

COMMODITY

FORAGE

Description

Forage crops are grown throughout British Columbia in support of various livestock commodities such as dairy, beef and sheep. They include a wide range of annual and perennial grasses and legumes grown for hay, silage and pasture. Major species include alfalfa; red and white clover; timothy; orchard grass; tall fescue; corn; and the cereals wheat, barley and oats.

The vast majority of forage crops are fed on the farm or ranch where they are grown. Small amounts are traded among farmers, and from farmers to feed companies for resale. A limited export market also exists for some movement of forage out of the province into Alaska, for example. Significant quantities of hay, mainly alfalfa, are imported to the south coastal areas of the province from Washington, Alberta and the B.C. interior to support the dairy industry.

Forage producers use farm equipment such as tractors, trucks, manure spreaders and harvesters. In drier regions, access to irrigation water is critical and the use of irrigation equipment is common. Growers may use manure and fertilizer to increase and improve production, as well as pesticides to control weeds and insects. The types of buildings common in forage-growing enterprises include barns, hay sheds and silos.

Farm Practices of Particular Interest

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

Cultivation

Some forages crops are annual in nature and therefore the land used to grow them requires cultivation each year prior to seeding. The generation of dust during cultivation, seeding and harvesting operations is common, especially when field conditions are dry.

See also Farm Practice: [Cultivation](#)

Harvesting

Harvesting of forage crops is weather dependent and time sensitive. Equipment may have to be operated early in the morning or late at night to take advantage of ideal conditions. Harvesting operations when conditions are dry may release dust as well.

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

Nutrient Management

Crops require nutrients to grow. Soil conditioners, inorganic fertilizers and manure are often applied prior to seeding and throughout the growing season. Applications of nutrients are usually carried out during normal work hours unless weather or seeding constraints are present. Calm days should be chosen to spread dusty materials such as lime whenever possible. Odour intensities and duration during manure spreading operations will vary depending on weather conditions, methods of application, and time elapsed until manure is incorporated into the soil.

See also Farm Practice: [Fertilizers and Soil Conditioners](#)
[Manure Storage and Use](#)

Pesticide Application

Forage crops are generally sprayed with pesticides far less frequently than are vegetable or fruit crops. The most common operation is the application of herbicides to control weeds in forage corn. Timing of pesticide application is often critical to success.

See also Farm Practice: [Pesticides](#)

Water Management

Drainage and irrigation are critical components of forage operations in many regions of the province to optimize production. Tractor-powered irrigation pumps can create noise nuisances for neighbours. In some situations, installation of electric pumps can mitigate ongoing disturbances of this nature. Excess irrigation in coarse soils may result in drainage problems on adjacent properties at lower elevations where the water may surface.

See also Farm Practice: [Drainage](#)
[Irrigation](#)
[Stormwater Management](#)

Principal and Accessory Buildings

From an operational perspective, principal farm buildings for forage-growing enterprises are carried out in conjunction with livestock or grain operations and typically include storage sheds, barns and silos. Accessory farm buildings may include storages for agricultural wastes, chemical storages, and machine sheds for forage cutting and harvesting equipment. If a livestock or grain component of a forage growing operation is included, the numbers and types of principal and accessory buildings are broadened. 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 that may be of special interest to forage producers include the following.

Federal Legislation

The *Fisheries Act* protects fish and fish habitat.

Provincial Legislation

The *Integrated Pest Management Act* regulates the sale, purchase, storage and use of pesticides.

The *Weed Control Act* places responsibility for the control of noxious weeds on land occupiers and land users.

The *Motor Vehicle Act* protects people travelling on public roads.

Local Government Legislation

Local government legislation may include applicable noise bylaws.

Publications

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

Advanced Forage Management

British Columbia Environmental Farm Plan Reference Guide

Nutrient Management Reference Guide