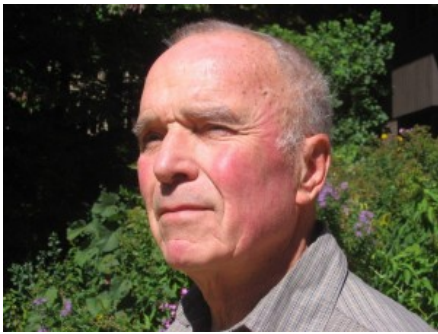


## Global honey bee crisis signals danger



### By Dr. Hans Martin

There is a constant stream of news articles concerning the widespread death of honey bees. Something has gone very wrong. This spring we did a survey of Toronto District Beekeepers Association members. The question was 'how many bee colonies did you lose last winter?' The average for all the members present was about 50%. I too lost 50% last winter and the same amount the winter before last.

A few days ago, I spoke with a large commercial beekeeper (800 colonies) in southern Ontario. I wanted to know how the bees were faring in southern Ontario between Toronto and Windsor. He told me about one of his bee yards which contained 50 hives. Last spring, suddenly all colonies were dead. This was not the slow death associated with disease or parasites. The loss occurred in a day or two during the spring planting of agricultural crops.

The honey bee crisis is occurring all over the world. In Europe the EU has banned the use of a family of chemicals produced by the global chemical firm, Bayer. The EU decision was hard-fought and was based on evidence collected over some years. The chemicals are the neonicotinoids widely used primarily to coat corn and soy seeds before planting. The chemicals are dispersed as dust during the planting and subsequently enter the growing plant and protect it from insect pests. Unfortunately, the chemicals are toxic to bees. Surprisingly, much of the discussion about the demise of the bees focuses on parasites and diseases. These discussions are misleading if not dishonest. A recent article on the CBC website is a perfect example. The article contains only two sentences relating to pesticides. The rest of the article deals with the level of losses across the country and the need 'to get a handle on diseases.' ? <http://www.cbc.ca/news/canada/story/2013/09/09/f-honeybees-winter-losses-deaths-canada.html>.

What nonsense! We have been dealing with diseases and parasites for years. We understand them fairly well.

But the evidence presented by a bee yard of 50 dead hives which have died suddenly, overnight, is disturbing and shocking. We beekeepers have not seen these events in the past. We are not looking for diseases here. Something else is happening.

The deterioration of bee populations in Europe has paralleled that in North America for some years. However, in Europe the reaction has been totally different from that in Canada. In Europe the value of bee pollination is understood. European governments have recognized the enormity of the economic and social impact of bee population losses on the production of fruit, vegetables, nuts, berries and fodder for livestock. In the past months the EU has forbidden the use of neonicotinoids. This decision was based on the evidence provided by beekeepers and researchers.

In the UK there has been an unexpected debate. The government opposed the ban of these pesticides. The MPs attacked the British government. The chair of the Environmental Audit Committee, the government body that prepared the assessment of the population decline, stated: 'I'm disappointed that the government has not accepted the great weight of scientific evidence that points to the need for a ban on these pesticides in line with the precautionary principle.'

For our part, Ontario's premier announced on July 9 the creation of a working group to provide advice on how to prevent the mortalities. The working group will provide recommendations on how to mitigate the 'potential' risk to honeybees. It will provide its recommendations by the spring of 2014. There seems to be no urgency. The press release notes that honey production contributes \$25 million to the provinces economy. It fails to note that the pollination service provided by Ontario bees is worth hundreds of millions. ?

([http://news.ontario.ca/omafra/en/2013/07/taking-action-on-bee-mortalities.html?utm\\_source=ondemand&utm\\_medium=email&utm\\_campaign=p](http://news.ontario.ca/omafra/en/2013/07/taking-action-on-bee-mortalities.html?utm_source=ondemand&utm_medium=email&utm_campaign=p)).

The concern for the bees is a preoccupation of beekeepers. We rarely talk about our cash flow and always talk about new methods or observations relating to their well-being, like dairy farmers who care for their herds foremost.

By contrast, the public is asleep. Food produced by bees accounts for 30% of our diets. No pollinating insect group can compare with the honey bee in its effectiveness in pollinating crops and thereby ensuring their productivity. The almond crop is particularly interesting. 80% of the world almond production comes from California. The farmers there rely on renting tens of thousands of hives every spring to pollinate their trees. Those who are involved in the renting of their colonies for pollination benefit from this practice. However, when bees become scarce and the Californians still need their pollinators, local beekeepers elsewhere who need new colonies find they are not available from bee supply enterprises because they are all shipped to California. This has happened to me. We are handicapped by our need for economic growth and prosperity at any price. We are also fearful of large powerful companies. This need not be the case.

A fascinating example reported in July was the action taken by Rotterdam in Holland. It concerns another common agricultural pesticide. This feisty Dutch city banned the use of Monsanto's Roundup herbicide. This action is tantamount to challenging God. ? [http://naturalsociety.com/second-largest-dutch-city-bans-monsantos-roundup/?utm\\_source=Natural+Society&utm\\_campaign=c68d103f40-Email+211:+7/25/2013&utm\\_medium=email&utm\\_term=0\\_f20e6f9c84-c68d103f40-323144837](http://naturalsociety.com/second-largest-dutch-city-bans-monsantos-roundup/?utm_source=Natural+Society&utm_campaign=c68d103f40-Email+211:+7/25/2013&utm_medium=email&utm_term=0_f20e6f9c84-c68d103f40-323144837).

Their campaign was called ?Non-Toxic Sidewalks For Our Children.? The active ingredient is glyphosate. Curiously, the US government has recently decided to increase the allowable amount of glyphosate in food crops.

Where are we going?

In case you need some Roundup, you can buy it just down the road at your local hardware store or garden centre.

Dr. Hans Martin is one of the world's leading scientists on climate change, toxics chemicals and other air issues. He has advised both national and international governments. He worked work Environment Canada and most recently for Foreign Affairs before retiring.