

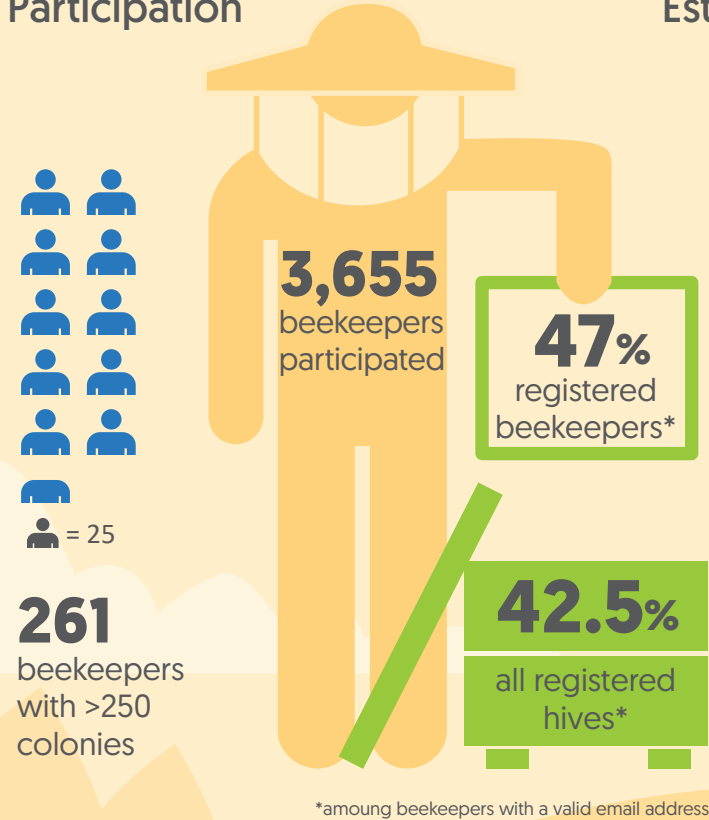


SUMMARY 2018

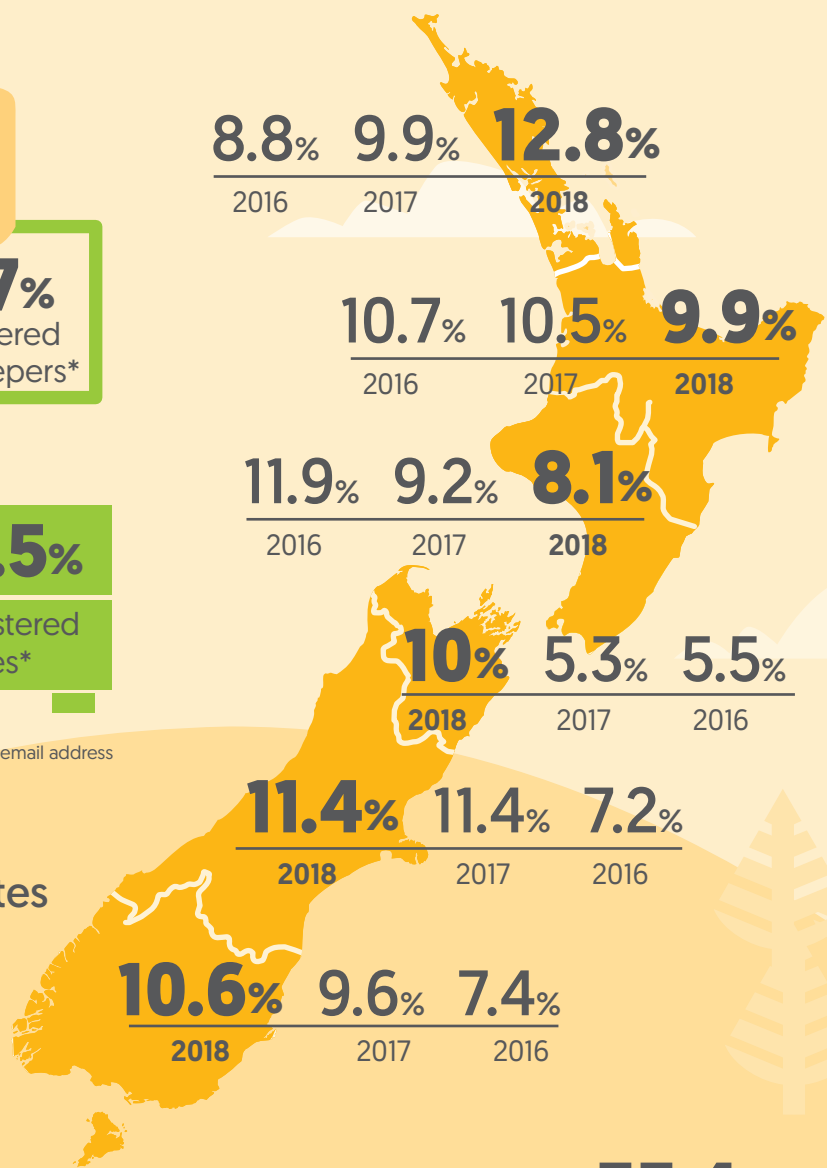
About the Survey

This is an on-line survey of beekeepers that aims to quantify winter colony losses. The survey has been conducted annually since 2015. The questionnaire is based on the international COLOSS survey and has been adapted to include topics of specific interest to New Zealand beekeepers.

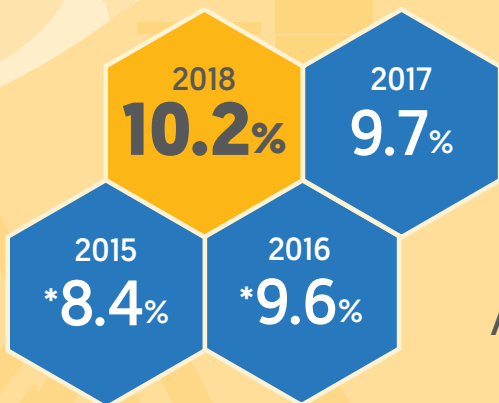
Participation



Estimated Total Colony Loss Rates

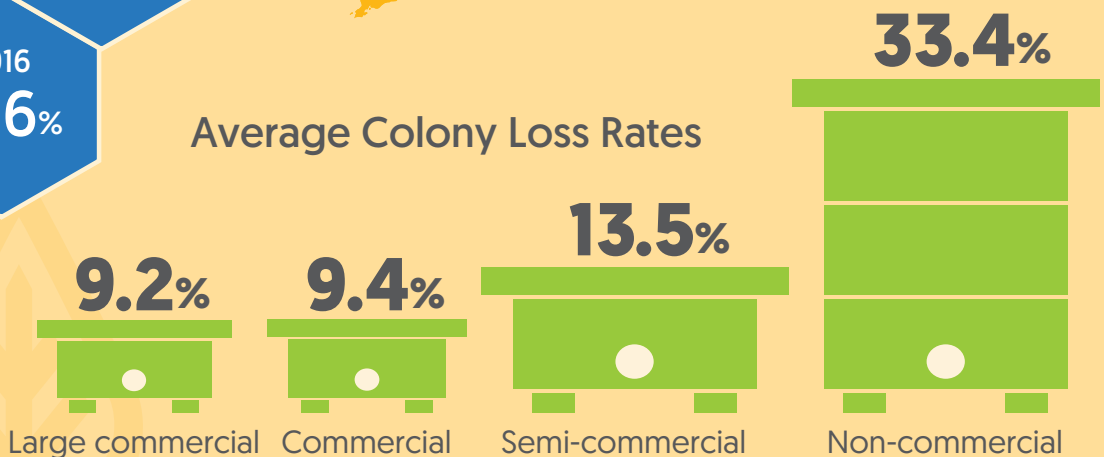


Estimated Total Colony Loss Rates



*statistically lower than 2018

Average Colony Loss Rates



Leading Causes of Colony Loss



19.5%

Suspected varroa



12.1%

Wasps



35.5%

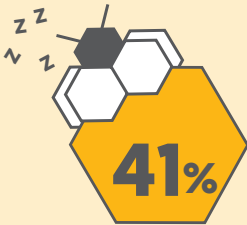
Queen problems



12.1%

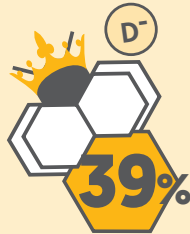
Suspected starvation

Most Common Queen Problems



Drone-laying queens

Old queens 26% more likely

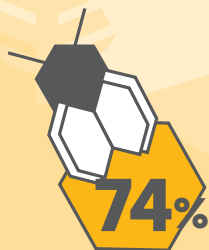


Queen failure

Old queens 48% more likely

Snippets

Beekeepers[#] report seeing signs of parasitic mite syndrome



Beekeepers[#] report seeing signs of deformed wing virus

[#]with greater than 250 colonies

Beekeepers provided any pollination services



In a Nutshell...

Overall loss rates for winter 2018 were 10.2%. This figure is statistically indistinguishable from 2017, but higher than 2015 and 2016. Our analysis shows a statistically significant, positive time trend in overall loss rates.

For winter 2018, the highest loss rates occurred in the Upper North Island and Middle South Island. Lowest overall loss rates were registered in the Lower North Island.

Trend analysis indicates that overall loss rates have increased significantly for the Upper North Island and all three parts of the South Island. Overall loss rates have trended downward in the Lower North Island. Evidence for the Middle North Island is less conclusive, but some statistical tests suggest a statistically significant downward trend.

Average loss rates were significantly higher for non-commercial beekeepers.

Leading causes of colony losses include queen problems, suspected varroa and related complications, suspected starvation, and wasps.

Most commonly, queen problems were attributed to drone-laying queens and queen failure. Both problems were more pronounced among old queens than young queens.

The Lower South Island reported less formal monitoring of varroa than other regions. Among beekeepers who treat varroa, Amitraz and Flumethrin are the most common treatments by a wide margin.

View full survey results at:

www.landcareresearch.co.nz/bee-health



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NZ COLONY
LOSS SURVEY

