulted in a coast-wide ban on the retention of coho in the commercial, recreational and aboriginal fisheries. A small amount of coho was imported from Alaska for routing to the canned salmon market.

Canned Salmon

The British Columbia canned salmon pack for 1998 was 735,400 cases. Although the pack size was almost the same as in 1997, the origin and species mix was atypical. Where sockeye has historically provided between 300,000 and 400,000 cases, the lack of raw material from both British Columbia and Alaska resulted in only 103,600 cases being produced.

To supplement the supply of salmon from domestic fisheries, British Columbia processors accessed over 16,000 tonnes of imported salmon for their canning lines. Salmon from Alaskan and Russian sources made up a record 67 percent of the total British Columbia canned salmon pack for the year. Pinks comprised over 85 percent of the imported salmon in 1998 and at 529,000 cases, contributed over 70 percent of the total canned salmon pack.

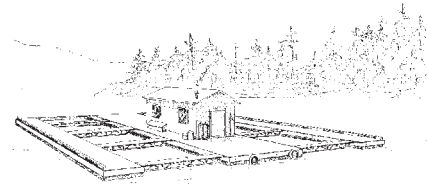


FARMED SALMON

British Columbia's farmed salmon production continued its growth by another 15% in 1998 to 42,300 tonnes and exceeded the wild salmon harvest for the first time. The farmed salmon industry maintained its position in the global economy as the world's fourth largest producer, while providing significant benefits to British Columbia's coastal communities due to the year-round harvest and grow-out regimes.

This sector generated \$229 million in farm sales in 1998 as the shortage of wild salmon allowed for high sales volumes in the summer months and the weak Canadian dollar encouraged exports. Farmed salmon accounted for 44 percent of the total landed value of all British Columbia fisheries and 81 percent of the value of domestic salmon.

With production and values the highest on record, British Columbia farmed salmon overtook wild salmon as the number one generator of wholesale value in the province. Product sales of \$245 million represented 28 percent of all seafood produced.



HERRING

British Columbia's herring spawn-on-kelp and salted herring roe products are destined almost exclusively for Asian markets. The 1998 herring harvest was down 26 percent from 1997 but was similar to 1996 levels. The landed value of \$26 million was half of what it was in 1997 and only one quarter of the 1996 value of \$100 million. The wholesale value of herring products fell only 10 percent from the previous year as prices in Japan improved slightly.

HALIBUT

Both British Columbia and Alaska increased their halibut Total Allowable Catch (TAC) for 1998. The increase in catch from both sources resulted in slightly lower prices to both fishers and wholesalers. British Columbia plants imported significant amounts of US frozen halibut to supplement the fresh British Columbia supplies in an effort to meet the growing demand for this important groundfish species. In 1998, over 25 percent of the wholesale value of halibut products was derived from imported fish.

GROUNDFISH

The 1998 harvest from British Columbia's diversified groundfish sector was 131,000 tonnes and accounted for 50 percent of the provincial seafood harvest. The landed value for groundfish species, at close to \$88 million, rose from 1997 levels as a result of the increased demand for live groundfish destined for the specialty restaurant trade.

The total wholesale value of groundfish, at \$133 million, was little changed from 1997. Although 1998 saw a rise in prices for "white meat" groundfish fillets this was negated by a reduced demand and price for other groundfish species and products.

Hake

Processing capacity for hake was expanded at two Vancouver Island surimi plants in 1998. Prices offered to fishers by at-sea processors were significantly higher than those offered by the on-shore processors and as a

result the plants experienced some difficulties in securing access to raw materials.

Although the hake harvest was down 8 percent in 1998, both the landed and wholesale values rose. Hake landings generated \$19 million and accounted for 22 percent of the income for groundfish harvesters. Hake products earned \$32 million in wholesale value, up slightly from the previous year and contributing 24 percent of the total wholesale value of groundfish for 1998.

Sablefish

The sablefish harvest rose 18 percent to 4,500 tonnes but demand for the J-cut frozen dressed products aimed at the Japanese market declined. Chilean sea bass products temporarily displaced Canadian sablefish in the market place resulting in low wholesale and landed prices in 1998.

British Columbia Groundfish Production 1996 to 1998

	WHOLESALE VALUE			LANDED VALUE			LANDINGS		
	... \$ Millions \$ Millions '000 Tonnes ...		
	1998 ^E	1997 ^E	1996 ^P	1998 ^E	1997 ^E	1996 ^P	1998 ^E	1997 ^E	1996 ^P
Dogfish	0.7	0.9	2.4	0.7	0.9	2.4	1.6	2.1	4.0
Hake	32.0	30.7	17.3	19.1	15.4	14.5	90.9	98.6	99.8
Lingcod	5.0	4.3	6.2	3.8	2.8	4.7	2.0	1.7	2.5
Pacific Cod	4.0	4.4	3.7	1.1	1.5	0.7	1.3	1.5	0.7
Pollock	3.0	3.5	2.9	0.5	0.9	0.9	0.8	1.8	2.1
Rockfish	36.0	34.2	30.5	28.0	26.5	20.0	20.5	19.6	22.8
Sablefish	32.5	35.5	29.3	27.8	30.9	23.1	4.5	3.8	3.0
Soles	9.0	8.1	10.7	5.0	4.4	4.8	4.9	4.3	5.0
Turbot	2.0	1.7	1.7	1.3	1.0	1.4	3.8	2.9	4.5
Other	9.0	9.8	10.4	0.5	0.7	0.7	0.8	1.8	2.3
Total	133.2	133.1	115.1	87.8	85.0	73.2	131.1	138.1	146.7

E Estimates P Preliminary

SHELLFISH

British Columbia's 1998 shellfish harvest remained similar to the 1997 season. Total landings were steady at 24,400 tonnes with 25 percent of the harvest derived from aquaculture operations. Although prices paid for most shellfish species were lower in 1998 compared to 1997, the shellfish harvesting sector was still the most important commercial fishery in terms of value to the harvester. At \$99 million almost 1/5 of the total value of British Columbia fisheries was derived from shellfish species. The 1998 wholesale value of shellfish products from wild and farmed sources combined was down 13 percent to \$138 million compared to 1997.

As most shellfish is destined for the live or fresh markets the opportunity for secondary processing is limited to a

handful of species. Sea cucumbers, red sea urchins and geoducks are the principal species targeted for value-added processing. The resulting products of skins, roe, neck and body meat are primarily destined for Asian markets.

Geoduck Clams

Geoduck clams are a primary generator of income for both commercial shellfish harvesters and processors. In 1998 the geoduck harvest of 1,800 tonnes represented 7 percent of all shellfish harvested. Although the harvest is relatively small, geoduck harvesters collected over \$16 per kilogram to generate almost \$30 million or 30 percent of the provincial total landed value of all shellfish.

Geoduck products earned \$42 million, down slightly from 1997 as a result of the weakened Asian economies, but still representing 30 percent of all British Columbia shellfish sales. Research is in progress to evaluate geoduck's potential for culturing and enhancement.

Sea Cucumbers

The 1998 sea cucumber harvest was up slightly from the previous year and prices paid to fishers were also strong. The Asian market demands very specific processing and as a result British Columbia plants shipped partially processed products to be finished at the destination.

Sea Urchins

Sea urchins are harvested for their roe. The British Columbia red urchin fishery, owing to minimum size limitations, produces roe product of borderline size and

quality compared to their direct competition from California. Dependent upon kelp resources for food, the red urchins have also been adversely affected by El Nino as lack of adequate kelp growth curtailed food supplies and resulted in a poor quality roe product. British Columbia processors have concentrated on bulk roe shipments recently rather than the added value roe in tray shipments that could have garnered higher prices. Experimental work is being undertaken to increase roe content through culturing techniques.

Shrimps and Prawns

Although the combined shrimp and prawn harvest was similar to 1997 the landed and wholesale values were down. Fresh shrimp, live prawns, and frozen whole prawns all saw a sharp decline in prices in 1998 from the high in 1997. This translated into a 32 percent reduction in landed value and a 29 percent loss of wholesale value.

British Columbia Shellfish Production 1996 to 1998									
	WHOLESALE VALUE			LANDED VALUE			LANDINGS		
	... \$ Millions \$ Millions '000 Tonnes ...		
	1998^E	1997^E	1996^P	1998^E	1997^E	1996^P	1998^E	1997^E	1996^P
Farmed									
Clams	5.8	5.1	5.2	3.6	3.4	4.4	0.7	0.8	1.0
Oysters	6.0	6.3	6.7	4.9	5.0	5.7	5.3	4.8	5.5
Scallops	0.2	0.4	0.5	0.1	0.2	0.9	0.02	0.02	0.14
Subtotal	12.0	11.8	12.4	8.6	8.6	11.0	6.02	5.62	6.64
Wild									
Clams	6.2	4.8	4.4	3.9	3.2	3.7	1.3	1.2	1.4
Crabs	29.0	34.0	31.3	21.4	28.7	23.4	3.0	3.9	4.9
Geoducks	42.0	45.0	37.0	29.6	30.7	34.8	1.8	1.7	1.8
Scallops	0.4	0.8	1.0	0.3	0.4	0.5	0.05	0.07	0.1
Sea Cucumbers	2.5	5.2	2.5	1.1	0.8	0.7	0.7	0.5	0.4
Sea Urchins	17.0	16.9	20.0	9.8	10.4	12.1	6.0	5.4	5.9
Shrimps/Prawns	28.0	39.6	49.4	23.0	34.1	37.8	5.1	5.0	9.2
Other	1.2	1.1	1.3	0.9	1.1	1.2	0.4	0.5	0.7
Subtotal	126.3	147.4	146.9	90.0	109.4	114.2	18.35	18.27	24.4
Total	138.3	159.2	159.3	98.6	118.0	125.2	24.4	23.9	31.0

E Estimates P Preliminary

Significant Events in 1998

NEW FISHERIES MINISTRY

The new provincial Ministry of Fisheries (BC Fisheries) was created in 1998 to provide a strong, coordinated focus for provincial efforts to protect fish and renew British Columbia's commercial and recreational fisheries.

FISHERIES & SEAFOOD DEVELOPMENT & DIVERSIFICATION

The province of British Columbia, in co-operation with industry and the federal Department of Fisheries and Oceans (DFO) continued to support the development of fisheries for new and under-utilized species. Terms of

reference were established for a Fisheries and Seafood Diversification Board (to be set up in 1999), which will provide both BC Fisheries and DFO with scientific and business advice on new fisheries.

BC Fisheries support for the processing sector is focussed on increasing competitiveness and diversification as a means for improving the wholesale value of fisheries. Initiatives for 1998 included:

- ◆ training programs to improve the skill base;
- ◆ providing business and technical advice on new work opportunities and ways to increase yield and recovery (technological improvements such as better icing and refrigeration have increased hake and sablefish recovery rates an additional 7 percent); and
- ◆ developing quality control and optimum utilization guidelines to improve the competitive position of traditional seafood products.

In co-operation with the BC Seafood Sector Council, BC Fisheries supported product diversification in seafood processing by:

- ◆ identifying new market opportunities for traditional species in Europe and the US;
- ◆ supporting the development of value added processing of previously under-utilized species such as spiny dogfish and arrowtooth flounder; and
- ◆ supporting secondary processing of traditional species such as salmon through development of new products like canned flake salmon, salmon burgers and salted or smoked products.

SHELLFISH DEVELOPMENT INITIATIVE (SDI)

Shellfish farming is an environmentally friendly activity with the potential to create significant economic opportunities for British Columbia's coastal communities and First Nations. Introduced in November 1998, the SDI plans to double the amount of Crown land available for shellfish aquaculture to 4,230 hectares within 10 years, at which time studies have indicated the industry could generate as much as \$100 million and add 1,100 direct jobs.

Government has been working with coastal and First Nations communities and industry to determine acceptable siting and production levels for shellfish aquaculture within each community. Shellfish pilot projects are underway at 15 sites on the North Coast and Queen Charlotte Islands in cooperation with local First Nations.

URBAN SALMON HABITAT PROGRAM

The principal goals of the program are to ensure sustainable wild stocks and habitats in the Georgia Basin, build effective partnerships with other levels of government, encourage community involvement and increase public awareness of salmon and other salmonids, and their habitats. In 1998/99 over \$1 million was provided for projects to protect, enhance and raise public awareness of salmon and their habitats and for environmental projects targeted towards conserving and protecting salmon streams.



FISHERIES RENEWAL BC (FsRBC)

Fisheries Renewal BC is a key component of British Columbia's conservation strategy. Support via FsRBC funding is based on direct community involvement in developing and delivering programs to restore fish resources and revitalize fisheries and the communities that depend on them.

Activities are also designed to help British Columbians identify and take advantage of opportunities that safeguard and sustain existing jobs and create new long-term work in the fisheries.

The 1998 FsRBC program investments are summarized as follows:

- ◆ \$9.3 million invested in projects having a total value of 30.6 million;
- ◆ 1,631 jobs created;
- ◆ in Salmonid Renewal, 232 projects were funded, which produced stock and habitat assessment for 1,027 kilometers of streams, habitat restoration for 53 kilometers of waterways and 9.5 million smolts released;
- ◆ 82 projects invested in various new fisheries, value added product development, shellfish aquaculture, and public education and research activities.

The Look Ahead to 1999

PLANS FOR PACIFIC HAKE

In early 1999, DFO announced a new three-year domestic arrangement for the offshore hake fishery. Under this arrangement, 50,000 tonnes of the TAC of 90,300 tonnes will be delivered to shore-based processing facilities, with the remainder split between at-sea factory ships and a reserve. The reserved 20,150 tonnes may be released pending in-season assessments, with priority access for shore-based processing.

Canadian fisheries managers set a conservation-based TAC of 301,000 tonnes for both Canadian and US waters, with the Canadian TAC set at 30 per cent of the coast-wide catch. The US established a quota of 80 percent of the TAC for both Canadian and US waters. The Province is pressing to initiate bilateral negotiations with the US to achieve an equitable sharing arrangement and to ensure the sustainable harvest of Pacific hake.

AUSTRALIA-SALMON IMPORT BAN

In July 1999, the Australian government gave its approval for the importation of uncooked Canadian salmon. The move follows a 1998 ruling by the World Trade Organization that Australia's 24-year ban on fresh and frozen salmon imports was a disguised restriction on trade. British Columbia hopes to pursue new market opportunities for high-value products such as cold-smoked, fresh and frozen fillets of sockeye salmon and for value-added chum with a possibility for annual sales of up to \$40 million.

INTERGOVERNMENTAL RELATIONS

The overall objectives of the Canada-British Columbia Agreement on the Management of Pacific Salmon Fishery Issues include improved cooperation among governments and an enhanced role for British Columbia in the management of fisheries issues. To further these objectives two bilateral agreements were signed May 18, 1999 between Canada and British Columbia:

- ◆ the Data-sharing sub-agreement proposes free exchange of "core fisheries datasets" - those under the direct control of BC Fisheries and the Fisheries side of DFO, Pacific Region - and exchange of "other relevant information" under the terms and conditions that apply for internal sharing within each government. A Fisheries Information Coordinating Committee comprised of officials from DFO and BC Fisheries will be established to

recommend sharing of information owned by either government. Their recommendations will be subject to approval by the Council of Ministers; and

- ◆ the Fisheries Management Protocol which calls for the development of joint steelhead management protocols for key stocks and watersheds to mitigate the problems of steelhead interceptions by commercial fisheries.

The development of the Agreement on Interjurisdictional Cooperation was an outcome of the National Council of Fisheries Ministers in September 1998. Governments agreed that it was in their mutual interests to improve their working relationship. Subsequently, a working group of senior officials developed and refined the agreement that is expected to be officially endorsed by Ministers September 1999.

SPORT FISHERIES INITIATIVES

A primary focus for 1999 will be working with freshwater sport fishing interests to develop a coordinated, long-term strategic plan for the sector.

SEAFOOD OUTLOOK FOR 1999

	Harvest	Landed Value	Wholesale Value
Wild Salmon	↓	↓	↓
Farmed Salmon	↑	↑	↑
Herring	↓	↑	↑
Halibut	↓	→	→
Groundfish	→	↑	↑
Wild Shellfish	↓	↑	↑
Farmed Shellfish	↑	↑	↑
Total BC	→	→	→

This is the seventh issue in the British Columbia Seafood Industry Year in Review series. We encourage you to send us your comments on this publication and any suggestions for future issues.

For more information contact: Ministry of Fisheries, Fisheries Planning and Information Branch, PO Box 9359 Stn Prov Govt, Victoria, British Columbia, V8W 9M2.

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Or visit our web site at <http://www.fisheries.gov.bc.ca>

Data Sources: All seafood finished products and wholesale values as well as aquaculture industry harvests and farmgate values are compiled by the Fisheries Planning and Information Branch of the provincial Ministry of Fisheries. Commercial fisheries landings and values are provided by the federal Department of Fisheries and Oceans, Pacific Region; 1996, 1997, and 1998 preliminary values have been adjusted.

June 1999