Canadian Beekeepers: How Hives Make our Ecosystems Thrive



Canadian consumers are fortunate to be serviced by a small but extremely important beekeeping industry. A wide array of flavourful honeys are often top of mind when talking about honeybees, but many of the fruits and vegetables we eat are dependent on the pollination services these mighty creatures provide. Worldwide it is estimated that over two thirds of the foods on many tables are there because of pollinators. In Canada, pollination of blueberries, cranberries, apples, cucurbits, seed canola and cherries provide consumers and producers with the products that adorn our tables.

The diversity of beekeeping in Canada is dramatic. It ranges from the management of a single colony in an urban setting to managing over 20,000 colonies on the prairies. The big operations can have colonies placed in hundreds of square miles that require a multitude of employees to manage tasks such as feeding, treating for pest and pathogens, honey extraction and movement of bees. Even in honey production, agricultural producers benefit from the placement of honeybees. It is estimated that the production of a commercial canola crop can increase up to 10% if honeybees are located near the crop during flowering. With over two thirds of Canadian honey produced in the prairie provinces, and with a majority of canola grown there, it is a marriage that is beneficial to all.

Commercial honey producers, sideliner and hobby production can vary dramatically as well. Some commercial operations have crops that exceed 300 pounds per colony while hobbyist could get as little as a couple pounds. It is dependant on several factors with the strength of the colony, weather, and the surrounding environment are the primary

influencers. Bear in mind, to make one teaspoon of honey it would take the entire lives of two bees or 120 honeybees travelling to 1800 individual flowers.

It is important to note that a colony acts as a single organism. Each colony can have up to 100,000 honeybees with a single queen being the focal point. A majority of the honeybees are female worker bees and are responsible for collecting pollen and nectar for the colony. Male bees are there to mate with the queen and cannot sting. Still, the survival of the colony depends on the expertise of the beekeeper monitoring for the colony's health.



Nationally, the annual over-wintering losses have risen from the mid teens a decade or so ago to over 30% with some regions experiencing losses exceeding 50%. If other livestock commodities experienced those same circumstances, it would mean an economic catastrophe, but in beekeeping, if losses can be held to less than 30% it still may be economically viable to maintain honeybees. Notably, there doesn't seem to be much of difference between survival rates of hobbyists versus commercial operations.

There are many ways the consumers can help support the industry. Obviously buying local honey is at the top of the list. Planting bee friendly flowers, plants shrubs and trees will encourage healthy populations of both honeybees and other native pollinators. The careful use of pesticides is also a good way of enhancing their healthy growth. Honeybees are critical to the survival of our ecosystem, and with a little help from everyone, that system can flourish.

For further information on honeybees, visit www.honeycouncil.ca.