



Aquaculture Industry Forecast to 2025

The 'aquaculture'* industry is one of the smallest employers in the agriculture sector, but it has the most positive growth outlook. This industry already faces labour challenges, but over the next 10 years, the labour gap will widen even further as a result of increased production to meet a rising global market for fish protein.

Industry Overview

'Aquaculture' is the second smallest employer within the agriculture sector, employing just 4,000 people, or 1% of the total agricultural workforce in 2014. The main species grown in Canada are salmon, mussels, oysters, and trout, with steelhead, Arctic char, Atlantic cod, sablefish, geoducks, Atlantic halibut, quahogs, white sturgeon, tilapia, and scallops also produced. The industry relies on exports for a significant share of its sales.

* The Labour Market Information data classifies Canada's agriculture sector into 11 commodity areas: 1) 'apiculture'; 2) 'aquaculture'; 3) 'beef'; 4) 'dairy'; 5) 'field fruit and vegetable'; 6) 'grain and oilseed'; 7) 'greenhouse, nursery, and floriculture'; 8) 'poultry and egg'; 9) 'sheep and goat'; 10) 'swine'; and 11) 'tree fruit and vine'.

Canada's 'aquaculture' industry is geographically concentrated, with British Columbia and Atlantic Canada accounting for two thirds of the industry's workforce. Because most aquacultural operations are located in rural areas, declining rural populations is a top labour concern for this industry.

The industry is almost entirely made up of domestic workers; foreign workers account for only 0.1% of the workforce.

In 2014, the 'aquaculture' industry employed 4,000 people.

The industry was unable to fill 450 jobs, which cost it \$57 million.

Within 10 years, the labour gap will widen, with 1,300 jobs going unfilled by 2025.



Labour Trends 2004–2014

Although the number of aquacultural farms has shrunk by 20% since 2008, this industry has been most heavily affected by labour shortages of any agriculture industry in Canada. In 2014, 58% of aquacultural farmers reported that they were not able to find enough workers, and the industry had 450 unfilled vacancies, which is equivalent to 10% of the demand. This inability to find enough workers is estimated to have cost the industry \$57 million, or 6% of sales.

'Aquaculture' production has limited access to foreign workers because it is not on the National Commodities List, which grants employers access to foreign workers through the Seasonal Agricultural Worker Program (SAWP) and the Agricultural Stream of the Temporary Foreign Worker Program.

Declining populations in rural areas is the top industry concern, with 25% of 'aquaculture' respondents reporting that it's a key barrier to recruiting workers.

Voluntary and involuntary turnover among aquacultural workers is the lowest in the agriculture sector. Voluntary turnover is 4% compared to the sector average of 18%, and



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Our industry survey revealed that:

- **58%** experienced a worker shortage
- **21%** lost sales due to worker shortages
- **14%** delayed or cancelled expansion plans due to lack of workers
- **25%** think the declining rural population is a key recruitment barrier
- **66%** expect employment at their farm to rise over the next five years

involuntary turnover is 2% compared to the sector average of 7%. However, aquacultural operators were much more likely to cite worker mobility (including an inability to get transportation to worksites and the need to relocate to work) as a retention issue.

Industry Forecast to 2025

Over the next decade, the global market for aquacultural products is predicted to grow as the demand for animal protein in emerging markets accelerates. At the same time, output is expected to increase by an average of 4.2% per year, which is the strongest growth performance within the agriculture sector.

A growing market and higher output will place additional pressure on the demand for labour, with the number of unfilled jobs expected to increase from 450 workers in 2014 to 1,300 workers by 2025. This means that in the next 10 years, the unmet demand for workers will rise from 10% to 23%.



Meeting the Challenge

Aquaculture's strong production outlook is expected to significantly increase the need for more workers between now and 2025. At the same time, a less mobile workforce and rural depopulation will make it harder for the industry to recruit the workers it needs in the coming years. Based on the high number of operators who reported lost sales due to worker shortages, it's clear that the impact on the bottom line is particularly acute for this industry.

'Aquaculture' faces these unique challenges in finding enough workers:

- Operations tend to be remote: rural depopulation and worker transportation issues will affect this industry's ability to find and retain workers.
- Because it's not on the National Commodities List, the industry can't access foreign workers through seasonal and temporary foreign worker programs.

However, the industry may benefit from these advantages:

- The industry is less affected by seasonality and variability in its hours of operation, which makes it a more stable, attractive employment option.



- 'Aquaculture' has a younger-than-average workforce, so the effects of retirement will be felt less here than in other industries with older workers.
- The industry faces fewer negative perceptions than other agricultural commodities.

For more information on production trends and labour market challenges for the 'aquaculture' industry, please refer to the accompanying report available at www.AgriLMI.ca.

About This Fact Sheet

This fact sheet looks at key labour trends in Canada's 'aquaculture' industry. The data is based on the results of a three-year study that examined the labour market in Canada's agriculture sector. Information was collected by modelling labour demand and supply by province, commodity, and occupation; conducting a survey of and interviews with more than 1,000 sector stakeholders; and validating the results through focus groups and webinars. To read the accompanying report, or to access additional provincial, commodity, or national fact sheets and reports, please visit www.AgriLMI.ca.

The study was initiated by the Canadian Agricultural Human Resources Council (CAHRC), a national, nonprofit organization focused on addressing human resource issues faced by agricultural businesses across Canada. For more information about the Council and its products and services for Canada's agriculture sector, please visit www.cahrc-ccrha.ca.

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This fact sheet defines the aquaculture industry according to Statistics Canada's NAICS code 1125, which only covers employers involved in primary production: those involved in seafood processing activities (NAICS code 3117) are not included. As a result, the estimated size of the workforce in this report is smaller than some industry estimates.