

## OBA Commentary on Canadian Association of Professional Apiculturists' Statement on Honey Bee Wintering Losses in Canada (2017)

We received this report toward the end of August. It indicates that Ontario beekeepers lost approximately 27% of hives this winter. This is a good number for Ontario, which not long ago was reporting losses as high as 59%.

The data come from a national survey of beekeepers with more than 50 hives. In Ontario 98 beekeepers participated, with a response rate of 54% of beekeepers contacted completing the survey, and representing 45% of the honey bee colonies in Ontario. While this is a good snapshot of winter losses, there will be wide variations from the norms expressed here. There will be many beekeepers who had higher losses and some with lower losses.

While PEI leads Canada this year with the highest reported overwinter losses, Ontario – at fourth highest losses – finds itself in a unique position of having fewer losses than both B.C. and Alberta. These provinces typically report much lower losses than Ontario. Poor winter weather was blamed for Alberta and B.C. losses.

Keep in mind that as a benchmark we usually regard a 15 – 19% winter loss as the maximum sustainable loss beyond which beekeepers will suffer from weaker hives for pollination and the added costs of increasing livestock (e.g. replacing queens and bees). Thus, even at 27%, Ontario is 42% above the maximum acceptable level of losses.

Beekeepers were asked to rank possible contributing factors to colony losses. Ontario respondents reported the following reasons for winter losses:

- #1 Poor queens
- #2 Starvation
- #3 Weak colonies in the fall
- #4 Ineffective Varroa mite treatments.

These are symptoms which could be attributed to either a bad winter, pesticide exposure or less than optimum beekeeping practices. While last winter was not as bad as some previous winters, Ontario's cold, wet spring was definitely a factor.

Finally, it should be noted that pesticide exposure continues to be a major issue in Ontario and was not mentioned as a possible cause. However, chronic pesticide exposure can be the root cause of poor queen performance, weak colonies in the fall, and colonies that are overwhelmed by Varroa mites.