

## COMMODITY

## APICULTURE

### Description

#### Honeybees

Honey bee colonies are managed in apiaries in many parts of British Columbia for honey production, crop pollination and beestock production.

To thrive, bees are dependent on the availability of pollen, nectar and water. To take advantage of different floral sources, beekeepers must move their colonies during the beekeeping season. The movement and placement of honeybee colonies and used beehive equipment may occasionally impact the public. Most often, issues arise from nuisances created by large numbers of foraging bees in a small area. Very rarely are public concerns brought forward due to issues associated with stinging.

#### Pollinators

Bees other than honeybees are also used for special crop pollination requirements. The Alfalfa Leaf Cutter Bee, for example, has been used on a limited scale for legume seed production in the southern interior of the province. Bumblebees are used extensively in greenhouse tomato operations, but are not used commercially in field crops. Orchard Mason Bees have found a limited use in blueberry pollination but are most often found in urban settings.

Honey bee colonies are typically placed near crop plantings that require pollination for several weeks before being moved to another nectar or pollen source. At the end of the season (usually during the fall), colonies are moved to overwintering sites until the following spring. Moving honey bee colonies to different sites throughout the course of the year is a standard management practice in commercial beekeeping.

### 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 apiculture production include the following.

#### Honey Bee Colony Placement

Under the *Bee Act*, permanent apiaries must be registered with the Ministry of Agriculture. The number of colonies and duration of placement in a crop planting varies and depends on the type of crop, planting areas and other physical circumstances. Accessibility to beekeepers, the need for unimpeded farm vehicle movement, and the size and types of plantings all influence hive management. As a general rule, colonies should be distributed in groups along the perimeter of the crop planting to ensure optimum crop pollination. Where practical and appropriate, colonies may be placed away from property boundaries to minimize disturbance to neighbours. Six to eight hives per hectare should provide

adequate pollination of berry crops, whereas three hives per hectare are typically suitable for most orchards. Pear orchards, however, require five hives per hectare. Hives are usually removed immediately after all crop pollination requirements have been met.

## Colony Transportation

Honeybee colonies are moved several times throughout the year to take advantage of specific nectar and pollen sources, to meet crop pollination contracts, and for breeding and over-wintering purposes. Movement of colonies within a beekeeping district is not regulated whereas movement of colonies across district and provincial boundaries is regulated. The authorization for movement under a permit is issued after inspection requirements and standards have been met. Colonies may only be placed in registered apiary sites, but local municipal or district bylaws may limit the placement of colonies. The *Motor Vehicle Act* requires that loads be securely fastened and/or sealed to prevent loss during shipment.

## Alfalfa Leaf Cutter Bees

Legume cultivation for seed production may involve the placement of special shelters for Alfalfa Leaf Cutter Bees. These shelters are set out in legume plantings and may house thousands of bees. If nesting sites are insufficient, these bees may try to build nests in small crevasses of walls and roofs of barns, houses and other structures. Leaf cutter bees cannot bore tunnels and do not cause structural damage to buildings.

## Disturbances

Honeybees are responsive to activities of people and animals. Disturbances resulting from practices such as those highlighted below may affect their behavior and productivity.

- Honeybees are highly sensitive to vibrations. The operation of motorized mowers and farm machinery near an apiary may result in heightened defensive behaviour.
- Apiaries must be protected from wildlife, livestock and pets. Horses and cattle do not mix well with bees as they are perceived by bees as a threat to their nest. Fences, including electric fences, are appropriate protection measures.
- Bees can be poisoned if the nectar and pollen they ingest have been sprayed with specific pesticides. If poisoned, bees may exhibit abnormal behavior including irritability and aggression.

Other farm practices may occasionally impact apiary management activities and can be found in other sections of this guide under the following headings.

See also Farm Practice: [Farmstead Refuse](#)  
[Mobile Equipment](#)  
[Pesticides](#)  
[Stationary Equipment](#)  
[Storage of Farm Supplies and Products](#)  
[Storage of Hazardous Material](#)

## Principal and Accessory Buildings

From an operational perspective, the principal farm buildings and structures used in apiary management include hives, bee shelters and honey houses. Accessory farm buildings may include machine sheds or chemical storage facilities. 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, 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 operation. 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 applicable 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 and which may be of special interest to apicultural producers include the following.

### Provincial Legislation

The *Bee Act* regulates the location, inspection, disease control and movement of bees.

The *Motor Vehicle Act* requires that loads must be securely fastened and/or sealed to prevent loss during shipment.

## Publications

Publications, fact sheets and website sources that provide information on apicultural production include, but are not limited to the following. Appendix D should be referenced for further detail.

*A Guide to Managing Bees for Crop Pollination*  
*BC Good Agricultural Practices (GAP) Guide*  
*Guide for Bylaw Development in Farming Areas*  
*On-Farm Food Safety*