

COMMODITY

POULTRY

Description

British Columbia's poultry industry comprises four major sectors: the meat chicken sector, egg layer production, the broiler breeding sector, and turkey production. Other smaller sectors include breeder pullet production, layer pullet growing, layer breeding and turkey breeding. Taiwanese chickens, Silkie chickens, ducks, geese, squab, pheasants, quail, partridges, and tinamous are also produced.

Chickens

Poultry meat production begins with the incubation of eggs from broiler breeder flocks. Newly-hatched chicks are moved into grower barns to produce chicken meat. All large commercial chicken barns typically incorporate automated feeding, watering, heating and ventilation systems. Chickens are fed for 34–45 days, the actual feeding interval dependent on the market they are serving, and are then shipped for slaughter to a processing plant.

Turkeys

Turkey meat production begins with the incubation of eggs from turkey multiplier breeders. The young turkey poults that successfully hatch are moved to grower facilities for grow-out, most often to 10–15 weeks of age. Various profiles of turkeys based on different weights are generally recognized in the industry, with the most common classifications being broiler turkeys, heavy hens and toms.

Layers

Layer breeders produce layer breeder eggs which hatch into chicks that will become layer replacement pullets. Replacement pullets become layers when they begin producing eggs at 18–21 weeks of age. Layers produce the eggs destined for human consumption. These eggs may be either marketed as table eggs or processed into products such as dried egg powder and whole yolk. Commercial egg layers generate approximately 26–27 dozen eggs per year. After 12–14 months of production, hens can be sold as spent fowl for minor incorporation into processed foods, but are more typically disposed of for rendering in the production of meat meal and feather meal in animal feeds. The proportion of spent fowl which is diverted for rendering purposes is dependent on demand within the more economically attractive processed food market.

Broiler Breeders

Broiler breeders produce broiler breeder eggs which are hatched as broiler chicks. These broiler breeder chicks are initially called broiler breeder replacement pullets and become broiler breeder layers when they produce hatchable eggs at approximately 25–27 weeks of age. They produce hatching eggs to an age of about 59–64 weeks, the actual age being dependent on a slaughtering order being issued by the Broiler Hatching Egg Commission which is dependent on the demand for hatching eggs at a given

time. Birds within a broiler breeder flock average 147 hatching eggs in a life cycle; high-producing flocks may produce as many as 175 eggs per bird per year.

Ostriches

Ostriches are produced throughout various regions of British Columbia. Adult ostriches weigh approximately 115 kilograms (250 pounds) as females and 160 kilograms (350 pounds) as males. Ostriches produce 35–55 eggs per hen over an approximate life span of 70 years. Some shelter is required to protect feed from rain and snow and to protect the ostriches from extreme weather conditions.

Ostrich males can become quite aggressive during the breeding season in their instinctive protection of females, nests and territory. In this context, ostriches can be dangerous to the public. It is therefore necessary to incorporate setbacks from pens to property lines with appropriate fencing designed specifically for ostriches. Catch pens are often covered because reduced light levels tend to settle the birds. Transportation of ostriches requires customized enclosed hauling equipment with non-slip flooring.

Emus

Emus can be quite large, reaching heights of approximately 1.8 metres (6 feet) and weights of 68 kilograms (150 pounds). Adequate fencing and alleyways are a necessity. Shelters may be made of wood, tin, fiberglass or suitable other materials. Adults are quite tolerant of cold weather. Emus are most easily handled and hauled during nighttime hours when they are typically most calm. Trailers should be enclosed, well-ventilated, padded and should incorporate non-slip floors.

Female emus emit a booming noise that can be annoying to the public. This noise is part of normal behaviour and can occur at any time of the day or night.

Ducks

Ducks are usually reared indoors on litter or on raised floors above a manure storage pit. When raised on litter, it is advisable to add small amounts of sawdust or other suitable bedding materials – as often as daily – to avoid packing of the litter and to prevent anaerobic gas generation. Duck manure has a moisture content of 92% whereas chicken manure's is about 75%. Ducks display a natural tendency to playing with waterers, making it necessary to pay particular attention to keeping litter dry. The preening oils of ducks contain propionic acid – often contributing to additional odours in the barn environment and in barn emissions – if litter and air quality issues are not addressed appropriately. Because ducks have webbed feet, they tend to pack the litter, thereby sealing it and creating conditions that allow it to turn anaerobic. This results in a predisposition toward the litter generating unpleasant odours. While ducks are raised on wire in many places in Canada, wire floor systems are not advised in locations where neighbours reside nearby or in high population density areas. Wire floor systems in which the manure drops directly into water and breaks down anaerobically often result in more severe odour problems.

Geese

Geese are typically raised outdoors in pens. They do not generally do well when raised indoors. Geese require six to eight square feet of floor space as mature birds. It is advisable to raise geese indoor until they reach an age of eight to ten weeks, after which outdoor access should be provided.

Squab

Squab are young pigeons raised for meat. Adult pigeons produce in the range of 10–12 squab a year per breeder pair. Young squab are nourished in early life directly by the adults feeding on grains and seeds and regurgitating the partially digested material into their mouths. These birds may be raised in

individual breeder cages or in community pens with 10–20 pairs in each pen. A high degree of variability in production and management systems exists in squab production. There is also significant variability in the number of pigeon breeders in commercial squab operations, ranging from a few hundred to over 15,000 breeders. More than 20 squab production units exist in the province.

Pheasants

Pheasants may be raised as hunting pheasants or as commercial meat pheasants for restaurants. Pheasants are often reared in outdoor net pens. Hunting pheasants need to be sheltered from human contact so that they flush when hunted after release into the wild.

Quail and Partridges

Quail and partridges are housed on floors if raised for meat purposes; when raised for egg or hatching egg production, they may be reared in cages.

Taiwanese and Silkie Chickens

Taiwanese and Silkie chickens are specialty chickens raised primarily for ethnic markets. Silkie meat is used in soups and broths, whereas Taiwanese chicken is consumed largely for other meat purposes. Growers of these birds are regulated under supply management marketing systems. The breeder birds that supply hatching eggs for production of growers, however, are not currently raised under this system.

Tinamous

Tinamous are most closely related to the ostrich and emu families and originate from Chile. They are typically raised on floors with litter. Tinamous are often referred to as partridges but the two are not the same. Tinamous prefer to have a nest inside open pens to which they can retreat and hide from people entering the pen.

Farm Practices of Particular Interest

Practices for specific farm activities can be found in the Farm Practices section of this reference guide. Farm practices which may be of particular interest to poultry production include the following.

Animal Husbandry

Farmers are responsible for ensuring that the basic needs of animals in their care are met. Feed, water, shelter and basic care must be provided.

See also Farm Practice: [Animal Care and Handling](#)

Farm Buildings

Poultry producers require buildings to house livestock; to protect equipment; and to store feed, fertilizers, manure and pesticides. From time to time pests such as flies and rodents can be found in and around buildings. Pest control programs are highly recommended to keep such nuisances at a minimum.

See also Farm Practice: [Feeding and Watering](#)
[Pest Management](#)
[Storage of Farm Supplies and Products](#)
[Storage of Hazardous Materials](#)
[Structures](#)
[Ventilation](#)

Waste Handling

Manure is collected and stored or composted until it can be applied to cropland as a fertilizer. Some odours will be generated from waste agitation and land spreading activities.

See also Farm Practice: [Composting](#)
[Farmstead Refuse](#)
[Fertilizers and Soil Conditioners](#)
[Manure Storage and Use](#)
[Mortality Disposal](#)

Principal and Accessory Buildings

From an operational perspective, principal farm buildings on poultry farms are structures used to raise chickens, turkeys, game birds, ratites and other birds and typically include barns, brooder houses, hatcheries, ranges, or outdoor pens with or without shelters. Outdoor pens with shelters are considered confined livestock areas. Accessory farm buildings may include storages for agricultural wastes, chemicals, compost input materials, compost products, grain, and wood waste. Other accessory structures could include machine sheds, on-farm composting and processing buildings, incinerators or detention ponds. From a watercourse protection perspective, however, the definition of principal and accessory buildings may differ. For the purposes of determining applicable setbacks from watercourses and property lines, therefore, local government bylaws or the *Guide for Bylaw Development in Farming Areas* should be consulted. Building assessments may need to be conducted on a case-by-case basis if the designation of a building as principal or accessory is unclear.

Legislation

Agricultural producers are expected to follow all legislation that pertains to their farming operations. The *Farm Practices Protection (Right to Farm) Act* stipulates that the farm operation must meet the *Public Health Act*, *Integrated Pest Management Act*, *Environmental Management Act* and the regulations under those Acts. Information on federal and provincial legislation can be found in Appendices B and C.

Acts that pertain to specific farm activities are listed in the Farm Practices section of this reference guide. Local government bylaws may also apply to some farm practices. Acts that are not referenced elsewhere and which are of special interest to poultry producers include the following.

Provincial Legislation

The *Animal Disease Control Act* provides authority to limit the spread of contagious diseases.

The *Prevention of Cruelty to Animals Act* protects all animals (other than wild animals not in captivity) from distress during handling or any activities not considered to fall under generally-accepted animal management practices.

Local Government Legislation

Applicable local government legislation may include animal control, meat inspection and noise control bylaws.

Publications

Publications and fact sheets that provide information on poultry production include, but are not limited to, the following. Refer to Appendix D for details.

British Columbia Agricultural Composting Handbook
British Columbia Environmental Farm Plan Reference Guide
British Columbia Good Agricultural Practices (GAP) Guide
Care of Hatching Eggs Before Incubation
Control of Insect and Related Pests of Livestock and Poultry in British Columbia
Control of Rats and Mice on Poultry Farms
Large Animal Disposal – On-Farm Composting Option, South Coastal Region of BC
Large Animal Disposal – On-Farm Burial Option, South Coastal Region of BC
Management of Dust in Broiler Operations
Management of Flies in Layer Barns
Management of Noise on Poultry Farms
On-Farm Food Safety
Recommended Code of Practice for the Care and Handling of Farm Animals – Transportation
Recommended Code of Practice for the Care and Handling of Poultry from Hatchery to Processing Plant
Siting and Management of Poultry Barns