
Careers in Agriculture and Food

Agriculture offers countless career opportunities. The agri-food industry encompasses production, processing and distribution systems; a whole network of industries that produce supplies for agricultural production, financial agencies, researchers, inspectors, regulators and advisors; and a whole range of marketers. Each of the commodity profiles in this handbook list a number of occupations under the heading, “Who’s involved in producing it?”. The following list is not comprehensive, but does give an indication of the great variety of jobs that are involved between the farmer’s field or barn and the consumer.

Suppliers

Agriculture pilot (aerial applicator)
Artificial inseminator
Bank manager
Boat builder
Building supplies sales representative
Carpenter (construction)
Custom applicator (fertilizer, pesticide)
Farm accountant
Farm equipment and supplies sales representative
Farm machinery mechanic
Farrier (horseshoer)
Feed laboratory technician
Feed miller
Feed transporter
Fertilizer/chemical sales representative
Fish net manufacturer
Heating and ventilation equipment sales representative
Hydroponics technician
Irrigator
Lab technician (seed tester)
Land appraiser/assessor

Loans officer/credit officer
Management consultant

Researchers, Advisors

Agricultural economist
Agricultural engineer
Agricultural land use planner
Agronomist/plant scientist
Anatomist
Animal health technologist
Animal scientist
Animal standards coordinator
Architect/draftsperson (building and landscape)
Bacteriologist
Biochemist
Biologist
Bio meteorologist
Botanist
Cell biologist
Chemist
Climatologist
Clinical or community dietician
Crop specialist
Dairy herd improvement consultant
District Agriculturist/horticulturist
Ecologist
Entomologist
Environmental biologist
Environmental lawyer
Environmental planning analyst
First nations resource expert
Food or flavour chemist
Food scientist
Geneticist
Habitat restoration expert
Health and wellness consultant
Horticulturalist

Human or animal nutritional scientist
Hydrologist
Interior designer
International agriculture officer
International trade manager
Landscape designer
Marine biologist
Medicinal plant specialist
Microbiologist
Parasitologist
Plant biotechnologist
Research and development brewmaster
Resource-based tourism manager
Resource economist
Rural sociologist
Soil scientist
Statistician
Surveyor
Teacher
Toxicologist
Veterinarian

Producers

Agribusiness manager
Athletic Turf specialist
Arborist (tree expert)
Aquaculture manager
Beekeeper (apiarist)
Breeder (hogs or horses)
Broiler producer
Christmas tree farm operator
Commercial fisher
Commercial forage producer
Cow-calf operator
Dairy farmer
Egg producer
Feedlot operator
Field worker
Fish farmer
Floriculturist
Forage seed producer
Fruit farmer
Game farmer
Ginseng grower
Grain and oilseed farmer
Greenhouse production officer
Horse trainer
Mushroom producer

Nursery operator
Nut producer
Orchardist
Pedigree seed grower
Picker (fruit, vegetable and flower)
Pork producer
Poultry producer
Rancher
Sheep and goat farmer
Shellfish operator
Sod farmer
Vegetable farmer
Vineyard manager
Viticulturalist

Inspectors, Regulatory Agents

Animal health inspector
Brand inspector
Dairy inspector
Environmental conservation officer
Fisheries licensor and inspector
Fruit and vegetable inspector
Grain inspector
Health inspector
Honey grader/inspector
Meat grader/inspector
Plant product inspector
Poultry inspector

Processors, Distributors

Accountant
Auctioneer
Baker
Brewer
Canning and freezing plant manager
Container manufacturer
Dock worker
Environmental planner
Fashion merchandizer
Feed laboratory technician
Fish processor
Flavour technician
Flour miller
Floral designer
Food product development manager
Food microbiologist
Grain elevator manager
Home economist

Landscape gardener
Livestock buyer (slaughterhouse)
Meat packing plant butcher and packager
Mechanic
Milk processing plant operator
Packinghouse employee
Quality assurance scientist
Seed cleaning technician
Seed packing plant operator
Sheep shearer
Ship crew member
Textile technician or designer
Trucker/transporter
Vintner

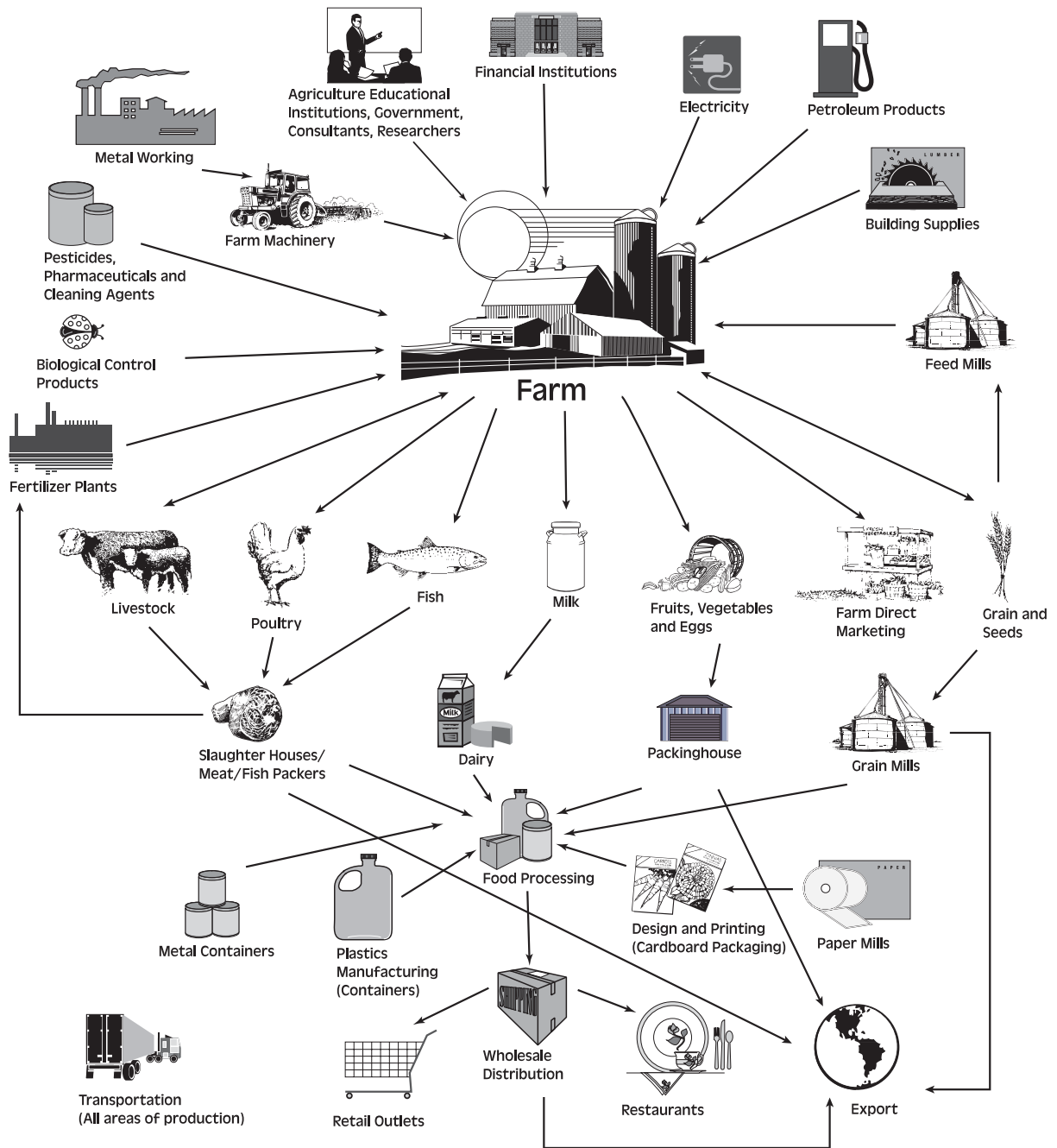
Marketing/Retail


Advertising sales agent
Auctioneer
Export manager
Farmers' market manager
Farm reporter (media)
Food critic
Food editor
Food stylist
Food marketing coordination
Food marketing manager
Graphic designer
Greenhouse operator
Hotel, restaurant and institution trade (chef)
Information officer
Instructor/teacher
Market researcher

The Farm Connection

Modern agriculture is much more than farming. It is a multi-faceted industry that is intricately connected with many other sectors of the economy. A great number of career possibilities are therefore associated with agriculture.

The following flow chart gives a visual impression of the interaction of the food industry with other industries. On the input side of the farm are industries that supply such items as farm machinery and fertilizer; on the output side are the food-processing industries. Connecting these various activities is a system of transportation and distribution.



Created by BC Agriculture in the Classroom Foundation 

Educational Institutions

The following table gives a list of most of the educational institutions in BC that offer courses or programs in an agriculture, fish or food-related area. This may help individuals interested in developing a career in this area.

Institution	Programs	Location	
British Columbia Institute of Technology (BCIT)	Fish Harvesting & Processing Technology Biotechnology Food Technology	Vancouver	www.bcit.ca
Camosun College	Horticulture	Victoria	www.camosun.bc.ca
Capilano College	Landscape Horticulture Fish Culture Technician	Vancouver	www.capcollege.bc.ca
College of the Rockies (EKCC)	Horticulture	Cranbrook	www.cotr.bc.ca
Kwantlen College	Turf Management Greenhouse Management Commercial Floristry Nursery Equine Studies	Vancouver	www.kwantlen.bc.ca
Malaspina College	Horticulture Aquaculture & Fisheries Technician Culinary Arts	Nanaimo	www.mala.bc.ca
North Island College	Aquaculture and Fisheries Technician	Courtenay	www.nic.bc.ca
Simon Fraser University	Pest Management Aquaculture Resource Management Agriculture degrees	Vancouver	www.sfu.ca
University College of the Fraser Valley	Horticulture/Ornamental Integrated Pest Management Milker Training Livestock Production	Chilliwack/Abbotsford	www.ucfc.bc.ca
University of British Columbia	B.Sc. (Agroecology) B.Sc. (Food, Nutrition & Health) B.Sc. (Global Resource Systems) B.E.D. (Environmental Design)	Vancouver	www.ubc.ca
University of Northern British Columbia	Biology Natural Resource Management	Prince George	www.unbc.ca
University of Victoria	Biology	Victoria	www.uvic.ca
Thompson Rivers University Animal Health Technology	Animal Biology Environmental Chemistry Natural Resource Sciences Ecology & Environmental Biology	Kanloops	www.tru.ca

Technology

Agriculture, fish and food production are complex businesses. Advanced technology is common throughout the agri-food business, from the farm to the consumer.

Farmers, processors, wholesalers and retailers today use modern equipment and systems, including leading edge computer technology in fields, barns, greenhouses, nurseries, fish operations, fish boats, processing plants and retail food stores. For example in many greenhouses computers control temperature, irrigation and CO₂ levels to optimize plant growth. On dairy farms many cows have computerized identification tags. Sophisticated technology is as important to the agri-food business as it is to any other business in society.

Information and its use is vital in the agri-food business. Communication through electronic and computer technology is a normal part of business for farmers. Management decisions are made based on quick access to markets, prices and production information.

Technological advances in production have dramatically improved the turnaround time of certain products from the research table to the consumer. Biotechnology has created more exact methods for breeding better livestock and crop varieties that are more disease-resistant and better quality. Biotechnology has improved foods, feeds, fertilizers, disease vaccines and pest control products. Biotechnology, which has been around for thousands of years, uses biological processes to produce substances that help agri-food production, the environment, industry and medicine. Some traditional methods include yeast to make bread and enzymes to make cheese.

Some modern examples of biotechnology at work

in agriculture are:

- Tomatoes that ripen more quickly on the vine and maintain flavour and texture for several weeks, allowing time for transport, retail display and storage at home.
- Potato plants genetically bred to resist key diseases and thus provide an environmentally sound alternative to chemical control.
- Plants developed through genetics that are more nutritious when cooked.
- Animal feeds and vaccines developed using micro-organisms.
- Animals bred for resistance to disease and for leaner meat.
- Bacteria is used that takes nitrogen from the air more effectively to legume plants, and therefore, helps reduce the amount of nitrogen fertilizers needed.
- Certain crops bred with fewer undesirable components, i.e. Canola.

Modern transportation and storage systems make products from across the world available within hours. Health inspectors ensure that products are free of impurities and disease, before they reach the consumer.

Scientists work with farmers, processors and retailers in developing and demonstrating new techniques. This is expensive and often time consuming, but results in better quality products for consumers.

Conservation

BC Farmers and Fishers Work Toward A Clean Environment for Quality Food

BC farmers are faced with the challenges of producing high quality food at a reasonable prices while preserving the environment and meeting consumer's ever changing demands. BC farms produce over 280 commodities as a result of the province's diverse climate condition and landscape, abundant supply of water and fertile soils. Farmers are the first to acknowledge the need to not only maintain, but enhance water and soil quality by using effective conservation practices to control soil erosion and avoid water contamination (balanced with the need to increase productivity). Many farmers are working with researchers from agencies, industry, organizations and universities to develop and integrate farming practices that maintain and enhance soil and water quality.

Some examples of methods that promote soil and water conservation are:

- use of cover crops
- use of crop rotation
- use of strip cropping
- zero till
- use of grass waterways
- use of beneficial insects

BC is recognized as a leader in North America in the development and use of creative technology that reduces pesticides use in food and ornamental crop production. Rigid inspection at processing facilities insures consumers get the highest quality and safest possible animal and fish products from BC processors.

Integrated Pest Management on Crops

BC is a North American leader in Integrated Pest Management (IPM). BC has led the way in

adopting IPM in its food production systems. IPM involves a balance of biological controls, cultural practices, resistant crops and pesticides, to control rather than totally eliminate pests. The result is maximum control with no detrimental impact on the environment. Virtually all of BC's greenhouse sector, and much of its vegetable, berry and tree fruit industries, use IPM technology. This assures consumers that BC food products are high quality and wholesome.

Soil and Water—Our Basic Resources

Farmers across the province, especially grain and forage producers, are trying new practices such as "zero-till". This means farmers seed the new crop directly into uncultivated land that was previously cropped. This reduces potential damage to the soil by eliminating one step in the planting process. Zero-till seeding offers reduced wind and water erosion of soil. Results of these tests show that the yield and cost of producing the crop is similar to the conventional method, but with less soil loss. This system may not work for all farms, but is being used successfully in some areas.

As a result of increased urbanization, especially in the lower Fraser Delta region, important wildlife habitat is being lost. Many agencies and organizations are working along with the farming community in the Lower Mainland region and other regions on wildlife management projects. They are working on solutions to provide habitat for wildlife i.e. migratory birds, herons, wildflowers... that are practical and economically viable for farmers.

BC farmers are encouraged to follow defined codes of agricultural practices i.e. Waste Management Act, The Pesticide Control Act, Health Act, Fish Protection Act, and Farm Practices

Protection Act, to insure they are farming in an environmentally responsible way to maintain a healthy, compatible relationship with all of their neighbours both rural and urban.

Courtenay Access Centre
2500 Cliffe Avenue
Courtenay, BC, V9N 5M6
250-897-7540
Fax: 250-334-1410

Fish Farming – A New Resource

The fish industry is a major contributor to the BC economy. Highly valuable fish products are shipped to local and off-shore markets.

Aquaculture farms are sited along BC's vast, highly suited coastline, according to sophisticated biophysical criteria that take environmental concerns into account.

Fish Waste Handling

Over 100,000 tonnes of salmon are harvested from the wild and from aquaculture operations. However, the waste by-products from fish farms and processing plants must be handled in an environmentally acceptable way. The Ministry, along with the Federal Government, the fisheries industry and the University of BC are cooperating in a multi-year project to reduce the volume of these by-products in landfills.

The project will develop and refine the commercial viability of a cost-efficient process that converts fish waste into a high quality soil enhancer.

For more information:

For more information on programs and technology related to pest management, soil and water conservation, and fish production, contact:

Resource Management Branch of the
BC Ministry of Agriculture and Lands
1767 Angus Campbell Road
Abbotsford, BC
604-556-3001

Aquaculture and Commercial Fisheries Branch
Ministry of Fisheries
780 Blanshard Street
Victoria, BC, V8W 9B3

Products of BC

British Columbia's Commodities

British Columbia's agriculture, fisheries and food industry produces many things for consumers, many more things than most people realize. Here is a list of over 280 primary agriculture and fish commodities produced by BC farmers and fishers.

Agriculture Crops

Floriculture

- Bedding plants
- Dried flowers
- Fieldgrown cut flowers
- Foliage plants
- Greenhouse cut flowers
- Potted plants
- Vegetable transplants

Nursery

- Broadleaf evergreens
- Bulbs
- Christmas trees
- Deciduous shrubs
- Shade trees
- Flowering trees
- Fruit trees
- Ornamental cut foliage (holly, etc.)
- Herbaceous perennials
- Sod
- Spreading evergreens
- Upright evergreens

Berries, Grapes and Nuts

- Black currants
- Blackberries
- Blueberries
- Boysenberries
- Cranberries

- Gooseberries
- Hazelnuts
- Kiwifruit
- Loganberries
- Raspberries
- Red currants
- Saskatoons
- Strawberries
- Table grapes
- Wine grapes (many varieties)

Vegetables

- Asparagus
- Baby carrots
- Baby corn
- Beans, green
- Beans, wax
- Beets
- Bok choy
- Broad beans
- Broccoli
- Brussels sprouts
- Cabbage, Chinese
- Cabbage, green
- Cabbage, red
- Cabbage, savoy
- Cantaloupe
- Carrots
- Cauliflower
- Celeriac
- Celery
- Chili peppers
- Collards
- Corn
- Cucumber, pickling
- Cucumber, slicing
- Eggplant

Endive (chicory)
Fennel
Garlic
Kale
Kohlrabi
Leeks
Lettuce, Boston
Lettuce, butter
Lettuce, green leaf
Lettuce, iceberg
Lettuce, red leaf
Lettuce, romaine
Lo bak
Marrow
Onions, green
Onions, red
Onions, silverskins
Onions, white
Onions, yellow
Parsley
Parsnips
Peas, pod
Peas, shelled
Peppers
Potatoes, seed
Potatoes, table
Pumpkins
Radicchio
Radishes
Rhubarb
Runner beans
Rutabagas
Shallots
Spinach
Squash (several varieties)
Suey choy
Tomatoes, field
Tomatoes, cherry
Turnips
Watercress
Watermelons
Zucchini

Greenhouse Vegetables

Cucumbers
Lettuce
Peppers

Tomatoes

Mushrooms

Agrarius (button)
Morel
Pine
Shitake

Tree Fruit

Apples (over 20 varieties)
Apricots
Crabapples
Nectarines
Peaches
Pears
Plums
Prunes
Sour cherries
Sweet cherries

Grains and Oilseeds

Barley
Buckwheat
Canola
Caraway seed
Corn (grain)
Dry field beans
Dry field peas
Flaxseed
Grass and legume seed (many varieties)
Oats
Rye
Soybeans
Triticale
Wheat
Yellow mustard

Livestock

Dairy Cattle Products

Dairy breeding stock
Dairy cattle
Embryos
Cow's milk

Beef Cattle Products

Beef breeding stock

Bull semen
Feeder cattle
Slaughter cattle

Calves

Feeder calves
Veal

Hogs

Market hogs
Suckling hogs

Poultry

Capon
Cornish game hen
Duck
Fowl
Frying chicken
Goose
Guinea fowl
Partridge
Pheasant
Squab
Quail
Roasting chicken
Silkies
Turkey

Eggs

Chicken eggs
Hatching eggs
Quail eggs
Duck eggs

Apiculture

Bee pollen
Bees
Beeswax
Honey
Royal jelly

Miscellaneous Livestock and Associated Products

Bison
Chinchilla
Deer antler
Emu

Fallow deer
Fox
Goats
Goat's milk
Horses
Lambs
Manure
Mink
Ostrich
Ponies
Rabbits
Reindeer
Sheep
Wild boar
Wool

Miscellaneous Agricultural Products

Biological control agents*
Corn for silage
Edible flowers
Flower and vegetable seeds
Forest products
Ginseng root
Ginseng seed
Hay and clover
Herbs*
Hops
Organic fruits and vegetables

*Biological control agents include: ladybugs, spider mite predator, whitefly parasites, aphid predator, insect parasitic nematode, manure fly parasites and thrips predator.

*Herbs include: anise, arugula, basil, chamomile, chervil, chicory, chili, chrysanthemum, cilantro, dill, ginger, lavender, lemongrass, mint, oregano, rosemary, saffron, savory, tamarind, tarragon, thyme and watercress.

Fisheries

Fish

Anchovy
Arctic charr
Dogfish
Eulachons
Flounder

Cod, Pacific
Cod, ling
Hagfish
Hake
Halibut
Herring, bait
Herring, food
Idiotfish
Mackerel
Perch, Pacific Ocean
Perch, silver
Pollock
Rainbow trout, farmed
Red snapper
Sablefish
Salmon, Atlantic, farmed
Salmon, chinook, farmed
Salmon, chinook, wild
Salmon, chum, farmed
Salmon, chum, wild
Salmon, coho, farmed
Salmon, coho, wild
Salmon, pink, wild
Salmon, sockeye, farmed
Salmon, sockeye, wild
Shark, six-gill
Skate
Smelt
Sole, butter
Sole, dover
Sole, English
Sole, petrale
Sole, rex
Sole, rock
Steelhead, farmed
Steelhead, wild
Sturgeon
Tuna
Turbot
Yellow mouth
Yellow tail

Roe

Cod, Pacific
Herring
Pollock
Sea urchin, red

Salmon, farmed
Salmon, wild

Shellfish

Crabs
Crayfish
Krill
Prawns
Shrimp

Molluscs

Abalone
Clams, butter
Clams, geoducks
Clams, horse
Clams, little neck
Clams, manila
Clams, razor
Gooseneck barnacles
Mussel, blue
Octopus
Oysters, European, farmed
Oysters, Pacific, farmed
Scallops, Japanese
Scallops, pink
Scallops, spiny
Snails
Squid

Miscellaneous Seafood

Dulse
Kelp
Roe on kelp
Sea asparagus
Sea urchins, green
Sea urchins, purple
Sea urchins, red
Sea cucumbers

199 agricultural commodities and 83 fisheries commodities.

Source:
Statistics Unit, Public Affairs Branch, BC Ministry of Agriculture and Lands.

Glossary

Acidic soil - refers to a soil with a pH below 7

Agriculture - agriculture is an applied science that uses water, energy (heat and light) as well as soil nutrients to grow plants, raise animals and rear fish for food and other related products

Aggregate fruit - a clustered fruit composed of numerous fruitlets each with its own seed

Agri-business - the group of industries dealing with the produce of, and services to, agriculture

Apiarist - a beekeeper

Artificial insemination (AI) - the injection of semen into the vagina or uterus by instrumental means

Avian - of or relating to birds

BC's Farm Practices (Right to Farm) Act - protects farmers who use normal farming practices, creates a process to resolve complaints and encourages local governments to support farming

Beta-carotene - a plant form of vitamin A

Biodiversity - biological diversity-the variety of plants, animals and other organisms in an ecosystem

Biodynamic farming - involves restoring the soil to a balanced living condition through the application and use of stabilized humus (well rotted organic matter)

Biotechnology - the application of science and engineering in the direct or indirect use of living

organisms, or parts or products of living organisms, in their natural or modified forms. Bio-(biology - the science of living things) Technology-(the tools and processes used to make products). Biotechnology is using biology to make new products.

Brassica - cruciferous plants with tap roots and erect branched stems, including cabbage, Brussels sprouts, mustard, rape, cauliflower and kale

Breeder operation - an operation in which poultry is bred to produce fertilized eggs

Brooder - a heated house for chicks, piglets, etc.

Castrated animal - an animal that has had its testicles removed

Cellulose - a carbohydrate that is the main constituent of plant-cell walls

Colostrum - the first secretion from the mammary glands after giving birth. This thick, yellow milk contains antibodies that are passed on to the young.

Compost - a combination of organic matter, soil, nutrients, moisture and lime in a state of partial and continuing decay used as a soil conditioner and/or fertilizer

Conservation - management of natural resources for present and future uses

Cover Crop - a crop grown to cover the soil and protect it from wind and water erosion

Cross pollinate - the passing of pollen from the

male part of one plant to the female part of another

Cruciferous - plants that have flowers with four petals arranged in the shape of a cross

Cud - a mouthful of previously swallowed food regurgitated from the first stomach of ruminants to the mouth where it is chewed slowly a second time

Culti-pack - a field preparation operation, often the last before seeding, which breaks up clods of dirt and firms and levels the soil surface

Cultivar - a plant variety produced by cultivation

Cultural practices - techniques used in growing a plant that include planting resistant varieties, rotating crops, spacing and pruning methods, providing good drainage and irrigation

Curing - to preserve meat, fruit or skins by salting, drying, etc.

Cutting - any part that can be severed from a plant and is capable of regeneration

Desiccate - remove the moisture from

Dioecious - having male and female organs on separate plants

Direct Marketing Board - an organization that controls the supply of a particular product (ie milk or eggs) by setting the prices for the product and by managing the sales of the product

Dressed weight - the weight of a meat cut after slaughter, defeathering or skinning and evisceration

Dwarfing rootstock - a root stock that limits the mature size of the plant that is grafted onto it

Ecology - the study of relationships between organisms and the environment

Entomologist - a specialist in the study of the forms and behaviour of insects

Estrus - a recurring period of sexual receptivity in many female animals; heat

Eviscerate - remove internal contents

Farm gate value - the cash value of a product when it leaves the farm

Feed-conversion rate - the rate at which feed is converted into weight gain

Fertile - a) of soil - capable of producing an abundance of crops, b) of animals and plants - able to reproduce

Fertilizer - a substance added to the soil to make it more fertile

Fertilization - the joining of male and female cells to produce offspring

Flora and Fauna - plant and animal life

Free Trade - international trade left to its natural course without tariffs, quotas or other restrictions

Free Trade Agreement - an agreement between countries of a particular region to allow certain goods and services to be traded among them without tariffs, quotas or other restrictions

Fructose - a simple sugar found in honey and fruits

Fungicide - a fungus destroying substance

Genetic modification (genetic engineering, genetic manipulation) - a series of techniques used to transfer genes from one organism to another or to alter the expression of an organism's genes.

Gestation period - the period between conception and birth

Gizzard - the second part of a bird's stomach used for grinding food, often with grit

Grafting - is a method of plant propagation

(reproduction) in which a scion (a bud or stem containing several buds) of one plant is inserted into the stock (root, stem or branch) of another plant so that they unite and grow as one plant

Green Manure - a growing crop plowed under and mixed with the soil to enrich it with organic matter

Grit - hard particles such as stone or sand

Habitat - a place where the needs for food, water and shelter of an organism are met

Harden off - acclimatize a plant to a change in its environment by gradual increase of its exposure to the new environment

Harrow - a heavy frame of iron teeth which is dragged over a field to break up clods of soil and to level freshly plowed farm land

Hatchery - a place for hatching eggs, especially of fish or poultry

Heat - the receptive period of the sexual cycle, especially in female animals

Herbaceous perennial - soft stemmed plants that live from year to year and which die down at the end of each growing season

Herbicide - a substance that kills unwanted plants

Horticulture - the science and art of growing fruits, vegetables, ornamental trees, shrubs and flowers

Hydro-cool - immerse in ice water to chill

Hydroponics - the technique of growing plants in a medium other than soil, using a feeding mixture of essential plant nutrients dissolved in water

Incubator - an apparatus used to provide a suitable temperature and environment to hatch eggs

Integrated Pest Management (IPM) - involves a balance of cultural, biological, chemical and

other methods to control rather than eliminate pest populations with minimum impact on the environment

Insecticide - a substance that kills insects, bugs and larvae

Leaflets - any division of a compound leaf

Legume - a member of the pea family that has the ability to transform nitrogen from the air into a form that can be utilized by plants

Litter - (a) straw, hay, wood shavings or other materials used as bedding for animals, (b) the young born at one time by an animal that normally produces several young at birth

Maggot - larva of a fly

Mulch - a layer of material spread over the surface of soil to protect it and plant roots from erosion, crusting, drying and freezing

NAFTA - a trade agreement signed in November 1993 between the United States, Canada, and Mexico to establish free-trade guidelines between the three countries.

Pasteurized - subject to the process of partial sterilization by heating

Pathologist - a specialist who deals with the nature of disease, especially the structural and functional changes caused by disease

Pectin - a soluble fibre found in ripe fruit and used as a setting agent in jams and jellies

Perennial - a plant that lives from year to year

Pesticides - an insecticide, herbicide or fungicide. A substance, usually synthetic, which kills a selected type of living thing.

Pheromones - a chemical secreted and released by an animal for detection and response by another

Physiologist - an expert who deals with the function and vital processes of living organisms

Pollinate - the transfer of the pollen from one flower to the stigma of another flower, which is the first step in producing fruit

Pome fruit - a firm-fleshed fruit in which multiple seeds are protected by a central core

Profit margin - the profit remaining in a business after all expenses have been deducted

Pulse crop - the plant producing the edible seeds of various legume, e.g., chickpeas, lentils and beans

Quota - rules set on how much of a commodity a particular producer can produce

Refractometer - a hand-held instrument used to determine the level of sugar in fruit

Retail value - the cash value of a product sold to the final consumer, often in small volumes and sold through a retail outlet

Riparian area - the area that borders a stream, a lake or a wetland area.

Rootstock - the underground part of a plant including a short portion of a trunk onto which a cultivar can be grafted

Ruminant - a group of four-footed, hoofed, even-toed, cud-chewing mammals

Stone fruit - a fruit with a fleshy pulp that encloses a single seed in a hard shell

Strip Cropping - a soil conservation technique-alternating rows of grain/forage crops like rye or clover with cash crops like corn

Subsidy - a sum of money granted by the government or a public body to assist a business or an industry in keeping the price of a commodity or service low enough to remain competitive

Supply management - a distribution system in which the total quantity of a product produced in an industry is controlled, often through quota. This maintains a level of financial return to farmers.

Sustainability - a system that works in a healthy state indefinitely

Taproot - a tapering root that grows vertically downward in which a plant stores food

Tariff - a tax or duty to be paid on a particular class of imports or exports

Tuber - a fleshy, food-storing swelling of an underground stem

U-pick - a pick-your-own operation in which customers go to the producer's farm and pick their own produce

Variegated - leaves with two or more colours

Vegetative propagation - to cause to generate or multiply plants by asexual means such as layering, cutting or grafting

Watershed - the entire land surface from which water ultimately drains into a particular stream or river system.

Wean - accustom a young mammal to food other than its mother's milk

Whorled leaves - a ring of leaves round the stem of a plant

Wildlife - non-domesticated plants and animals

Windbreak - vegetation barriers used to protect crops from desiccation and breakage and soil from wind erosion

Windrowed - placing the crop into rows to dry before it is collected

Resources and Contacts

For more information and resource materials both from inside and outside BC, please contact the following agencies directly. Although this not a complete list of every agency in BC related to the agri-food industry, it represents the key agencies, which could offer help to educators.

Some may have educational materials, while most do not. However, they may help with other contacts or general information.

Often, the marketing board, if one exists, or the marketing agency for a particular commodity is the better source of information, while the producer group is generally an administrative membership office.

Animal

BC Bison Association
21845 Hwy 97S
Prince George BC V2N 6A3
www.bcbuffalo.ca

BC Broiler Hatching Egg Commission
180 - 32160 S. Fraser Way
Abbotsford BC V2T 1W5
604-850-1854
www.bcbhec.com

BC Cattlemen's' Association
#4-10145 Dallas Dr.
Kamloops BC V2C 6T4
250-573-3611
www.cattlemen.bc.ca

BC Chicken Grower's Association
PO Box 581 Abbotsford BC
V2T 6Z8 604-859-9332
www.bcchicken.ca

BC Chicken Marketing Board
101 - 32450 Simon Ave
Abbotsford BC V2T 4J2
604-859-2868
www.bcchicken.ca

BC Dairy Council
5805 Wales Street
Vancouver BC V5R 3N5
604-434-2434
www.bcdairycouncil.ca

BC Dairy Foundation
3236 Beta Ave
Burnaby BC V5G 4K4
1-800-242-MILK
www.bcdairyfoundation.ca

BC Egg Marketing Board
#150 32160 South Fraser Way
Abbotsford BC V2T 1W5
604-556-
www.bcegg.com

BC Fallow Deer Association
28481 Starr Rd
Abbotsford BC V4X 2C5

BC Goat Breeders Association
41690 No. 3 Road
Chilliwack BC V2R 5G1
604-823-7144

BC Goat Milk Producers Association
3421 Boundary Rd
Abbotsford BC V3G 2N1
Ph/Fax 604-823-0186

BC Hog Marketing Commission
2010 Abbotsford Way
Abbotsford BC V2S 6X8
604-864-9096
www.bcpork.ca

BC Livestock Producers Cooperative Association
#1 - 10145 Dallas Dr
Kamloops BC V2C 6T4
250-573-3939
www.bclivestock.bc.ca

BC Llama & Alpaca Association
www.bclaa.com

BC Milk Marketing Board
200 - 32160 S. Fraser Way
Abbotsford BC V2T 1W5
604-556-3444
www.milk-bc.com

BC Milk Producers Association
3236 Beta Ave
Burnaby BC V5G 4K4
1-877-462-2672
www.bcmilkproducers.ca

BC Pork Producers Association
2010 Abbotsford Way
Abbotsford BC V2S 6X8
604-853-9461

BC Purebred Sheep Breeders' Association
www.bcsheep.com

BC Specialty Birds
Association
32351 Huntington Rd.
Abbotsford BC V2T 5Y8
604-854-6776

BC Stock Dog Association
PO Box 635 100 Mile House
V0K 2E0 250-395-4785

BC Sustainable Poultry
Farming Group
4582 Bell Rd Clayburn BC
V3G 2M1 604-556-7781
www.sustainablepoultry.ca

BC Turkey Marketing Board
#106 - 19329 Enterprise
Way
Surrey BC V3S 6J8
604-534-5644
www.bcturkey.com

Canadian Ostrich Association
www.ostrich.ca

Cattle Industry Development
Council
#4-10145 Dallas Dr
Kamloops BC V2C 6T4
250-573-3611
www.cattlefund.net

Horse Council of BC
27336 Fraser Hwy,
Aldergrove BC V4W 3N5
1-800-345-
www.hcbc.ca

Fish

BC Salmon Farmers
Association
#302-871 Island Highway
Campbell River BC V9W 2C2
1-800-661-7256
www.salmonfarmers.org

BC Salmon Marketing
Council
Ste. 1100 - 1200 W. 73rd.
Ave Vancouver BC V6P 6G5
604-267-3030
www.bcsalmon.ca

BC Shellfish Growers
Association
Unit F - 2002 Comox Ave
Comox BC V9M 3M6
250-890-7561

Freshwater Aquaculture
Association of BC
3104 Cardinal Dr.
Burnaby BC V5A 2T6
604-626-6747
www.aquaculturebc.com

Positive Aquaculture
Awareness
Box 952 Campbell River BC
V9W 6Y4
www.farmfreshsalmon.org

Plant

Associated Ginseng Growers
of British Columbia
Box 241 Vernon BC V1T
6M2
250-545-4737

BC Asparagus Growers
Association
2651 Camp Road
Winfield BC V4V 1K4

BC Blueberry Council
Box 8000-730
Abbotsford BC V2S 6H1
604-864-2117
www.bcblueberry.com

BC Certified Seed Potato
Growers Association
4119 - 40th St Ladner BC
V4K 3N2
Ph/Fax 604-940-2024

BC Cranberry Growers
Association
#130 - 32160 South Fraser
Way
Abbotsford BC V2T 1W5
604-854-4499
www.bccranberrygrowers.
com

BC Cranberry Marketing
Commission
#71 - 4001 Old Clayburn Rd
Abbotsford, BC V3G 1C5
604-852-8585
bccranberries.com

BC Forage Council
www.farmwest.com

BC Fruit Growers'
Association
1473 Water Street
Kelowna BC V1Y 1J6
250-762-5226

BC Grain Producers
Association
Box 16 Dawson Creek BC
V1G 4H3
866-716-7170
250-782-7170
www.bcgrain.com

BC Grape Growers
Association
Box 2462, Stn R
Kelowna BC V1X 6A5
www.grapegrowers.bc.ca

BC Greenhouse Growers'
Association
#108-7565 132nd St
Surrey BC V3W 1K5
604-591-5480
www.bcgreenhouse.ca

BC Hazelnut Association
6320 Wilson Road
Agassiz BC V0M1A1
604-796-1066

BC Herb Growers
Association
4020 Casorso Rd
Kelowna BC V1W 4N6
Ph/Fax 250-764-1263

BC Landscape & Nursery
Association
102 - 5783 176A St
Surrey BC V3S 6S6
604-574-7772
www.bclna.com

BC Potato & Vegetable
Growers Association
Box 18565 Delta BC
V4K 4V7
Ph/Fax 604-940-2024

BC Raspberry Industry
Development Council
#130-32160 South Fraser
Way, Abbotsford BC V2T
1W5 604-854-8010
www.bcraspberries.com

BC Tree Fruits Limited
1473 Water Street
Kelowna BC V1Y 1J6
250-470-4200
www.bctree.com

BC Vegetable Marketing
Commission
#207 - 15252 32nd Ave
Surrey, BC V3S 0R7
604-542-9734
www.bcveg.com

BC Wine Institute
Suite 107 – 1726 Dolphin
Ave
Kelowna BC V1Y 9R9
1-800-661-2294
www.winebc.com

Canadian Grain Commission
Western Regional Office
300 – 333 Seymour Street
Vancouver BC V6B 5A6
www.grainscanada.gc.ca

Canadian Seed Growers
Association BC Branch
c/o BC Ministry of
Agriculture & Lands
4th Floor 1201 103rd Ave,
Dawson Creek BC V1G 4J2

Canola Council of Canada
400-167 Lombard Ave.
Winnipeg MN R3B 0T6
204-982-2100
www.canola-council.org

Certified Organic
Associations of BC
3402 - 32nd Ave Vernon
BC V1T 2N1 250-260-4429
www.certifiedorganic.bc.ca

Flowers Canada
929 5th Avenue Suite 305
Ottawa ON K1S 5P5
www.flowerscanada.org

Fraser Valley Bush Bean
Growers Association
2194 Westham Island Rd
Delta BC V4K 3N2
604-946-7493

Fraser Valley Cole Crop
Growers Association
100-32160 S. Fraser Way
Abbotsford BC V2T 1W5
604-864-0565

Fraser Valley Corn Growers
Association
38900-#4 Rd Abbotsford
BC
V3G 2G2 604-852-4009

Fraser Valley Pea Growers
Association
6545 - 60th Ave
Delta BC V4K 4E2
604-946-2643

Fraser Valley Strawberry
Growers Association
Suite 100-32160 South
Fraser Way
Abbotsford BC V2T 1W5
604-864-0565
www.bcstrawberries.com

Grasslands Conservation
Council
of BC
954 A Laval Crescent
Kamloops BC V2C 5P5
250-374-5787
www.bcgrasslands.org

Invasive Plant Council
#104 - 197 N. 2nd Ave.,
Williams Lake BC V2G 1Z5
www.invasiveplantcouncilbc.
ca

Kiwifruit Association of BC
1485 Newton Heights Rd
Saanichton BC V8M 1T6
250-652-3745

Mushroom Industry
Development Council
PO Box 356 151-32500
South Fraser Way
Abbotsford BC V2T 4W1
604-850-6670
www.bcmushrooms.org

United Flower Growers'
Co-operative Association
4085 Marine Way Burnaby
BC V5J 5E2 604-430-2211
www.ufgca.com

Western Canada Turfgrass
Association
22097 Isaac Crescent
Maple Ridge BC VX 0V9
www.wctaturf.com

Agriculture

BC Honey Producers
Association
2810 Fairfield St.
Duncan BC V9L 6B9
www.bcbeekeepers.com

Education

BC Agriculture in the
Classroom Foundation
Abbotsford Agri. Centre
1767 Angus Campbell Rd
Abbotsford BC V3G 2M3
604-556-3088
www.aitc.ca/bc

Other AITC groups across
Canada
www.aitc.ca

BC 4-H Foundation
Box 490 #1-904 Maud St,
Enderby BC V0E 1V0
1-866-776-0373 www.bc4h.
bc.ca

BC Ministry of Education
Curriculum Development
Science and Technology
620 Superior St
PO Box 9152 Stn. Prov.
Gov't. Victoria, BC
V8W 9H1
www.gov.bc.ca

Other

Agriculture and Agri-Food
Canada
www.agr.gc.ca

Agriculture Environment
Initiatives
#102 - 1482 Springfield Rd
Kelowna BC V1Y 5V3
250-763-9790

Agricultural Labour Pool
#106-2669 Langdon St.
Abbotsford BC V2T 3L3
604-855-7281
www.agrilabourpool.com

Agriculture Research &
Development Corporation
(ARDCOPR)
#140-32160 South Fraser
Way Abbotsford BC
V2T 1W5 604-854-4483

BC Agriculture Council 102 - 1482 Springfield Rd Kelowna BC V1Y 5V3 250-763-9790 www.bcac.bc.ca	BC Ministry of Agriculture and Lands PO Box 9043, Stn Prov Gov't Victoria BC V8W 9B4 www.gov.bc.ca/al	Fisheries and Oceans Canada www.dfo-mpo.gc.ca	Smart Growth BB 314 - 402 West Pender St Vancouver BC V6B1T6 604-915-5234 www.smartgrowth.bc.ca
BC Association of Agricultural Fairs & Exhibitions 944 Brooks Place, Courtenay BC V9N 9E3 Ph/Fax 250-898-8582 www.bcfaairs.ca	BC Veterinary Medical Association Suite 107-828 Harbourside Dr North Vancouver BC V7P 3R9 604-929-7090 www.bcvma.org	Fraser Basin Council 1 st Floor 470 Granville Street Vancouver BC V6C 1V5 604-488-5350 www.fraserbasin.bc.ca	Western Canadian Farriers Association 10373 - 272nd St Maple Ridge BC V2W 1R1 604-462-8572 www.WCFA.ca
BC Association of Farmers Markets 21845 Highway 97S Prince George BC V2N 6A3 250-330-4465 www.bcfarmersmarket.org	Delta Farmland & Wildlife Trust #205 - 4882 Delta Street Delta BC V4K 2T8 604-940-3392 www.deltafarmland.ca	Fraser Valley Farm Direct Marketing Association Box 327, #800-15355 24th Ave White Rock BC V4A 2H9 604-535-5282 www.bcfarmfresh.com	Western Canadian Functional Foods Network Rm 218, Food, Nutrition & Health Building 2205 East Mall UBC Vancouver BC V6T 1Z4 604-822-6920 www.bcfm2.com
BC Farm Fresh www.bcfarmfresh.com	Ducks Unlimited Canada BC Western Region Unit 511, 11370 - 78 Ave Surrey BC V3W 0H6 604-592-0987 www.ducks.ca	InfoBasket www.infobasket.gov.bc.ca	Westgen (Western Canada's Genetics Centre) Box 40 Milner BC VOX 1T0 604-530-1141 /800-563-5603 www.westgen.com
BC Farm Writers Association Box 338 Chilliwack BC V2P 6J4 604-858-9193	Farm & Ranch Safety & Health Association (FARSHA) Suite 311-9440 202nd St Langley BC V1M 4A6 1-877-533-1789 www.farsha.bc.ca	Investment Agriculture Foundation PO Box 8248 Victoria BC V8W 3R9 250-356-1662 www.iafbc.ca	
BC Food Processors Association Suite 204 2929 Commercial Drive Vancouver BC V5N 4C8 604-871-0190 www.bcfpa.ca		Irrigation Industry Association of BC 2330 Woodstock Dr Abbotsford BC V3G 2E5 604-859-8222 www.irrigationbc.com	
BC Institute of Agrologists #205 - 733 Johnson St Victoria BC V8N 3C7 250-380-9292 www.bcia.com	Farm Folk/City Folk Society 1937 West 2nd Ave Vancouver BC V6J 1J2 604-730-0450 www.farmfolkcityfolk.ca	Pacific Agri-Food Research Centre Agassiz Site 6947 No. 7 Highway/ P.O. Box 1000 Agassiz BC V0M 1A0 604-796-2221	