

Low winter mortality in Dutch bee colonies for the third year in a row

April 14 2015



Again last winter, Dutch beekeepers lost few bee colonies: about 10%. This means that the winter mortality, which is measured in early April, has been around 10% for three years in a row (13%, 9% and 10% in 2013, 2014 and 2015, respectively). That is the result of a telephone survey of beekeepers carried out on 2 April by the Dutch Beekeepers Association (NBV) and bee researchers from Wageningen UR.

The [winter](#) mortality of [bee colonies](#) has been alarmingly high for years. In some winters, one in four colonies did not survive. Fortunately, in recent winters the mortality rate has declined.

Flower-rich environment

However, it is not yet certain that the surviving bee colonies will develop as they should. At this time of year, the surviving colonies are at their weakest. They can collect sufficient pollen and nectar to develop properly only when spring is going strong with higher temperatures. But this obviously requires a flower-rich environment as well.

Survey among beekeepers

The survey was conducted among members of the NBV; with over 6,000 members it is the largest beekeeper's organisation in the Netherlands. To determine the percentage of winter mortality, the beekeepers were asked how many colonies they had prepared in the autumn for wintering and how many were still alive at the beginning of spring. From the membership list, 500 names were chosen at random, and about 200 of them were contacted by telephone. The results of the survey were used to calculate a winter mortality of 9.9% (95% confidence interval: a range of 9.0% - 10.9%). Of the total group of respondents, 59% indicated that all their colonies had survived the winter.

Acceptable winter mortality

After three years in a row with acceptable winter mortality, the researchers are cautiously hoping that the high mortality rates are a thing of the past. However, it is still unclear why the mortality has declined. One reason may be that [beekeepers](#) are combatting the parasitic varroa mite more conscientiously each year, even in mid-winter.

Provided by Wageningen University

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