

# SUMMARY 2024

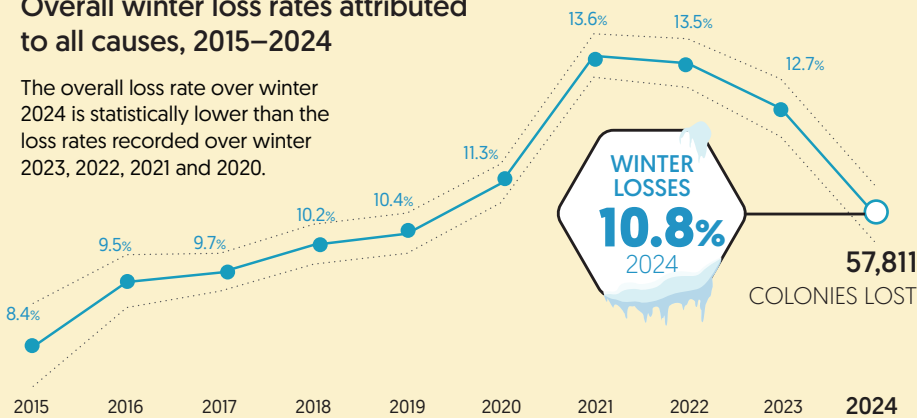


This is an online survey of beekeepers that aims to quantify winter colony losses. The survey has been conducted annually since 2015. The questionnaire is based on the international COLOSS survey and has been adapted to include topics of specific interest to New Zealand beekeepers.

## WINTER LOSSES

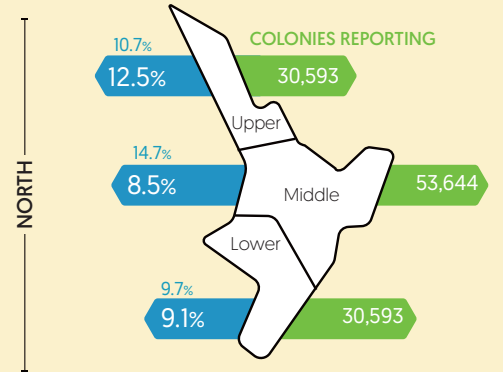
### Overall winter loss rates attributed to all causes, 2015–2024

The overall loss rate over winter 2024 is statistically lower than the loss rates recorded over winter 2023, 2022, 2021 and 2020.

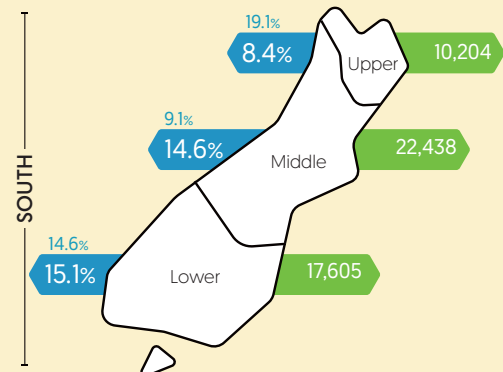
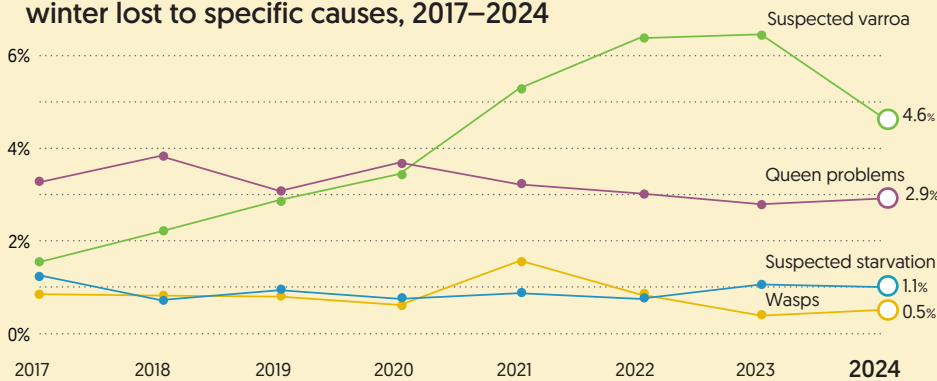


### Estimated regional loss rates 2024

#### 2023 winter loss rate 2024 WINTER LOSS RATE

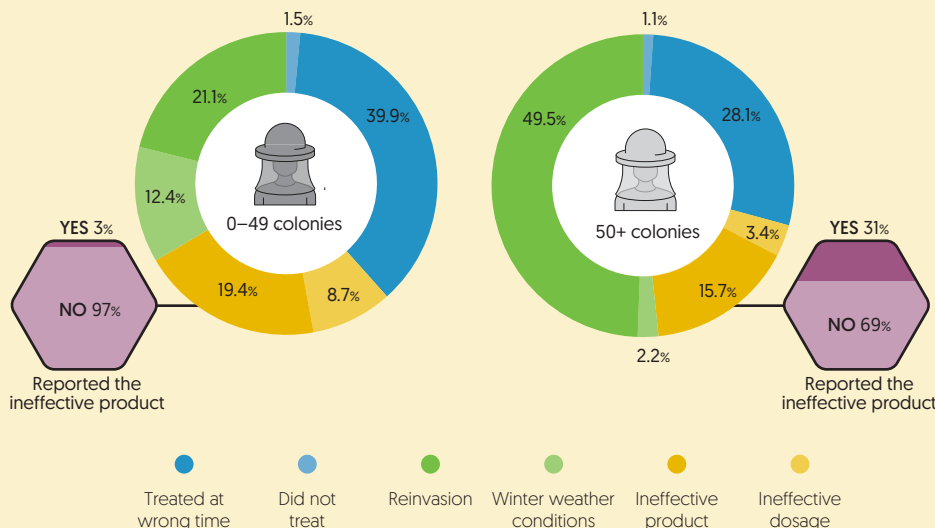


### Estimated percent of all living colonies entering winter lost to specific causes, 2017–2024

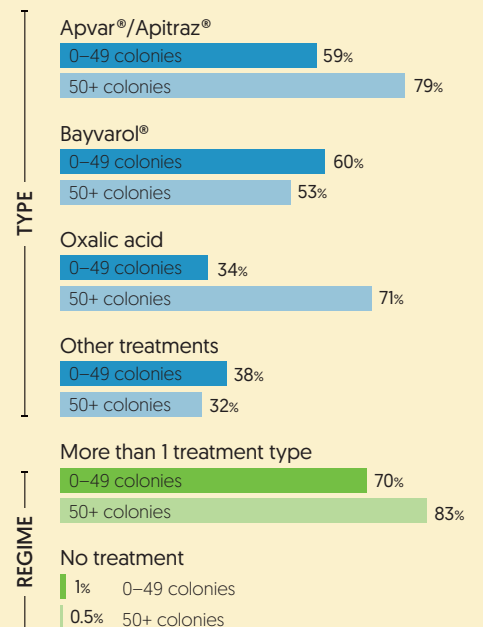


## VARROA

### Reasons for over-winter losses to varroa

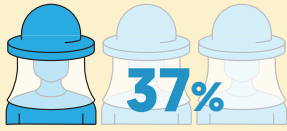


### Varroa treatments used



# POLLINATION

## Pollination services



of beekeepers with 50+ colonies provided commercial pollination services

■ = 10 colonies



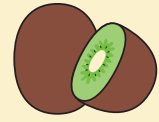
of their colonies were used for commercial pollination

= 102,466

colonies providing commercial pollination services



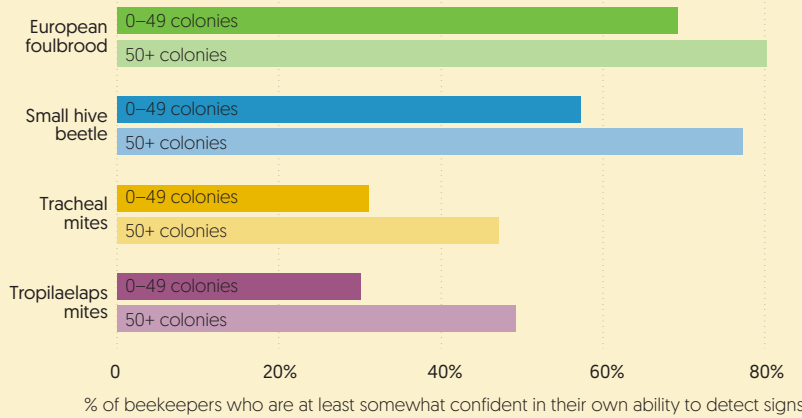
The average colony commercially pollinated...



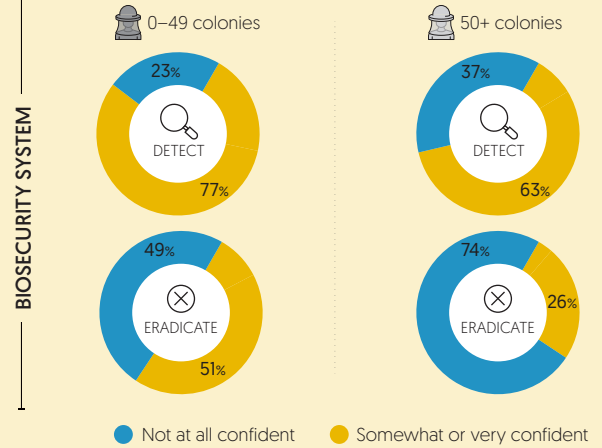
1.5 crops

# BIOSECURITY

Beekeepers generally had more confidence in being able to identify signs of European foulbrood or small hive beetle, which may be because these have more obvious visual signs in beehives.



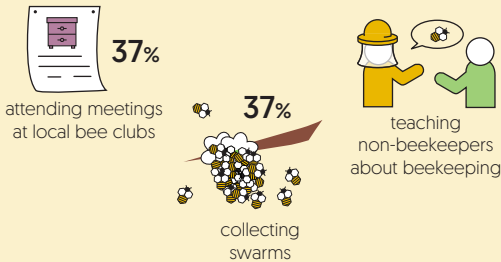
Beekeepers are somewhat confident that the biosecurity system could identify new pests and diseases and not at all confident that the biosecurity system could eradicate them.



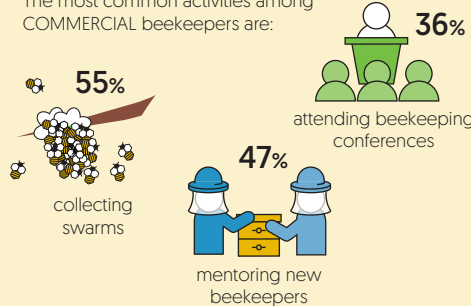
# INDUSTRY PRACTICES

27% of non-commercial beekeepers and 11% of commercial beekeepers are essentially solitary.

The most common activities among NON-COMMERCIAL beekeepers are:

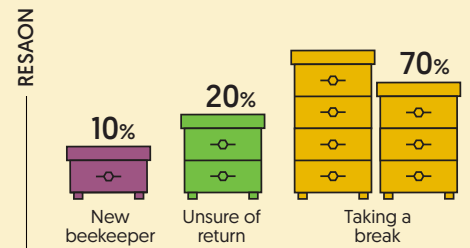


The most common activities among COMMERCIAL beekeepers are:



10% registered beekeepers have 0 colonies

Beekeepers with no colonies were asked why they are registered.



# OVERVIEW

In a 'queen cell'

We surveyed 2,828 beekeepers, who collectively had 153,856 colonies. We estimate that 10.8% of New Zealand's colonies were lost in New Zealand during winter 2024. This means 57,800 colonies died over winter, from a total of 535,185. It is the second year in a row where winter loss rates have fallen, and reverses a long trend of increases. Loss rates were lower this year because varroa did not kill as many hives. Only 4.6% of all colonies died from varroa during winter 2024 compared to 6.4% during the previous winter.

Commercial beekeepers (those with more than 50 colonies) represent approximately 10% of all registered beekeepers and manage approximately 94% of all registered colonies. However, the majority of beekeepers are non-commercial (1-49 colonies). About 10% of registered beekeepers do not currently keep any bees, although most plan to return to beekeeping.

Non-commercial beekeepers said the main reason they lost colonies to varroa during winter was that they had applied varroa treatment at the wrong time. The main problem commercial beekeepers had with varroa was reinvasion of their hives. Even though beekeepers generally considered their varroa treatments were effective, 19% of non-commercial and 16% of commercial beekeepers said they lost colonies over winter because the products they used were ineffective. If a product had failed, most

beekeepers said they did not report it to anyone (e.g. authorities or manufacturers).

Questions about beekeeper perceptions of biosecurity were new in the 2024 survey. Most beekeepers were at least somewhat confident that they could identify the signs of European foulbrood or small hive beetle. However, beekeepers were less certain that they could identify the signs of tracheal mites or tropilaelaps mites. Overall, beekeepers had some confidence that the biosecurity system (described as a collaborative effort in which every New Zealander has a role to play) could detect exotic pests and diseases, but beekeepers were much less confident that these exotic pests and diseases could be eradicated.

Pollination was an important activity for commercial beekeepers. More than 102,000 colonies were used for commercial pollination during the 2023/24 season, with each colony pollinating an average of 1.5 commercial crops.



View additional results at: [www.landcareresearch.co.nz/bee-health](http://www.landcareresearch.co.nz/bee-health)



Data summary commissioned by Ministry for Primary Industries

