

## FARM PRACTICE

## FEEDING AND WATERING

### Description

Livestock acquire their feed by grazing on pastures or rangeland, or by having feed directly offered to them on the ground or in feeders. The humane treatment of farm animals requires that they be fed regularly to achieve daily nutritional requirements. This may require feeding activities to be done several times each day or they may be fed once a day or possibly even less frequently. For example, broiler breeders may be on skip-a-day feeding programs to keep their weight optimal for production.

The federal *Feeds Act* controls and regulates the sale of feed. Formulated feeds, forages, commodity feeds and recycled feeds are all used on commercial farms in BC. Recycled feeds can include garbage food wastes, processed processing plant wastes, liquid whey and composted animal wastes. Recycled feeds can only be used with the permission and supervision of Agriculture and Agri-Food Canada.

Under the *Feeds Act*, feed is defined as “any substance or mixture of substances containing amino acids, antioxidants, carbohydrates, condiments, enzymes, fats, minerals, non-protein nitrogen products, proteins or vitamins, or pelletizing, coloring, foaming or flavoring agents and any other substance manufactured, sold or represented for use for consumption by livestock, to provide the nutritional requirements of livestock, or for the purpose of preventing or correcting nutritional disorders of livestock, or any substance for use in any such substance or mixtures of substances.”

### Nuisance Concerns

The three main disturbances mentioned in the *Farm Practices Protection (Right to Farm) Act* are odour, noise and dust. Of particular concern to feeding and watering practices are dust and odour relating to the outdoor feeding and/or watering of livestock.

#### Dust

Dust is defined as fine-grained suspended particulate in air. The degree to which individuals perceive dust to be a nuisance will depend on the frequency, intensity and duration of a dust-generating event.

Farmers engage in a variety of activities that require the use of equipment or practices that will create dust. Feeding equipment may generate some dust. Dust may also be generated as fugitive dust when fine particulates are lifted from fields, roads, buildings and yards via air turbulence.

See also Nuisance Reference: [Dust](#)

#### Odour

Odour is a human sensory perception and response to chemicals in the air. The degree to which individuals perceive an odour to be a nuisance will depend on the frequency, intensity, duration and

offensiveness of the odour. Other factors that come into play include a person's sensitivities and personal previous experiences.

Farmers engage in a variety of activities that produce odours. Feeding and watering activities may generate odours caused by feed products in feeders or by manure deposition.

See also Nuisance Reference: [Odour](#)

## Activities and Operations

### Feeding Livestock

Livestock may be fed outdoors or indoors. Common methods of outdoor feeding include pasture and rangeland grazing in open fields; seasonal feeding on the ground or in portable or fixed feeders; and feeding in feed bunks or mangers. Indoor feeding is usually carried out using feed bunks or mangers. Several different types of feed are fed to livestock including hay, silage, grain and prepared rations. Special equipment is required to make, store and deliver each type of feed as outlined below.

- Hay is made by cutting or mowing grasses grown especially for making winter feed, drying or curing it, and then baling and storing it in barns or other shelters. Mowers, swathers, rakes, balers and elevators are among the implements used. Hay may be harvested near the place it will be fed or it may be purchased. Hay may be transported by trucks, tractors, hay wagons or other equipment.
- Silages are fermented high moisture forages such as grain and corn. Silage is generally harvested and stored near where it will be fed. Silage equipment includes tractors, choppers, wagons, augers, elevators and harvesters. Silage may be stored in pits, bunkers, tower silos or large plastic bags.
- Grain may be grown on the farm on which it will be fed or purchased. Grain is harvested using combines, trucks, tractors, augers and high speed pumps. Harvesting operations may go on day or night. Purchased feed may be delivered to the farm at any time of the day or night.
- Mixed rations are commonly fed on dairy farms and feedlots. If rations are mixed on the farm using separate grain inputs, tractors, mixers, delivery wagons and feed mills are used. Purchased rations may be delivered to the farm early in the morning or late at night.

### Feeding Fur Animals

Animals on fur farms are typically in pens and fed once each day. The feed is a mixture of grain and meat by-products such as fish heads and abattoir wastes. Feed may be mixed on the farm. Mink farms are licensed under the *Fur Farm Act* which specifies that certain animal health standards are to be met.

### Feeding Pigs

Feed is usually delivered indoors to pigs mechanically once or twice each day. Typical feeds include barley, wheat, soybean meal, canola meal, field peas or manufactured feeds. Most pig producers buy feed rather than growing their own. Large trucks may deliver the feed at any time of the day or night.

The feeding of food wastes to pigs is regulated under the federal *Health of Animals Act* in order to control the transmission of disease of to and from swine or poultry. Cooked food wastes – also known as swill – may not be sold or transported in Canada. On-farm cooking is therefore required.

## Feeding Poultry

Poultry – which includes birds such as layers, broiler chickens, broiler breeders, turkeys, ducks, partridges, quails and pigeons – are typically kept inside barns and usually have feed available to them all day. In some feeding programs for broiler breeders, for example, feed is offered every second day to control weight gain. When birds are allowed access to the outdoors, feeding facilities are best kept indoors to avoid attracting wild birds which can consume feed and which can spread disease to flocks.

For the most part, feed comes in manufactured form and is typically produced off the farm. Some larger farms may incorporate their own feed manufacturing and production facilities to take advantage of efficiencies and cost reduction. Large trucks may deliver feed or grains for feed manufacture on the farm early in the morning or late at night. Most poultry barns are equipped with automated computer feeding and watering systems. Automatic feeding systems may operate anytime day or night.

Ostriches can be raised on mixed feed or forages ingested by grazing on pastures. Many producers rely on a combination of concentrate or grass feeding systems.

## Watering Livestock

Livestock may be watered outdoors or indoors. Outdoor watering is typically accomplished by installing water troughs or by controlled access to watercourses. Watercourse access by animals is regulated through the *Agricultural Waste Control Regulation*. Indoor watering is done with water troughs or – in the case of poultry – with cup drinkers or nipple drinkers.

See also Farm Practice: [Habitat Management](#)

## Related Farm Practices

Other farm practices that pertain to feeding and watering practices include, but are not limited to, the following.

### Grain Handling

Feed grains may be mixed on-site and stored until ready for feeding.

See also Farm Practice: [Grain Handling](#)

### Mobile Equipment

Feeding operations will require the use of mobile equipment.

See also Farm Practice: [Mobile Equipment](#)

### Product Processing

Feeds may be processed on the farm prior to storage or feeding.

See also Farm Practice: [Product Processing](#)

### Stationary Equipment

Feed and watering may both be accomplished using stationary equipment.

See also Farm Practice: [Stationary Equipment](#)

### Storage of Farm Supplies and Products

Feed or water may be stored on farms housing livestock and poultry.

See also Farm Practice: [Storage of Farm Supplies and Products](#)

## Legislation

Information on federal and provincial legislation can be found in Appendices B and C. Acts, regulations and bylaws that regulate or may affect feeding and watering practices include, but are not limited to, the following.

### Federal Legislation

The *Fisheries Act* prohibits damage to fish habitat caused by livestock trampling stream banks and streambeds and also prohibits the discharge of deleterious substances such as sediment and manure in waters frequented by fish.

### Provincial Legislation

The *Environmental Management Act*, the *Agricultural Waste Control Regulation*, and the *Code of Agricultural Practice for Waste Management* allows farmers to operate without a waste permit when feeding and watering livestock in accordance with the legislation.

The *Range Act* regulates livestock grazing and forage cutting operations on Crown land.

The *Water Act* requires a license or permit to withdraw water from surface water sources for irrigation or drinking purposes. The Act does not, however, govern direct access to watercourses by livestock.

## Publications

Publications that provide further information on feeding and watering include, but are not limited to, the following. Refer to Appendix D for details. In addition, recommended codes of practice for the care and handling of animals provide guidelines on feeding and watering of livestock. These codes are referenced in the applicable commodity fact sheets that comprise this Farm Practices Reference Guide.

*British Columbia Environmental Farm Plan Reference Guide*

*British Columbia Livestock Watering Manual*