

# AMERICAN FOULBROOD

American foulbrood (AFB) is caused by the bacterium *Paenibacillus larvae larvae*. This disease of honey bees has been regulated by an Apiaries Act since 1907. In October 1998 responsibility for managing AFB to reduce the reported incidence of the disease, passed to the National Beekeepers' Association Incorporated (NBA). The NBA developed a Pest Management Strategy (PMS) and became the management agency for the strategy. The PMS retained many of the provisions from the previous Apiaries Act 1969 plus some new ones. More information can be found at [www.afb.org.nz](http://www.afb.org.nz) and also at [www.nba.org.nz](http://www.nba.org.nz). Recently, owing to an amendment to the legislation, Pest Management Strategies have been renamed Pest Management Plans (PMPs). Key features of the American Foulbrood PMP are:

- An apiary is a place where bees are kept and every apiary must be registered. In addition all hives must be inspected annually by an approved beekeeper, who must also report on the disease status of the hives.
- Any case of AFB must be reported within seven days to the Management Agency.
- To become approved, beekeepers must first pass a competency test on AFB recognition and control and then submit a hive and AFB management plan to the management agency or their contractor, AsureQuality Ltd. This is called a Disease Elimination Conformity Agreement (DECA).
- Beekeepers must submit samples of bees and/or honey for AFB testing if so requested.
- All hives with AFB symptoms must be destroyed, although some equipment can be sterilised by heating in paraffin wax at 160°C for at least 10 minutes.
- Antibiotics cannot be used to control AFB in New Zealand.
- The AFB Plan is funded by an apiary fee levied under the Biosecurity (American Foulbrood – Apiary and Beekeeper Levy) Order 2003. All beekeepers are required to contribute through a base fee of \$20, plus \$14 per apiary (+ GST). Beekeepers with fewer than four apiaries and fewer than 11 hives pay the base fee plus one apiary fee. Those above the thresholds are levied a base fee plus \$14 for each apiary registered on 31 March, the date the levy is assessed.

## Hive inspection and audit programme to 31 May 2013

AsureQuality Ltd collates beekeeping and AFB disease statistics to 31 May each year for the management agency, which encompasses a full beekeeping season. Between 1 June 2012 and 31 May 2013, 1177 cases of AFB were found by beekeepers (0.26 percent of hives) and/or AsureQuality staff in 530 apiaries (2.0 percent). Corresponding AFB infection rates for 2011–2012 were 762 hives (0.18 percent) and 499 apiaries (2.0 percent).

As of 31 May 2013 there were 2509 beekeepers with DECAs and a Certificate of Inspection Exemption (59 percent of beekeepers). These beekeepers are permitted to inspect their own hives for AFB and make reports to AsureQuality on the authorised forms. During the reporting period 341 new DECAs were approved and six existing DECAs were reviewed. No DECAs were revoked during the year.

## Apiary register and statistics

There were 1771 beekeepers who owned 21 017 hives on 2772 apiaries that required a Certificate of Inspection on 21 June 2013. This means they have to engage the services of an Approved Beekeeper to inspect and report on the AFB status of their hives. The number of beekeepers in this category is up 13 percent from last year, which is similar to the increase seen in total beekeeper numbers. The high number of new beekeeper registrations

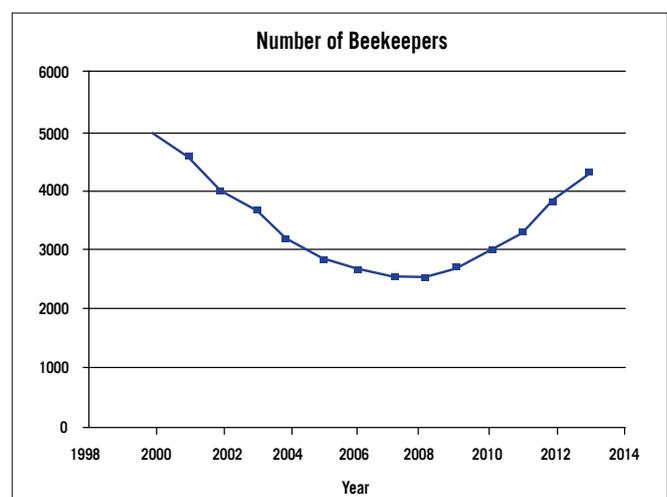


Figure 1: Number of beekeepers, 2000–2013

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continues to be the major reason that, despite the efforts of the management agency, the percentage of beekeepers holding a DECA has remained static (**Figure 1**).

There were 4280 beekeepers owning 451 895 hives on 27 081 apiaries as at 31 May 2013, compared to 3806 beekeepers, 25 253 apiaries and 422 728 hives at the same time last year. Over the last few years the industry has continued to grow, with a net increase in beekeeper numbers of 12 percent in the last year and an impressive 65 percent since the low point in 2008 (**Figure 1**). This net increase was a combination of both commercial and hobbyist beekeepers, which resulted in the average number of hives per apiary remaining constant. Hive numbers increased by seven percent over last year.

The main increases were again in the North Island, where 72 percent of the new beekeepers were registered. The beekeeper split between islands has been moving in favour of the North island for some years and currently for every beekeeper in the South Island there are two in the North. This is the second highest net increase in beekeeper numbers since 2008 when the downward trend reversed. Last year saw the greatest net increase. There were 4956 registered beekeepers before the discovery of varroa mite in Auckland in March 2000. The increase in all statistics is partly driven by high manuka honey prices and also by a strong interest in pollination and home food production.

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