

# 2020 CAMPAIGN WORK WELL + LIVE WELL

---

Honey Bee Hives at RBC Centre



## HONEY BEE HIVES AT RBC CENTRE Work Well + Live Well Campaign

As of June 2020, RBC Centre is home to two honey bee hives. Cadillac Fairview has partnered with [Alvéole](#), an urban beekeeping company whose bee hives and educational services are helping companies, organizations, schools and individuals appreciate the impact honey bees have on our environment and the interconnectedness of our ecosystem. Below you will find more information about urban beekeeping, the hives at RBC Centre, as well as care and maintenance.

### URBAN BEEKEEPING



Urban beekeeping is the practice of keeping bee colonies in urban areas providing cities with environmental and economic benefits. Bringing bees to an office tower is a sustainable initiative that highlights a variety of issues related to the environment as outlined below.

**Bees are Important:** Bees are responsible for the pollination of more than 130 varieties of fruits and vegetables around the world, including almonds, cranberries, apples, blueberries, and avocados. In Canada, it is estimated that bee's pollination services contribute an annual harvest value of \$4 – 5.5 billion and along with other pollinators, are responsible for nearly a third of what we eat.

**Bee Populations are Declining:** The rise of urban beekeeping has been supported by a general concern for the fate of pollinators. Populations of bees, butterflies, bumble bees and other pollinators are declining around the world due to industrial agriculture, disease and parasites, and climate change.

**Urban Centers Provide a Great Home:** Cities can be a pollinator's paradise when there is an abundance of floral resources, temperate climates, sources of water, and a lack of pesticides.

### THE HIVES



RBC Centre is home to two honey bee hives. Each hive can contain up to 50,000 bees. For a real-time number of bees, the kilometres travelled each day, and more information about our hives, visit the [RBC Centre My Hive Page](#).

Bees can travel up to a five kilometre radius in search of floral resources, which means that RBC Centre Bees can travel as far as Casa Loma before returning to the hive. Each hive is about the size of a small laundry basket and can produce up to 30 pounds of honey each year. Each hive has three hive members; the queen, the drones (males), and the workers (females).

**Queen:** There is only one queen per hive and she can live up to five years in the best conditions. She requires a court of bees to help feed, hydrate and clean her, as she is busy laying up to 2,000 eggs per day.

**Drones:** The male bees do not have stingers, but rather a reproductive system. They do not forage resources. Their primary role is to mate with a virgin queen from another hive.

**Workers:** The female bees make up the majority of the hive, about 90% of the colony. They occupy many different roles in their lifetime, which is anywhere from 30 – 45 days. These roles can include cleaner, nurse, waxer, ventilator, guard, forager, etc.

## CARE & MAINTENANCE



Beekeeping season begins in late Spring or early Summer with the hive installation. A beekeeper will then visit the hives every three weeks for regular checks and maintenance. Below you will find a season-by-season description of the hive care and maintenance.

**Spring/Summer:** The hives are installed in late Spring or early Summer, depending on the weather. RBC Centre's resident beekeeper will visit the hives every three weeks during the beekeeping season to ensure the colony is in good shape, the queen lays her eggs regularly and normally, the colony has enough space to grow, and it is healthy. Towards the end of Summer, the beekeeper will start preparing for the harvest.

**Fall:** At the end of the beekeeping season, Alvéole will harvest the honey-filled frames from the hives and take them back to their honey house for extraction, where they will bottle the honey into jars. In preparation for winter, they will feed the bees if needed.

**Winter:** Throughout the winter months, the bees will remain comfortable in the warmth of their hive, where they will maintain an internal temperature of up to 35°C. In fact, due to the average temperature in the heart of the city being higher than the countryside, bees do not have to work as hard to keep warm during winter in the city. The hives will be wrapped with insulation so they can remain on site.

## FREQUENTLY ASKED QUESTIONS

### Are tenants at risk of being stung?

Honey bees are not interested in the presence of humans. Their daily quest is to bring nectar, pollen, resin, or water to their colony to ensure its development. Unless aggression is demonstrated towards them, bees have no motivation to sting. In fact, once they sting, they lose their stinger and a part of their abdomen and die. There will not typically be lots of bees around the hive because when they leave the hive they have one goal, which is to forage for resources that are within 3-5 km. There are honey bee hives all around us, in fact there are approximately 700 hives in the Greater Toronto Area on the roofs of commercial buildings and they have never posed a threat to the public.

### Are honey bees threatening the wild bee population?

Toronto is not an ideal space for many native pollinators as many native bees' nest underground and need undisturbed bare ground for easy tunnel building. They also require an abundance of native flowers nearby, which is increasingly rare in a highly developed city like Toronto. Honey bees are more versatile pollinators and are very adaptive, allowing them to flourish in the city. The single biggest threat to native bees is the industrialized agriculture system, not honey bees. Habitat loss, use of pesticides, and the reliance on monocultures are large factors that negatively impact native bees and surrounding wildlife. While both native bees and honey bees search for the same resources, there is enough room and food for all bees.

### How is the honey harvested?

At the end of the Summer, the time will come to harvest the extra honey produced by the bees. The quantity produced will vary depending on the environment around the hive, but is usually around 30 pounds. The honey-filled frames are removed from the hives and taken to a certified honey house for jarring. The frames are put in a centrifuge that extracts the honey from the combs by spinning them quickly. The honey is then filtered and jarred, without pasteurization, to preserve its nutritional value and nuanced flavour.