

COMMODITY

NURSERY AND TURF

Description

Nursery

BC's nursery industry is located primarily in the Fraser Valley. Production also occurs in the Okanagan, Kootenay and Vancouver Island regions. The nursery industry is comprised of retail and wholesale producers as well as plant material distributors and brokers. The nursery sector has grown substantially in recent years and is one of the agriculture's most successful industries.

Nursery production in BC supplies coniferous and deciduous trees and shrubs, fruit trees, berry bushes, vines, roses, ground covers, broadleaf evergreens and a wide variety of perennials.

Nursery crops are grown either in fields or containers, with the latter being the more popular production method. One acre of containers yields three to eight times more product than one acre of field production. Container production is more intensive and mechanized and requires more technical training by staff and more capital investment than field production.

Nursery plants are vulnerable to disease and insect infestation. To control these problems and minimize their use of chemicals, many nursery growers use integrated pest management, which combines good growing practices, resistant stock, and biological and chemical controls.

For container production, mulch is required to create a stable working and growing area. For field production, good drainage is needed so farmers can have year round access to their fields and crop production areas. Nursery operators use farm equipment such as tractors, cultivators, sprayers and harvesters. On-farm infrastructure includes irrigation equipment, greenhouses, machinery sheds, cold frames, wells, power lines and chemical and fertilizer storage facilities. Nursery operators typically require processing areas for crop handling and shipping.

Turf

Turfgrass production is scattered throughout the province with about two-thirds of the sod being grown in the Lower Mainland, on Vancouver Island and in the Okanagan. Turfgrass sod is a mature grass cover that is produced in an intensively managed agricultural operation, removed intact with a minimum amount of soil and transplanted in another location to form an instant turf cover. The primary market for sod production in British Columbia is in the housing industry.

Field preparation for sod involves control of perennial weeds and old sod either mechanically or through the use of herbicides. Mineral and/or organic material, such as sand, sawdust, compost or manure, is sometimes placed on the field to replace the soil that was removed in previous harvests. The soil is then worked and fertilizer is applied. Plastic webbing may be laid to improve root mat strength and reduce soil removal at harvest. A mixture of perennial grasses is seeded and allowed to grow for about one year. The sod is cut and rolled by the sod harvester, a special machine used for this purpose. The sod is then placed on pallets, ready for transport to the installation site.

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 nursery and turf production include:

Crop Production and Marketing

Harvesting operations and pesticide application are timed according to the weather, production cycles and crop quality. Equipment may be run at any time of the day or night during critical stages of the production process. Nursery producers often need to grade, package and store farm products to be shipped. Pesticides may be applied early in the morning or late evening. Operations, which sell direct to the public, must provide adequate on-site parking for customers. Turfgrass sod must be moved quickly after it is harvested to prevent damage as it is living plant material.

See Farm Practice: [Direct Farm Marketing and Agriculture Tourism](#)
[Mobile Equipment](#)
[Product Processing](#)

Farm Buildings

Nursery producers require buildings to protect equipment and store growing media, fertilizers and pesticides.

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

Fertilizer and Manure Management

Nursery and turf growers use a wide range of fertilizers, soil amendments and soil-less media.

See Farm Practice: [Fertilizer and Soil Conditioners](#)

Lighting

Supplemental lighting is required inside the greenhouses on some nursery operations. Nursery operators may use yard lights for security and safety.

See Farm Practice: [Lighting](#)

Removal of Soil or Placement of Fill

As necessary, soil removal or placement of fill is a permitted agricultural activity. For specified farm and non-farm uses, including the construction and maintenance of greenhouses, farm building or structure for use in an intensive livestock operation or for mushroom production, an aquaculture facility, or a composting facility, with conditions, and where the removal of soil or placement of fill exceeds 2% of the area of the parcel, a 'Notice of Intent' must be submitted to the Agricultural Land Commission. Proposals under the 'Notice of Intent' may be allowed with terms and conditions set by the CEO of the Commission or require an approval of the Commission.

Water Management

Nursery and turf production may require frequent, short applications of irrigation water. Growers may deliver dissolved fertilizers (fertigation) or pesticides (chemigation) to their crop with the irrigation water. Irrigation systems may be used for frost protection or crop cooling purposes. Nursery operators may allow uncontaminated storm water runoff from their nursery to enter municipal drainage systems, provided that a storm water management plan has been prepared and submitted in accordance with local government bylaws.

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

Waste Handling

Nursery wastes must be collected, stored, handled, used and disposed of in accordance with the *Code of Agricultural Practice for Waste Management*. Materials of special concern are plastic pots, polyethylene bags, coverings for greenhouses, plant material and polystyrene.

See Farm Practice: [Burning](#)
[Composting](#)
[Farmstead Refuse](#)
[Non-Agricultural Waste](#)

Use of Woodwaste

Nursery growers use a considerable amount of woodwaste for on-farm and access roads, soilless media and container beds.

See Farm Practice: [Woodwaste](#)

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 nursery and turf producers include the following:

Federal

Fisheries Act – prohibits the discharge of deleterious substances (i.e., agricultural wastes, fertilizers and manure) into waters frequented by fish

Provincial

Natural Products Marketing (BC) Act – provides for a system of schemes that enable the producers of agricultural commodities to control the production and marketing of natural products in the province.

Plant Protection Act – provides for the prevention of the spread of pests destructive to plants in BC

Weed Control Act – the Act places the responsibility for the control of noxious weeds on the occupiers of land.

Local Government

All applicable *Noise* and *Zoning Bylaws*.

Publications

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

British Columbia Environmental Farm Plan Reference Guide

Insect and Mite Pests of Ornamental Shrubs and Shade Trees of British Columbia

Nursery & Landscape Pest Management & Production Guide

BC Landscape Standards 6th Edition