Bee Pollination of Berry Crops

Aside from honey and the countless other value-added products we get from bees (for example beeswax candles and royal jelly), bees also play an important role in berry crop production. While some berry growers rely solely on wild bee populations to pollinate their berry flowers, others take matters into their own hands and rent beehives from beekeepers to ensure that enough pollination will occur to produce a good harvest.

Pollination is, according to some, the most important ecological process in the world; it is vital to the reproduction of approximately 90 per cent of seed-producing plants. Through natural selection, many of these plants have developed showy flowers to attract pollinators.

Even if other insects are also able to pollinate plants, honeybees are often considered to be the best pollinators because not only are they manageable and numerous, but they can cover large areas and will continue to visit one species of flower until all the nectar and pollen are gone.

In recent years, there has been a new threat to North American bees, called Colony Collapse Disorder (CCD). CCD struck approximately a quarter of the hives in the United States in 2007, and in many cases wiped out most or all of the affected beekeepers' hives. CCD is still quite misunderstood; it was first discovered in 2004, and its most notable symptoms are the absence of adult bees in hives, with no record of their corpses, and the presence of both honey and pollen in hives.

So far, it seems CCD has not affected Atlantic Canada; however, we too are losing bees in record numbers. Eighty percent of New Brunswick bees died over the 2006-2007 winter, from the cold winter and poor fall conditions. While many beekeepers are now on the lookout for CCD, other risks to bee populations, which may also be partially to blame for the bee deaths in the United States, are parasitic mites, poor nutrition, pesticides and stress.

Tens of thousands of honeybee colonies are rented out each year across Canada for pollination purposes. Although it is hard to say exactly how much of an impact honeybees have on berry crop production, estimates range from over three-quarters dependence for blueberry and cranberry crops, to approximately a quarter dependence where strawberries are concerned. This dependence shows that the massive decreases in honeybee numbers not only put honey and beeswax related production in jeopardy; they also have a major impact on plants that rely on bees for pollination.