STRENGTHENING Farming
RIGHT TO FARM

BRITISH COLUMBIA
Ministry of Agriculture, Food and Fisheries

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COMMODITY GRAIN

Description

Wheat, barley, oats and rye are the primary cereal crops grown in British Columbia. There is also significant production of canola (an oilseed), dry field peas (a pulse crop) and forage seeds (for both forage and turf). Small amounts of flax, canary seed, mustard, sunflowers, triticale, hemp and soybeans are also produced. About 85-90% of BC's grain is grown in the Peace River region. The balance occurs mostly in the Vanderhoof, Armstrong, Creston and Fraser Valley areas.

Grain is typically planted in the spring and harvested in August and September, although harvesting may extend into October. There is also some fall seeding of crops which is to remain dormant until early spring germination. Seedbed preparation involving field cultivation is usually required before seeding. Zero-till direct seeding and minimum tillage systems that greatly reduce the amount of soil disturbance are becoming more widely practiced. Most crops are sown using a seed drill, air drill or air seeder. Fertilizers and pesticides are usually applied with applicators or sprayers as required either before, during, or after seeding. Seed treatments are often required to protect the seed from insect and disease damage, and to promote nitrogen fixation by legume crops. Desiccants are frequently used just before crop maturity as well.

Grain is harvested either by swathing and then combining, or by straight combining a standing crop. A combine is used to separate the kernels of grain (which are retained) from the straw and chaff (which is blown out the back). Grain is trucked from the field to granaries for storage until it is trucked to an elevator, feedmill, livestock operation or used on the farm.

Grain is graded and priced according to its quality, moisture content, weather damage and freedom from weed seeds, disease and foreign materials. Farmers must keep the temperature and moisture content of their grain within prescribed limits to meet export quality requirements established by the Canada Grain Commission and *Seeds Act*, and to prevent spoilage. This must be accomplished in a manner that does not affect the grain or its intended end use. A variety of heated air dryers and grain aeration fans are used.

Commercial grain farms are large and highly mechanized operations. Grain farmers use such farm equipment as tractors, cultivators, sprayers, harvesters (combines), fans, augers and conveyors. On-farm infrastructure may include machinery sheds, grain storage bins, wells, power lines, irrigation lines and chemical and fertilizer storage facilities. Trucks, trailers and railway cars are used to transport grain to market.

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 grain production include:

Aircraft Activities

Fixed wing aircraft and helicopters may be used for seeding and the application of pesticides and fertilizers.

See Farm Practice: Fertilizers and Soil Conditioners
Pesticides
Mobile Equipment

Crop Residue

Crop residue may be burned to allow for the planting of a subsequent crop or left on the field to serve as a soil amendment. Grass seed fields are sometimes burned to control disease and insect outbreaks.

See Farm Practice: Burning
Crop Residue Management

Cultivation and Seeding

Cultivation of crops may occur 24 hours per day and may result in dust movement and noise from machinery.

See Farm Practice: Cultivation
Mobile Equipment

Harvesting

Harvesting operations are timed according to the weather, crop development and production cycles. Other harvesting practices requiring machinery include grain transport and handling. Machinery may be operated 24 hours a day.

See Farm Practice: Mobile Equipment

On-Farm Grain Storage and Handling

Grain storage and handling requires the use of stationary and/or mobile equipment. Drying fans can operate 24 hours per day over the harvest period and beyond.

See Farm Practice: Grain Handling
Stationary Equipment
Storage of Farm Supplies and Products

Pesticide Application

Grain production often benefits from the use of pesticides to control insects, diseases and weeds. Applications are times according to the weather as well as the growth and development of the pest.

See Farm Practice: Pesticides
Pest Management
Weed Control

Transportation

Grain producers may have vehicles making deliveries and hauling products away 24 hours a day. They must, however, supply adequate areas on the farm property to handle the volume, movement, and parking of trucks and other traffic related to the activities and production of the farm.

See Farm Practice: Mobile Equipment
Transportation

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 grain producers include the following:

Federal
Fisheries Act – protects fish and fish habitat
Migratory Birds Convention Act – protects migratory birds

Provincial
Motor Vehicle Act – regulates the movement of farm vehicles and implements on the road
Weed Control Act – places the responsibility for control of noxious weeds on the land occupier

Publications

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

Canola Growers Manual
Creeping Red Fescue Seed Production in the Peace River Region
Fertilizer Guide for the Peace River
Growing Forage Legumes for Seed
Intensive Wheat Management
Lentil Production in Alberta
Oat Production in Alberta"
Pedigreed Forage Seed Production
Pulse Production Manual
Sunflower Seed Crops
Winter Wheat Production