



Order No. 870.218-7 January 2004

DAIRY

COMMODITY

Description

British Columbia's dairy farmers produce milk that is processed in licensed dairy plants and subsequently sold to consumers and other milk product users. About 75% of BC's milk is produced in the Fraser Valley. Other production areas include the Okanagan-Shuswap, Vancouver Island, Creston, Smithers, Vanderhoof and the Peace River. The raising of dairy veal calves for meat is practiced on a small scale. Most dairy meat production occurs as a result of culling animals of all ages with reproductive problems or lactating cows that do not meet milk production expectations.

Heifers are bred to produce their first calf at about 24 months of age and cows are reproductively managed to give birth at approximately 12-month intervals. A lactating cow produces milk for about 10 months and is dried off for about two months before giving birth again. Cows are fed fibre-rich forages such as pasture, corn, grass silage, and hay. Concentrates in the form of grain mixes provide energy-rich supplements and contain cereals such as barley and protein supplements such as canola meal. Cows are usually milked two or three times a day in automated milking facilities. Milking equipment is sanitized between milkings.

Typically, producers in BC grow much of their own forages directly on the farm. Manure is spread on the farm's own land at agronomic rates to improve soil fertility. Manure must be stored for the winter, a minimum period of approximately five months for most regions of the province.

Under the *Milk Industry Act*, dairy farms are subject to regular inspection to ensure that operators work in an environment that promotes safe and clean milk production and handling. Farmers must also provide adequate housing and waste handling facilities. The Ministry of Agriculture, Food and Fisheries oversees farm inspection, raw milk handling and milk testing. The Ministry of Health is responsible for dairy plant and processed product evaluation.

Farm Practices of Particular Interest

Practices for specific farm activities can be found in the Farm Practices section of this reference guide. Farm practices that are of particular interest to dairy production include:

Cattle Handling and Transportation

Producers are responsible for ensuring that the behavioural and comfort needs of their animals are met inasmuch as possible. Prompt medical treatment, good housing, and cleanliness all play a role in this goal. Dairy cattle may be handled in a variety of corrals, chutes and squeezes. They are usually moved by vehicle ranging from pickup trucks to large livestock liners. At times, dairy producers may be involved in round-the-clock transportation activities for making deliveries and hauling products. Producers must supply adequate areas on the farm property to accommodate the volume, movement and parking of vehicles related to such farm activities.

See Farm Practice: Animal Care and Handling Transportation

Cultivation

Dairy producers normally cultivate part of their land area for annual corn production and for grassland replenishment.

See Farm Practice: Cultivation

Mobile Equipment

Farm Buildings and Equipment

Dairy producers require structures to house livestock, to store feeds, fertilizers and pesticides, to hold wastes, and to protect and maintain machinery and equipment. Some odours can be expected to be generated from livestock housing structures. More concentrated odours result from manure storage facilities during times of agitation and spreading of waste onto land. Best manure management practices help to control fly populations.

See Farm Practice: Storage of Hazardous Material Ventilation Pest Management

Feeding

Feed may be handled, prepared and mixed on the farm or purchased from feed companies for bin storage.

See Farm Practice: Feeding and Watering Storage of Farm Supplies and Products

Fertilizer Use

Inorganic fertilizers are often stored temporarily until cropping and weather conditions permit spreading.

See Farm Practice: Storage of Hazardous Material

Grazing

Cattle can be pastured 24 hours a day throughout the growing season. It is more common to see cattle on a mixed feeding system where they are sent to the fields only during daylight hours. See Farm Practice: Feeding and Watering

Machinery Operation

The operation of equipment for feeding is common practice on dairy farms and usually includes tractors and wagons for loading and mixing, electrically-powered augers for grain bin unloading and, in some cases, mechanical feeding systems along bunks. It is common for automated systems to run at any time of day, depending on demand. Green feeding requires field equipment to be used to cut forage from a standing crop several times a day to meet the immediate nutritional needs of cows for fresh product. During times of electrical power outage, standby power generation equipment may also be operational for extended periods.

See Farm Practice:

Mobile Equipment Stationary Equipment Feeding and Watering

On-Farm Cooling and Storage

Farmers are required to store milk produced on the farm for up to two days. In some cases, farmers process raw milk into products for direct consumer use. This may require the operation of tractors, compressors and other equipment.

See Farm Practice: Product Processing Stationary Equipment

Waste Handling

See Farm Practice:

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.

Composting Farmstead Refuse Fertilizers and Soil Conditioners Manure Storage and Use

Legislation

Agricultural producers are expected to follow all legislation that pertains to their farming operation. The *Farm Practices Protection (Right to Farm) Act* stipulates that the farm operation must meet the *Health Act, Pesticide Control Act, Waste 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 that are of special interest to dairy producers include the following:

Federal

Fisheries Act – prohibits the discharge of deleterious substances (i.e. fertilizers and manure) into watercourses

Provincial

Milk Industry Act – governs production, storage, transportation, processing and sale of milk and milk byproducts

Local Government

Applicable animal control bylaws where in place

Publications

Publications that provide information on dairy cattle production include, but are not limited to, the following (refer to Appendix D for details):

British Columbia Environmental Farm Plan Reference Guide
British Columbia Standards for the Design, Fabrication and Installation of Milking and Milk Handling Equipment
Canadian Dairy Farm Milk and Meat Assurance Program
Fly Control Around Buildings
Fly Control for Dairy Barns
Recommended Code of Practice for the Care and Handling of Farm Animals – Dairy Cattle
Recommended Code of Practice for the Care and Handling of Farm Animals – Veal Calves
Riparian Management