



# How Labour Challenges Will Shape the Future of the 'Beef' Industry:

## *Agriculture Forecast to 2029*



Canada's agriculture sector faces unique labour market challenges in the coming years, and so will the beef industry. This report explores some of the workplace trends and realities that will shape this industry between now and 2029.





## Industry Overview

One of the largest agricultural employers in Canada, the 'beef'\* industry has undergone a considerable decline in recent years. However, the next decade will see the trend reverse, with a strong outlook that will require more workers to support growth. The 'beef' industry, which includes operations that primarily raise and finish cattle, including feedlots, employs 44,350 people, which is equivalent to 13% of the agricultural workforce.

With less seasonality and less variability in hours than other sectors, the industry primarily relies on domestic labour, with only 0.7% of the workforce being made up of foreign workers. This is much lower than the agricultural average of 17%.

The Prairies account for just under two-thirds of the industry's workforce, with Alberta alone accounting for 34% of all 'beef' workers. Ontario is also a significant 'beef'-industry employer, accounting for another 19% of industry workers.

The age of the workforce skews older than the average. This reflects the fact that the 'beef' industry has a much higher share of managers in agriculture in its workforce, which include both owner-operators and employed farm managers. Indeed, this occupation makes up 58% of the beef workforce compared to 35% across all agriculture. Nearly one-quarter of all managers in agriculture are already 65 years or older, versus 16% for the overall agriculture workforce. Because of its unique occupational makeup, nearly two in five domestic workers in the 'beef' industry (40%) is expected to retire over the forecast period. This is the highest share of any industry.

\*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'.

### 'Beef' industry at a glance

#### In 2017:

- 44,350 people employed
- 1,600 jobs left unfilled
- 334 million in lost sales due to labour shortages

#### In 2029:

- 7,400 fewer domestic workers available
- 40% of the workforce lost to retirement
- 14,000 more jobs than the domestic workforce can fill

While Canada's 'beef' production has been in decline over the past decade, the next 10 years are predicted to bring strong growth. However, the industry faces serious challenges in finding enough workers to take advantage of this growth potential. In 2017, there were 1,700 more jobs than workers; by 2029, the labour gap is predicted to reach 14,000.



## Production Trends

The 'beef' industry can look forward to a period of strong growth, as global markets drive a higher demand for Canadian 'beef'.

The 'beef' industry shrank considerably over the past decade, as many operators shifted away from 'beef' production to a specialization in grains and oilseeds. Between 2006 and 2016, the number of 'beef' farms in Canada declined by over two-fifths, from 60,900 to 36,000. Industry output also fell 2.0% per year during this time.

With the number of farms decreasing and the industry's output falling, the number of workers required to support the industry also fell. Between 2007 and 2017, the demand for labour fell by an average of 2.3% per year. This was considerably steeper than the 0.7% average annual decline experienced by the agriculture sector as a whole.

However, the outlook for 'beef' between now and 2029 is strong, due to a growing demand for animal protein in emerging markets. As a result, output in the 'beef' industry is expected to rise by an average of 2.1% per year during this time. Although productivity, which is the output each worker can produce, will also increase by 1.2% per year, the industry will still need to increase its workforce by 0.8% per year to keep up with the market demand.

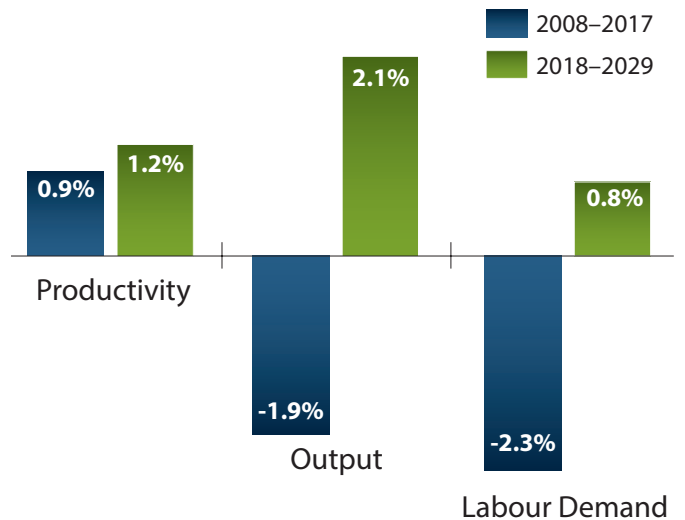


### RESEARCH HIGHLIGHTS

- **49%** of 'beef' producers were not able to find all the workers they needed in 2018, compared to 47% for all agriculture.
- **35%** of 'beef' producers expect employment at their farm to rise over the next five years, while only 17% expect to see a decline.

### Productivity, Output, and Labour Demand Trends

(average annual percentage change)



## Labour Forecast

As the 'beef' industry rallies, the growing needs of its labour force will be met with a shrinking pool of domestic workers. As a result, the labour gap will widen from 1,700 to 14,000 workers by 2029.

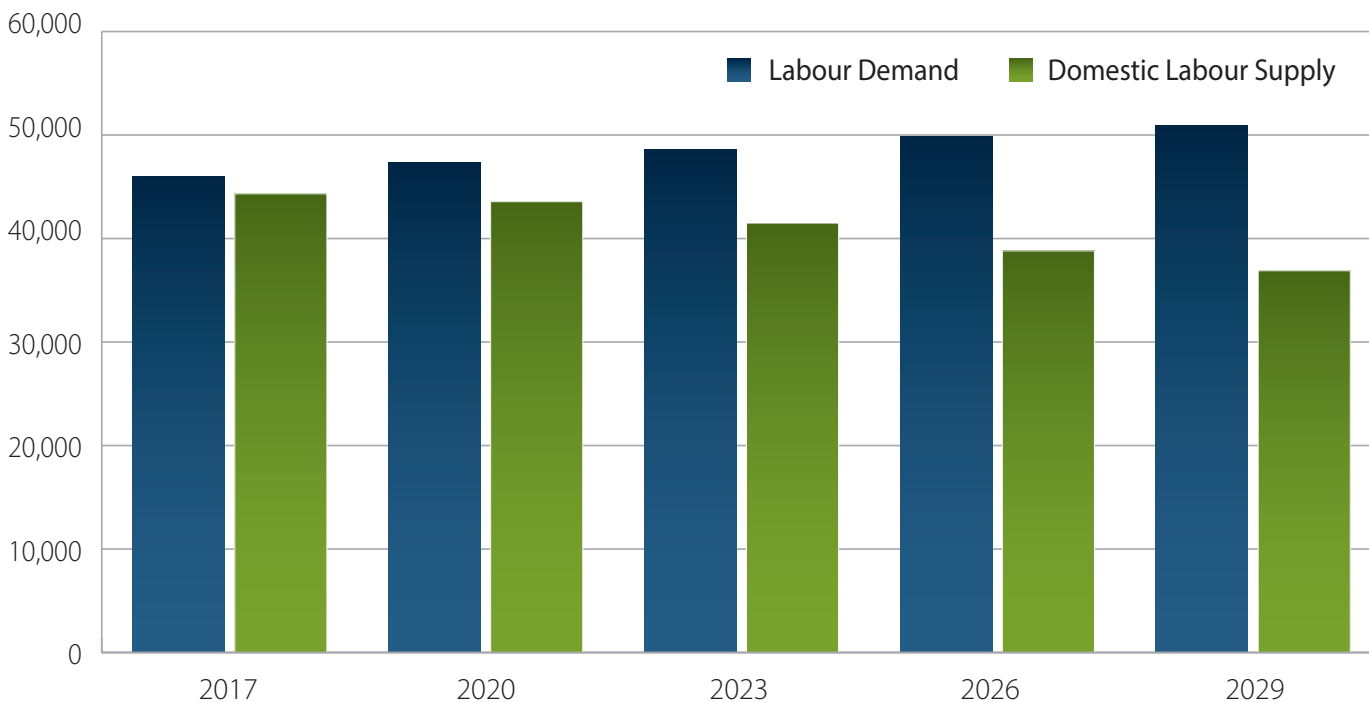
Although productivity will increase by 1.2% per year over the next decade, the industry must still expand its workforce to meet the fast-growing market demand for 'beef' products. The demand for workers is expected to grow by 0.8% per year, rising from 46,000 in 2017 to 50,900 in 2029.

However, the domestic labour supply is expected to shrink even further over the forecast period. As a result, the labour gap will widen considerably, from 1,700 more jobs than workers today to 14,000 more jobs than workers in 2029, which is equivalent to 27% of the total demand for workers at the time.



In other words, more than one in four jobs in the 'beef' industry is at risk of going unfilled if additional sources of labour can't be found. This puts the industry at risk, with a labour gap that is the highest of any in animal production.

### The Labour Gap Widens for the 'Beef' Industry





## Regional Trends

The 'beef' industry is concentrated in the Prairies, and labour challenges are expected to impact Alberta and Saskatchewan most heavily.

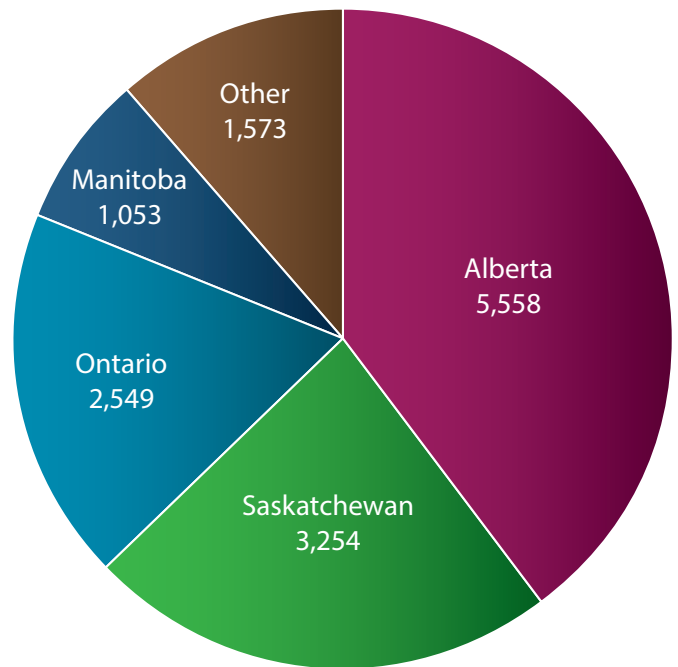
The Prairies account for more than half of the industry's workforce, with Alberta alone accounting for 34% of Canada's 'beef' workers and Saskatchewan accounting for another 20%. Alberta also has the strongest concentration of 'beef' employment: more than one in four of its agricultural workers (28%) are employed by the 'beef' industry.

As the labour gap widens over the next 10 years, the Prairies will also be hardest hit by labour shortages, with Alberta and Saskatchewan most deeply affected. By 2029, the labour gap for each of these provinces will be equivalent to just under one-third of the total demand for labour. In other words, around one in three 'beef'-industry jobs in these provinces will be at risk due to the labour shortage. Alberta is predicted to have 5,550 more jobs available than employees available to work, while Saskatchewan's labour gap will be equivalent to 3,250 jobs, and Manitoba's equivalent to 1,050 jobs.

Ontario is also a significant industry employer, with 19% of 'beef' workers located in this province. It will experience a labour gap equivalent to 2,450 jobs. Quebec accounts for a further 9% of the workforce, and it too is predicted to see a deficit of workers, with 950 more jobs than workers.



## Number of Industry Jobs at Risk by 2029



## Demographic Trends

An older workforce with a higher rate of retirement will contribute to the shrinkage of the 'beef' industry's domestic labour force.

The 'beef' industry has an older-than-average workforce, which reflects its unique occupational makeup. Close to three in five workers are managers in agriculture (which include both owner-operators and employed farm managers), nearly one-quarter of whom are already 65 years or older.

As a result, two in five members of the industry's current domestic workforce (40%) is expected to retire by 2029. This is noticeably higher than the average 37% retirement rate predicted across the agriculture sector as a whole, and will be a substantial contributor to the industry's predicted loss of 7,400 workers by 2029.



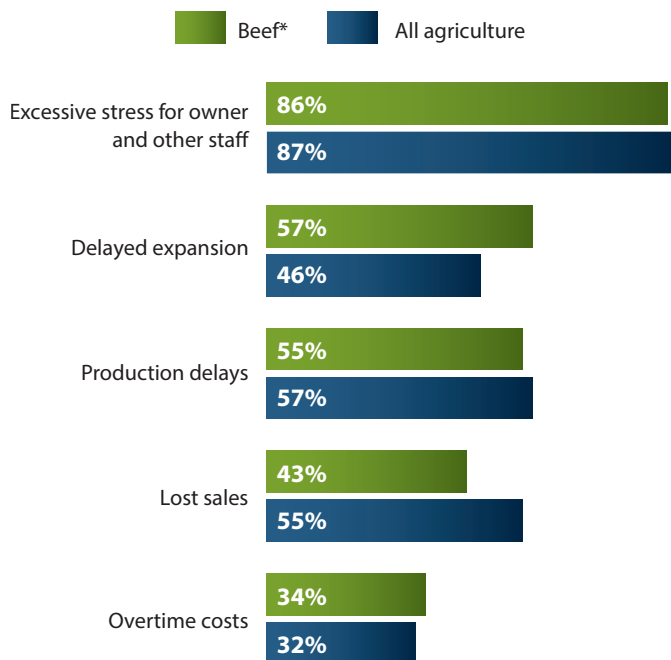
## Financial Impact

In 2018, the 'beef' industry's considerable labour shortage resulted in lost sales of \$334 million and significantly impeded expansion plans.

The 'beef' industry was unable to fill 1,600 jobs, a number equivalent to 3.6% of the total jobs needed to support the industry. This was slightly lower than the average across the agriculture sector, but higher than the average for other sectors of the Canadian economy.

These labour shortages cost the industry \$334 million, or 3.7% of sales, in 2018. However, lost sales were not the only negative effect on the industry's ability to thrive. Of the 'beef' producers impacted by labour shortages, over four in five (86%) reported excessive stress for owner and other staff. Around three in five (57%) reported delaying expansion plans, which is higher than the sector average and particularly troubling given the industry's opportunity to grow over the next 10 years. Finally, another 55% of producers reported production delays as a labour-related issue.

## Impacts of Labour Shortages



\*Based on responses of 44 beef producers who reported not having access to all needed workers.



## Labour Challenges

'Beef'-industry employers face challenges in finding enough qualified workers to meet the needs of their industry.

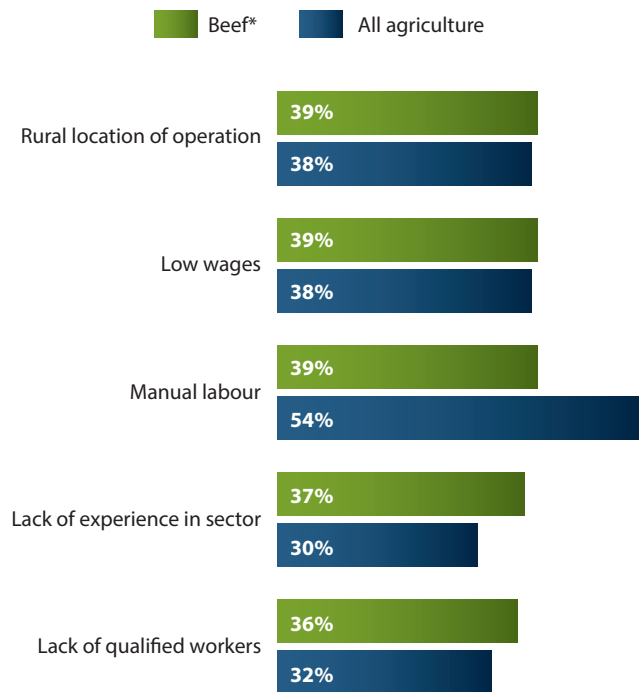
The ability of the 'beef' industry to find and retain enough workers is impeded by a lack of experienced workers, rural depopulation, and a lack of adequate compensation. However, the industry has the advantage of low seasonality, minimal variability in hours, and less physically demanding work than other agricultural industries.

### Recruiting Workers

The 'beef' industry is affected by many of the same recruitment issues facing the agriculture sector as a whole. However, it also faces a number of unique barriers. Employers are much more likely to cite an inability to find experienced workers as a key recruitment barrier; 37% cite this as a recruitment challenge, compared to 30% across all agriculture. Only 'dairy' and 'swine' farms were more likely to cite this as a recruitment barrier.

With many industry operations located in rural areas, more than one in three (34%) of 'beef' producers mentioned declining rural populations as a barrier to recruiting new workers. However, only 18% of 'beef' producers cited the seasonal nature of work as a barrier to recruitment, which was significantly lower than the average of 43% across all agricultural operations.

## Challenges in Recruiting Workers



\*Based on responses of 119 beef producers.

### Retaining Workers

The 'beef' industry does reasonably well in retaining workers. Involuntary turnover rates are 3.1%, which is above the sector average of 2.5%. At the same time, voluntary turnover rates in the 'beef' industry are 9%, which is below the sector average of 10%. This suggests that 'beef' employers have had slightly greater success in retaining staff.

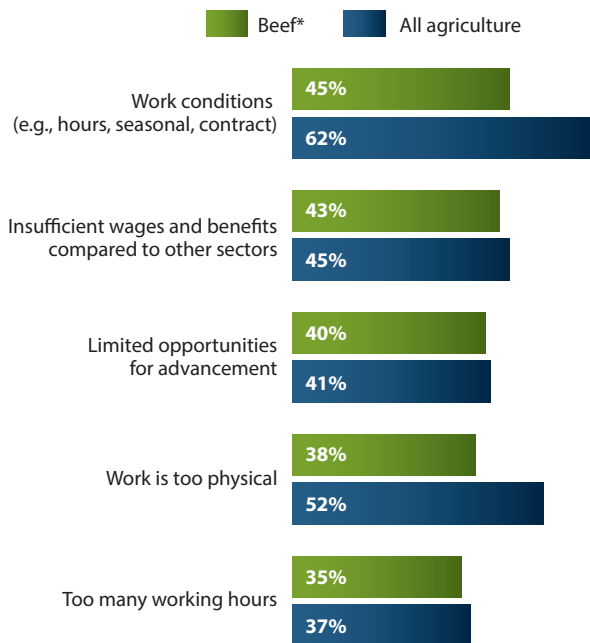
The 'beef' industry benefits from a work environment in which there is low seasonality, little variability in hours, and less physically demanding work.

However, the industry faces two unique retention challenges. Nearly one in three employers (29%) cite the remote location of their operation as a retention issue, compared to 24% of employers across the sector. 'Beef' producers were also more likely to cite unstable earnings as a barrier.





## Challenges in Retaining Workers



\*Based on responses of 117 beef producers.

## Toughest Jobs to Fill

The 'beef' industry will have the most trouble filling general farm worker positions. Currently, general farm workers account for 24% of the industry's total employment, but only 10% of jobs that can't be filled by domestic labour. However, by 2029, this occupation will account for 44% of all unfilled jobs within the industry. This means that 6,200 jobs of this type could go unfilled.

Managers in agriculture positions, which include both owner-operators and employed farm managers, will be the second most difficult to fill. Roughly one in four positions that can't be filled by domestic labour (24%) will be for managers in agriculture.



## Conclusion

With a workforce that has shrunk considerably over the years and a strong growth outlook over the next decade, the 'beef' industry faces a widening labour gap that could seriously impede the industry's ability to reach its growth potential.

While Canada's 'beef' industry has been in decline over the past decade, the next 10 years are predicted to bring strong growth, as global emerging markets create a growing demand for animal protein. To take advantage of this growth potential and meet production targets, the 'beef' industry will require a sizeable workforce. However, the industry is already challenged to find enough domestic workers: 1,600 jobs went unfilled in 2017, costing the industry \$334 million in lost sales. Over the coming ten years, the labour gap will widen to 14,000 jobs, or 27% of the industry's total labour requirements. In other words, more than one in four jobs could go unfilled unless this labour shortage can be addressed.

To do so, the 'beef' industry must overcome a number of challenges:

- The 'beef' sector is concentrated in the Prairies, where competition for workers in the natural resource sectors (e.g. oil and gas, and mining) is most intense.
- This industry has an older-than-average workforce, which means it will lose workers to retirement at a more rapid rate.
- Over one-third of 'beef' producers surveyed identified finding workers with the necessary qualifications and experience as a challenge.
- Labour shortages for this industry are more likely to affect expansion plans, an issue of real concern for an industry facing high growth.



To meet these labour challenges, the industry has several strengths it could leverage:

- Below-average seasonality and variability in hours create a more stable, attractive workplace.
- The work is less physical than average for jobs in agriculture.
- Staff training could help the industry improve worker qualifications.

Finding solutions to labour challenges and increasing the pool of available domestic workers will ensure that this vital agriculture industry is better prepared to take advantage of an upcoming decade of growth.



## About This Report

This report represents an update to the Labour Market Information (LMI) study that the Canadian Agricultural Human Resource Council (CAHRC) undertook between 2014 and 2016. The purpose is to re-assess the labour market, project supply and demand for agricultural workers from 2018 until 2029, and recommend potential solutions to labour issues.

The Conference Board of Canada, commissioned by CAHRC, constructed an economic model that forecasts agricultural labour demand and supply for each province, for 11 different commodity groups, and for 25 occupational groups.

The economic model was validated through several industry consultation activities conducted Canada-wide, including:

- **A large-scale survey** of 1,316 employers, 278 workers, and 110 industry stakeholders.
- **Eight webinars** focused on specific commodity groups, with 160 participants in total.
- An Advisory Group presentation.

This data was used to produce the following reports:

### Commodity-specific reports and fact sheets

Apiculture ■ Aquaculture ■ Beef ■ Dairy ■ Field Fruit and Vegetable ■ Grain and Oilseed ■ Greenhouse, Nursery, and Floriculture ■ Poultry and Egg ■ Sheep and Goat ■ Swine ■ Tree Fruit and Vine

### Regional reports and fact sheets

National ■ British Columbia ■ Alberta ■ Saskatchewan ■ Manitoba ■ Ontario ■ Quebec ■ New Brunswick ■ Prince Edward Island ■ Nova Scotia ■ Newfoundland and Labrador

For more information on the research, and to access additional commodity-specific, national, and provincial reports, please visit the CAHRC website at [www.AgriLMI.ca](http://www.AgriLMI.ca).

## About CAHRC

The Canadian Agricultural Human Resources Council (CAHRC) is a national, nonprofit organization focused on addressing human resource issues faced by agricultural businesses across Canada. CAHRC conducts industry research and develops products and services designed to help agricultural employers attract, retain, and develop the workforce they need to succeed.

For more information about the Council and its products and services for Canada's agriculture sector, please visit [www.cahrc-ccrha.ca](http://www.cahrc-ccrha.ca).







## Acknowledgements

The Canadian Agricultural Human Resource Council (CAHRC) acknowledges the support and guidance of volunteers, the Advisory Group, the Provincial LMI Panel, and the Strategic Steering Committee.

### LMI Advisory Group

Chair: Alberta Federation of Agriculture, Humphrey Banack  
Aboriginal Aquaculture Association: Marguerite Parker  
AGRIcarrières: Robert Ouellet  
Agricultural Alliance of New Brunswick: Marc Ouellet  
Agriculture and Agri-food Canada: Li Xue, Alejandro De Maio-Sukic, and Michael Donohue  
Agri-Food Economic Systems: Al Mussel  
Agri-Food Management Excellence: Larry Martin  
Ag Women's Network: Katie Keddy  
Canadian Aquaculture Industry Alliance: Cyr Couturier  
Canadian Canola Growers Association: Gayle McLaughlin  
Canadian Federation of Agriculture: Norm Hall and Chris van den Heuvel  
Canadian Horticulture Council: Beth Connery  
Canadian Nursery and Landscape Association: Leslie Sison  
Canadian Pork Council: Phyllis MacCallum  
Canadian Sheep Federation: Harry Elsinga  
Farm Credit Canada: Marty Seymour  
Indigenous Agriculture Advisor: Trevor Kempthorne  
Immigration, Refugees and Citizenship Canada: Martha Justus and Jonathan Van Amburg  
Newfoundland and Labrador Federation of Agriculture: Merv Wiseman  
Ontario Federation of Agriculture: Peter Sykanda  
Prince Edward Island Agriculture Sector Council: Laurie Loane  
Saskatchewan Women in Agriculture: Stacy Brownridge

### Provincial LMI Panel

Chair: Manitoba: Manitoba Agriculture, Food and Rural Development, Stephanie Cruickshanks  
British Columbia: B.C. Agriculture, Heather Anderson, and Kelly Rainsforth  
Alberta: Alberta Agriculture and Forestry, Gerard Bos  
Saskatchewan: Saskatchewan Agriculture, Bob Wiens  
Ontario: Ontario Ministry of Agriculture and Food & Rural Affairs, Jill Melo-Graydon  
Nova Scotia: Nova Scotia Agriculture, Bettina Brown  
Quebec: Ministère de l'Agriculture, des Pêcheries et de l'Alimentation du Québec, Hélène Brassard  
New Brunswick: New Brunswick Post-Secondary Education, Training and Labour, John Calhoun  
Prince Edward Island: Prince Edward Island Department of Agriculture and Forestry, Darryl O'Brien  
Newfoundland and Labrador: Advanced Education, Skills and Labour, Derrick Barrett  
Agriculture and Agri-Food Canada: Li Xue and Alejandro De Maio-Sukic

The use of any part of this publication, whether it is reproduced, stored in a retrieval system, or transmitted in any form or by any means (including electronic, mechanical, photographic, photocopying or recording), without the prior written permission of CAHRC is an infringement of copyright law.

Canadian Agricultural Human Resource Council  
Published September 2019

T: 613.745.7457

E: [info@cahrc-ccrha.ca](mailto:info@cahrc-ccrha.ca)

This document may be downloaded from [www.cahrc-ccrha.ca](http://www.cahrc-ccrha.ca)

All rights reserved. © 2019 CAHRC

Photo credits: Krista Connick-Todd, Highland Feeders, Lydia Schouten, Liz Klose, Casey Vander Ploeg.