



July 2018

CAREER PATHWAYS: AGRICULTURE



**Bulkley-Nechako
Workforce Opportunities Table**



Sector Size and Performance

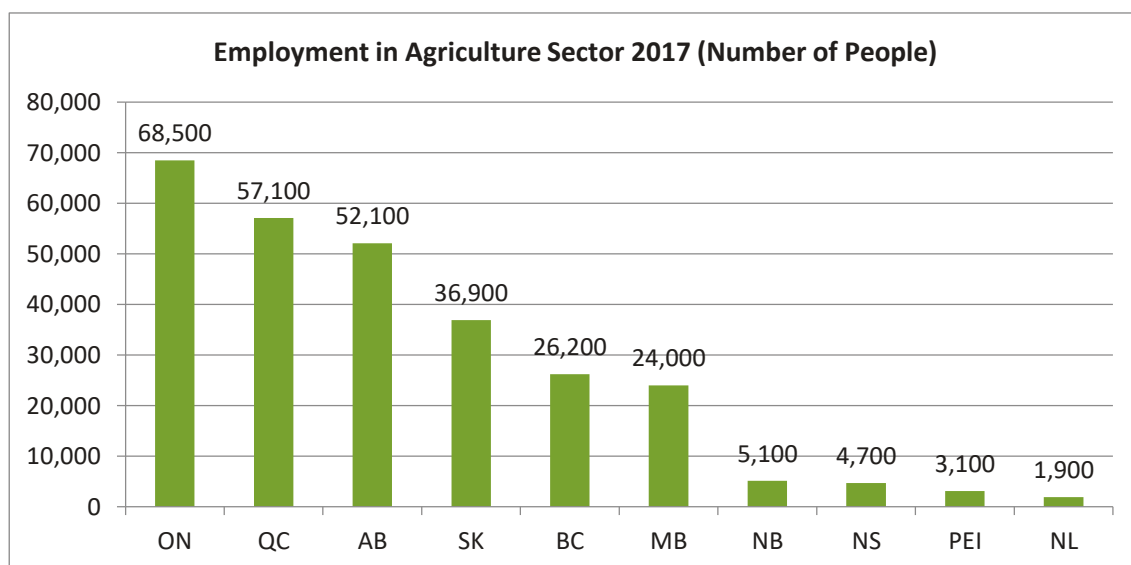
The agriculture industry is composed of three major segments: crop production; animal production; and related support activities. Crop production includes oilseeds, grains, fruits, vegetables, plants and vines. Animal production is the process of raising cattle, hog, poultry and other animals for generating meat, egg and dairy products. It also includes aquaculture and apiculture. Examples of related support activities are harvesting, fertilizing and sterilizing services, and any services related to raising livestock.

Canada's agriculture sector contributed \$38.6 billion to overall GDP in 2016. B.C. is the sixth largest contributor to total agriculture GDP in Canada, contributing more than \$2.6 billion (or 6.7%) in 2016.

British Columbia's agriculture sector GDP grew each year from 2012 to 2016, except for in 2014. Overall the sector has grown 1.8 percent from 2012-2016.¹

Approximately 26,200 people were employed in British Columbia's agriculture sector in 2017. Although the amount employed in this sector has seen decreases in certain years, it has grown overall by 2,400 jobs in the last five years.

Just over 9 percent of all agriculture employees in Canada are employed within British Columbia; this makes British Columbia the fifth largest agriculture sector employer out of all provinces in Canada.²



Canada's agriculture sector is expected to have an average of 7,980 job openings each year over the next five years.³ The Government of British Columbia is forecasting 6,200 total job openings in agriculture in British Columbia over the next 10 years.⁴

¹ Statistics Canada GDP by NAICS, CANSIM Table 379-0030, 2017

² Statistics Canada Labour Force Survey Estimates by NAICS, CANSIM Table 282-0008, 2017

³ Canadian Occupational Projection System, Job Opening Projections by Industry, 2015

⁴ British Columbia Labour Market Outlook, 2017



Careers in Agriculture

There are many different careers within the agriculture sector to pursue, the top twelve in terms of employment in British Columbia's agriculture sector include:

- Aquaculture and Marine Harvest Labourer;
- Biological Technologist/ Technician;
- Farm Supervisor;
- General Farm Worker;
- Harvesting Labourer;
- Horticulture Technician/ Specialist;
- Landscaping Maintenance Labourer;
- Manager in Agriculture;
- Manager in Aquaculture;
- Manager in Horticulture;
- Nursery/ Greenhouse Worker;
- Transport Truck Driver.

The median wage for positions in British Columbia's agriculture sector ranges from \$11.35 to \$26.56 per hour. Agriculture workers in British Columbia make a higher median wage than Canada as a whole – approximately \$0.78 more per hour, on average.

Career Progression & Employment Requirements in Agriculture Sector

LEVEL D (*On-Job Training*):

Harvesting Labourers (NOC 8611)

- There are no specific education or training requirements.

Median Wages (/Hr): BC: \$11.35 Canada \$12.00

Landscaping and Grounds Maintenance Labourers (NOC 8612)

- Some secondary school education may be required.
- A provincial licence to apply chemical fertilizers, fungicides, herbicides and pesticides may be required.

Median Wages (/Hr): BC: \$15.38 Canada \$15.00

Aquaculture and Marine Harvest Labourers (NOC 8613)

- Some secondary school education is usually required.
- Shellfish harvesters require commercial fishing licences.
- Marine Emergency Duties certificate may be required for some occupations in this unit group.

Median Wages (/Hr): BC: \$16.00 Canada \$15.53

LEVEL C (*Some College or Industry Specific Training/ Certification, On-Job Training*):

Transport Truck Driver (NOC 7511)

- Completion of secondary school is usually required.
- Completion of an accredited driver training course of up to three months duration, through a vocational school or community college, may be required.



- A Class 3 or D licence is required to drive straight-body trucks.
- A Class 1 or A licence is required to drive long combination vehicles.
- Air brake endorsement (Z) is required for drivers who operate vehicles equipped with air brakes.
- Transportation of dangerous goods (TDG) certification is required for drivers who transport hazardous products or dangerous goods.
- Additional licensing endorsement or certification may be required to drive articulated trucks.

Median Wages (/Hr): BC: \$25.00 Canada \$21.00

General Farm Workers (NOC 8431)

- There are no specific education or training requirements. However, a college certificate or specialized courses related to farming are available.
- Basic farm knowledge, usually obtained from working on a farm, may be required for employment.
- A course or certificate in first aid may be required.

Median Wages (/Hr): BC: \$15.00 Canada \$15.00

Nursery and Greenhouse Workers (NOC 8432)

- Completion of secondary school may be required.
- Completion of college courses in horticulture or a related field may be required.
- On-the-job training is provided.
- A provincial licence to apply chemical fertilizers, fungicides, herbicides and pesticides may be required.

Median Wages (/Hr): BC: \$12.50 Canada \$12.50

LEVEL B (College or Apprenticeship, Some Certification, Some Experience):

Biological Technologists and Technicians (2221)

- Completion of a 2- to 3-year college program in a field related to agriculture, biology, microbiology, wildlife or resource management is usually required for biological technologist.
- Completion of a 1- to 2-year college program in a related field is required for biological technician.
- Certification with provincial associations is available, but voluntary.

Median Wages (/Hr): BC: \$26.56 Canada \$24.00

Landscaping and Grounds Maintenance Labourers (2225)

- Completion of a university or college program in agronomy, arboriculture, horticulture, landscaping, landscape design or landscape technology is usually required.
- Experience as a landscape and grounds maintenance labourer may be required.
- An apprenticeship program is available for horticulturists, arboriculturists and landscape gardeners.
- Trade certification for landscape horticulturists is available, but voluntary, in all provinces.
- A provincial licence to apply chemical fertilizers, fungicides, herbicides and pesticides may be required.
- Red Seal endorsement is also available to qualified landscape horticulturists upon successful completion of the interprovincial Red Seal examination.

Median Wages (/Hr): BC: \$26.56 Canada \$24.00



[Agriculture Service Contractors, Farm Supervisors, and Specialized Livestock Workers \(NOC 8252\)](#)

- Agricultural service contractors usually require a university degree, college diploma or industry courses in agricultural studies and several years of experience related to the service offered.
- Contractors providing certain services, such as artificial insemination and pesticide application, may require training certificates and provincial licensing.
- Farm supervisors and specialized livestock workers may require a college certificate or other specialized training in agriculture or livestock husbandry.
- A course or certificate in first aid may be required.

Median Wages (/Hr): BC: \$15.00 Canada \$19.91

LEVEL O (*Management Positions - Combination of Education and Advanced Experience*)

[Managers in Agriculture \(NOC 0821\)](#)

- Extensive farming experience, obtained as a farm supervisor or specialized crop or livestock worker or by working on a farm, is usually required.
- A university degree or college diploma in agricultural management or other field related to crop or livestock production may be required.

Median Wages (/Hr): BC: \$17.82 Canada \$17.82

[Managers in Horticulture \(NOC 0822\)](#)

- Completion of a college program in horticulture is usually required.
- Experience as a nursery or greenhouse supervisor is required.

Median Wages (/Hr): BC: \$15.09 Canada \$16.29

[Managers in Aquaculture \(NOC 0823\)](#)

- Extensive farming experience, obtained as a farm supervisor or specialized crop or livestock worker or by working on a farm, is usually required.
- A university degree or college diploma in agricultural management or other field related to crop or livestock production may be required.

Median Wages (/Hr): BC: \$24.10 Canada \$18.73



Local Education/Training Programs

College of New Caledonia

The College of New Caledonia is a post-secondary educational institution that serves the residents of the Central Interior of British Columbia. The college has campuses in Burns Lake, Fort St. James, Mackenzie, Prince George (main), Quesnel and Vanderhoof. It offers a range of programs including: apprenticeship trade training, certificates, diplomas, associate degrees, university transfer credit, continuing education/vocational training, and individualized training sponsored to the client's needs in the college or onsite at a location of the clients choosing. College of New Caledonia also offers a variety of online and direct digital delivery courses and programs to those within the Regional District of Bulkley Nechako. To see up-to-date programming visit: www.cnc.bc.ca

Relevant Programs to Agriculture (Current):

[Driver Training, Licence](#) – Location: Burns Lake, Fort St. James, Fraser Lake, Vanderhoof

The College of New Caledonia offers commercial driver training for Class 1, 3, 4 (Restricted & Unrestricted), and 5. It also offers air brake certification.

Coast Mountain College (formerly Northwest Community College)

Coast Mountain College is a post-secondary education institution that serves the residents of northwest British Columbia. The college has campuses in Hazelton, Kitimat, Masset, Prince Rupert, Queen Charlotte, Smithers, and Terrace (main). It offers a range of programs including: apprenticeship trade training, certificates, diplomas, associate degrees, university transfer credit, continuing education/vocational training, aboriginal education and distance and online learning. To see up-to-date programming visit: www.nwcc.bc.ca

Relevant Programs to Agriculture (Current):

[Environmental Monitor Assistant Program](#)

Tailored to the needs of industry in Northern BC, the 50-day Environmental Monitoring Assistant Program (EMAP) prepares students for entry-level fieldwork with a focus on environmental monitoring. Course topics include: Environmental Protection; Data Collection Methods and Information Management; Site Characterization and Reclamation; Navigation using a Compass, GPS, and Maps; Monitoring Terrestrial Environments (soils, vegetation, and wildlife); Monitoring Aquatic Environments (fish and hydrology); and more.

[Permaculture Design, Certificate](#) – Location: Prince Rupert

Permaculture is the conscious design of landscapes which mimic the diversity, stability, and resilience of natural ecosystems and the relationships found in nature while yielding an abundance of food, fiber and energy for the provision of local needs. The Permaculture Design Field School teaches students to create sustainable communities through the process of permaculture design. The two-week intensive study includes a variety of outdoor activities, lectures, visits to field sites, and exploring how the creative



design process of permaculture can provide an organizing framework for designing sustainable communities.

University of Northern British Columbia

The University of Northern British Columbia is a small research-intensive university that serves the residents of Northern British Columbia. The university has campuses in Fort St. John, Prince George (main), Quesnel, and Terrace. It offers a range of programs including: certificates, diplomas, undergraduate and graduate degrees. To see up-to-date programming visit: www.unbc.ca

Relevant Programs to Agriculture (Current):

[Wildlife and Fisheries Management, Bachelor of Science](#) – Location: Prince George

The Major in Wildlife and Fisheries provides students with a solid foundation in wildlife and fisheries biology and ecology with a background in other resource disciplines. Through selection of elective courses, students can choose to emphasize basic biology and ecology, behaviour and conservation, or more applied aspects of resource management. Advanced courses in Population Ecology, Animal Diseases and Parasites, Conservation Biology, Wildlife Ecology, and Fisheries Ecology provide a strong biological foundation for future study in biology or management.

opportunities.rdbn.bc.ca

Bulkley-Nechako Workforce Opportunities Table

bulkleynechakoopportunities@gmail.com

Canada 



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