

Title: Investigating honey bee colony health in England and Wales

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The number of beekeepers in the UK has reduced in recent years. Currently in England and Wales it is estimated that there are still in excess of 230,000 honey bee colonies, managed by in the order of 35,000 beekeepers. The annual honey bee colony losses in England and Wales fluctuate greatly from 4-40%, but the last eight years have seen a trend of slowly rising losses. Although this decline are thought to reflect multifactorial pressures on honey bees, the precise reason(s) for their occurrence is/are unknown. Samples were collected through the National Bee Inspectorate, that has responsibility for delivering the Bee Health programme in England and Wales. In this study, *Apis mellifera* colonies were screened for a range of RNA- and DNA-based honey bee pathogens using targeted and non-targeted molecular approaches. The results from these molecular screens will be presented and interpreted in relation to colony health.