BRITISH COLUMBIA
FISH PROCESSING EMPLOYMENT
2016

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Executive Summary

B.C. fish processing operations generated 4,882 year-round equivalent jobs in 2016. Active fish processing operations were attributed to 264 companies operating in 271 plants. An additional 23 companies in 24 plants reported they did not carry out fish processing in 2016.

Of the 4,882 jobs, the majority (69 per cent) were processing jobs, followed by administrative positions (23 per cent) and maintenance jobs (8 per cent). In total, the sector reported paying $179.5 million in wages in 2016. Fish processing plants are located throughout the province. The Lower Mainland had the highest concentration with 62 per cent of jobs and total wages paid.

Year-round operations were reported by 80 per cent (217) of the 271 active plants. The remaining 20 per cent (54) were seasonal operations reporting employment for as little as one month up to 11 months. Many of the seasonal plants were up–river sport caught fish processors that operated only during salmon season and cold-storage plants that were used as temporary storage.

Plants carrying out processing solely for their own use or sale made up the majority (60 per cent) of active operations with the other 40 per cent carried out solely custom processing or a combination of self- and custom processing.

Processing of wild salmon generated the most (28 per cent) jobs in the sector followed by groundfish (at 16 per cent), farmed salmon (at 11 per cent), wild shellfish (at 11 per cent), herring (at seven per cent) and halibut (at seven per cent). An additional 12 per cent of the jobs were attributed to the “other species” category which included tuna, trout, tilapia, basa, eel, anchovy, sablefish, arctic char, mackerel, marine plants, tilapia, sturgeon, and hagfish. One per cent of the jobs were not attributed to a species.

Since 1996, eight B.C. fish processing employment surveys have been conducted and sector employment ranged from a low of 4,176 in 2008 to a high of 5,679 in 2002. The 4,882 jobs estimated for 2016 varies less than 1 per cent from the long-term (1996-2016) average of 4,918.

British Columbia Fish Processing Employment 2016 Survey Results

The Ministry of Agriculture regularly conducts the fish processing employment survey of all provincially licensed fish processing plants in British Columbia.

For 2016, the survey was distributed to 298 processing companies licensed to operate in 306 plants. Industry survey response rate of 93 per cent was achieved. Estimates for jobs, wages and species were developed for an additional 12 operations, bringing the capture rate to 96 per cent.

Active fish processing operations were attributed to 264 companies operating in 271 plants. An additional 23 companies in 24 plants reported they did not carry out fish processing in 2016.

Jobs by Occupation Category and Month

B.C. fish processing operations generated 4,882 year-round equivalent jobs in 2016. Employment fluctuated from month to month throughout 2016. The summer months (May through August) saw the highest levels of employment with a maximum of 5,630 in July. Winter months (January, February and December) exhibited the lowest levels of employment dropping to 4,184 in December.

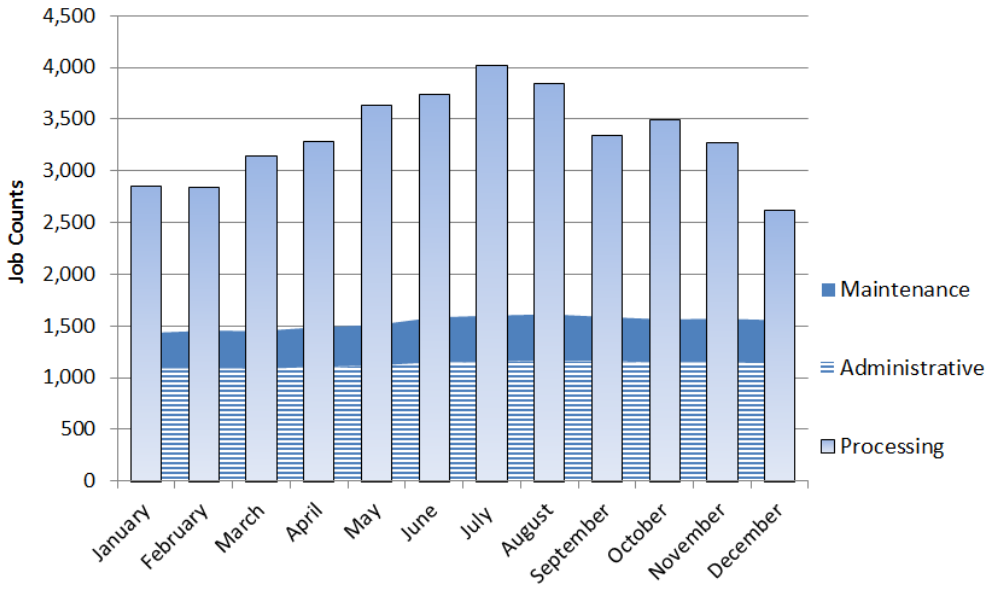
Employment was attributed to one of three broad occupation categories: processing, administrative and maintenance. Processing jobs were defined as all jobs directly involved in fish processing. Jobs that were classified as administrative or maintenance were not directly involved in fish processing but existed because the plant carried out fish processing activities. Fish processing jobs accounted for the largest portion of the sector with 69 per cent (3,347) of all plant jobs. Administrative and maintenance jobs made up 23 per cent (1,130) and eight per cent (405), respectively.

Table 1: Jobs in B.C. Fish Processing by Month and Occupation Category

Month	Processing	Administrative	Maintenance	Total
January	2,858	1,089	344	4,290
February	2,843	1,092	362	4,297
March	3,152	1,088	366	4,606
April	3,294	1,104	386	4,784
May	3,640	1,120	392	5,152
June	3,740	1,150	434	5,324
July	4,028	1,156	446	5,630
August	3,855	1,170	445	5,469
September	3,350	1,160	427	4,937
October	3,503	1,148	416	5,067
November	3,274	1,148	424	4,846
December	2,627	1,140	416	4,184
Annual Average	**3,347**	**1,130**	**405**	**4,882**

The number of fish processing jobs ranged from a high of 4,028 in July to a low of 2,627 in December with an annual average 3,347. The number of administrative jobs ranged from a low in March of 1,088 to a high in August of 1,170 with an annual average of 1,130. Maintenance jobs ranged between a low of 344 in January to a high of 446 in July with an average of 405. In 2016, administrative and maintenance job counts appeared to be more year-round with less month-to-month variation than fish processing jobs.

Figure 1 Monthly Employment in B.C. Fish Processing by Occupation Category



Since 1996, eight B.C. fish processing employment surveys have been conducted and sector employment ranged from a low of 4,176 in 2008 to a high of 5,679 in 2002. Fish processing employment trends observed in 2016 were relatively consistent with results observed in the previous surveys. The 4,882 jobs estimated for 2016 varies less than 1 per cent from the long-term (1996-2016) average of 4,918. In 2016, the breakdown of employment by occupation category within the sector showed similar distribution to historical figures with processing jobs dominating. There was a notable shift in 2016 with fewer jobs attributed to fish processing (69 per cent in 2016 compared to 76 per cent historically); and more jobs attributed to administration (23 per cent in 2016 compared to 18 per cent historically) and maintenance (eight per cent in 2016 compared to six per cent historically).

Table 2: Jobs in B.C. Fish Processing by Occupation Category (1996-2016)

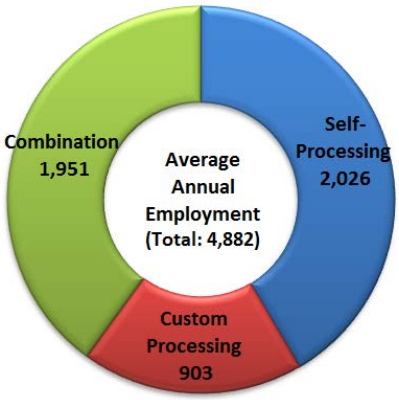
Year	Processing	Administrative	Maintenance	Total
1996	3,929	749	231	4,909
1999	3,574	740	245	4,558
2002	4,626	779	274	5,679
2005	4,343	917	241	5,500
2008	3,101	823	251	4,176
2011	3,615	858	356	4,829
2014	3,382	1,083	351	4,815
2016	3,347	1,130	405	4,882
1996 -2016 Average	3,769	885	294	4,918

Processing Activity

Of the 269 operations that provided information on their self- and/or custom processing activities in 2016, 161 reported self-processing only, 51 reported custom processing only and 57 reported a combination of the two processing types. Plants carrying out processing solely for their own use or sale made up the majority (60 per cent) of active operations with the other 40 per cent carried out solely custom processing or a combination of self- and custom processing.

An estimated 41 per cent (2,026) of provincial fish processing employment occurred in self-processing only plants, 18 per cent (903) in custom processing only plants and 40 per cent (1,951) in plants that carried out both self- and custom processing activities during 2016.

Figure 2 B.C. Fish Processing Employment by Processing Activity



Jobs by Species Processed

A breakdown of own vs custom processing by species category was available for 4,879 jobs. Processing of wild salmon generated the most jobs (28 per cent) in the sector followed by groundfish (at 16 per cent), farmed salmon (at 11 per cent) and wild shellfish (at 11 per cent).

Additional shares of total employment were attributed to the processing of herring, halibut and farmed shellfish - each with seven per cent. An estimated 12 per cent of jobs were attributed to the "other species" category which included tuna, trout, tilapia, basa, eel, anchovy, sablefish, arctic char, mackerel, marine plants, tilapia, sturgeon, and hagfish. For the remaining one per cent of jobs no species information was available.

Table 3: Employment in B.C. Fish Processing by Species and Processing Activity

Species Category	Number of Jobs			Number of Plants
	Self-Processing	Custom Processing	Annual Average	
Wild Salmon	930	470	1,400	144
Farmed Salmon	312	221	533	54
Herring	189	143	332	26
Halibut	218	100	319	85
Groundfish	367	395	761	107
Wild Shellfish	477	49	526	98
Farmed Shellfish	280	75	355	52
Other Species	471	116	586	71
Not Specified	48	19	67	12
Total	3,291	1,588	4,879	269

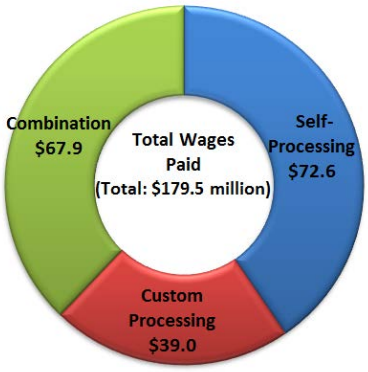
- For combination plants, job estimates were divided into custom or self-processing based on the percentage of jobs attributed to each processing type
- One plant may process more than one species; therefore, the total number of plants by species is greater than the total number of active plants

Wages Paid

In 2016, 243 plants reported paying wages totalling $179.5 million. Of these plants, 140 self-processing only plants paid out $72.6 million in wages, 46 custom processing only plants paid out $39.0 million in wages and 56 combination plants paid out $67.3 million in wages and salaries.

A total of 28 plants did not report paying wages in 2016. These plants fell into two main categories: 1) owner-operated plants where no wages or salaries were paid; and 2) employees working in a plant but where their primary employment wages were paid from another aspect of the operation e.g. fish guiding; retail store etc.

Figure 3 B.C. Fish Processing Wages Paid by Processing Activity



Wages by Species Processed

For plants that provided species category information, wage estimates by species were also developed. Wild salmon, groundfish and farmed salmon accounted for the highest per cent of wages paid at 28 per cent, 14 per cent and 13 per cent, respectively. Additional shares of wages were attributed to wild shellfish (at 11 per cent), herring (at eight per cent), farmed shellfish (at eight per cent), and halibut (at seven per cent). Twelve per cent of wages were attributed to species in the "other species" category and the remaining one per cent attributed to unspecified species.

Table 4: Wages Paid by B.C. Fish Processors by Species and Processing Activity ($ Millions)

Species Category	Self-Processing	Custom Processing	Total Wages Paid
Wild Salmon	31.8	18.3	50.1
Farmed Salmon	13.4	9.8	23.2
Herring	8.0	4.3	12.7
Halibut	8.4	6.0	14.0
Groundfish	12.8	12.1	24.9
Wild Shellfish	17.2	1.9	19.2
Farmed Shellfish	9.4	4.5	13.9
Other Species	14.8	4.6	19.4
Not Specified	1.5	0.7	2.1
Total	117.3	62.1	179.5

- For combination plants, job estimates were divided into custom or self-processing based on the percentage of jobs attributed to each processing type
- One plant may process more than one species; therefore, the total number of plants involved per species is greater than the total number of active plants

Employment and Wages Paid by Region

Fish processing plants are located throughout the province. The Lower Mainland had the highest concentration with 62 per cent of jobs and total wages paid. The Southern Vancouver Island region was the second largest contributor, accounting for 20 per cent of jobs and 13 per cent of wages. The West Coast Vancouver Island region ranked third with six per cent of jobs and four per cent of wages followed by Northern Vancouver Island with four per cent of jobs and five per cent of wages paid. The North Coast/Prince Rupert was the fifth largest contributor with four per cent of jobs and three per cent of wages. The Sunshine Coast, Central Coast, Haida Gwaii and the Interior of BC regions combined to make up the remaining four per cent of jobs and three per cent of wages.

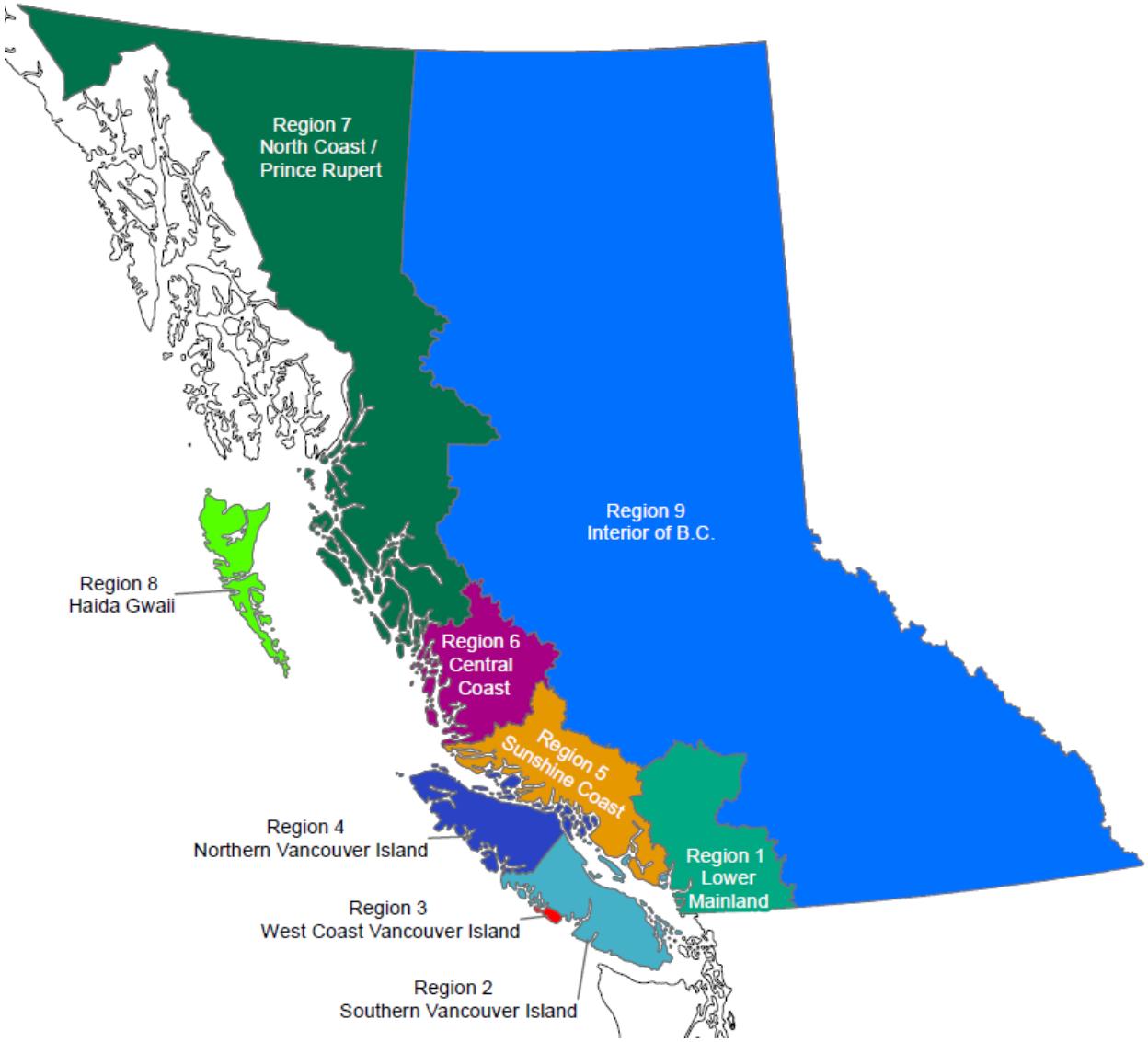
The Central Coast, North Coast/Prince Rupert and Haida Gwaii regions displayed the greatest range in job numbers between the low and high seasons. The Lower Mainland and Southern Vancouver Island showed the least amount of seasonal variation between the low and high seasons.

Table 5: Regional B.C. Fish Processing Plant and Company Counts with Jobs and Wages Paid

Region	Company Count	Plant Count	Job Count			Wages Paid ($ Millions)
			Seasonal Low	Seasonal High	Annual Average	
Lower Mainland	153	153	2,684	3,203	3,019	111.7
Southern Vancouver Island	48	46	850	1,050	958	40.7
West Coast Vancouver Island	8	9	177	350	275	8.0
Northern Vancouver Island	11	12	168	265	214	8.6
Sunshine Coast	6	6	47	125	66	1.9
Central Coast	6	6	10	108	26	0.4
North Coast/Prince Rupert	14	16	58	546	209	5.0
Haida Gwaii	11	11	22	129	65	1.9
Interior of BC	12	12	36	64	49	1.2
Total BC*	269	271	4,184	5,630	4,882	179.5

- One company may operate plants in more than one region; therefore, the company total for B.C. is less than the combined region totals.

Map of Fish Processing Regions in British Columbia



Notes on Methodology

Employment

The survey collects the number of persons employed each month. The survey does not collect information on the number of hours worked (i.e. whether a job was full-time or part-time). The resultant summary data provides the number of jobs and whether they are seasonal or year-round but cannot be used to report on full-time equivalents (FTE) or person years (PY) for the sector.

Wages Paid

Companies reported on the total T4 wages paid to persons employed in the fish processing plant. For those operations where fish processing was a partial component of their overall operation (e.g. cold storage plants) the companies were asked to only attribute wages for those jobs that were dependent upon seafood (i.e. would cease to exist if the operation did not process seafood).

Species Shares

Companies provided additional information on the species group(s) that were processed in the facility and estimated the per cent of jobs attributed to each group. These percentages were applied to job counts and T4 wages reported by each company. For some companies, mostly cold storage plants, it was not possible to provide species breakdown. These jobs were classified in the report as species 'not specified.'

Contact Information

This report is available online at ***https://www2.gov.bc.ca/gov/content/industry/agriculture-seafood/statistics/industry-and-sector-profiles***

For more information on B.C. agrifood and seafood, please contact:

AgriService BC
Telephone: 1-888-221-7141
Email: ***AgriServiceBC@gov.bc.ca***