June 2003. Beekeeper numbers continued to track downwards with more than 600 beekeepers exiting the industry this year compared to 324 beekeepers in 2003 and 290 in 2002. This may be due in part to beekeepers, who have not had bees for some time, advising AgriQuality of their situation when presented with a levy demand. It must be noted that this is a net result and that there are still new beekeepers entering the industry with 173 registering in 2003 and 130 in 2002. Prior to the varroa outbreak there were 4914 beekeepers, 21793 apiaries and 302988 hives (July 1999).

4 LIVE BEE MOVEMENTS AND EXPORTS

Demand for package bees to Canada was even stronger than the previous year and was due in part to the high prices being paid for honey. For the year ended December 2003, 27281 x 1 kg packages of bees were exported and 6283 queen bees. For the year ended December 2002, 10,780 queen bees and 18,028 x 1 kg packages of bees were exported. Export orders in the autumn of 2004 were higher again but these statistics will be included in the year ending December 2004.

5 PMS SUMMARY

5.1 Disease reports

Between June 1 2003 and May 31 2004, 870 cases of AFB were found by beekeepers and/or AgriQuality staff in 422 apiaries. This is average disease rate of 0.30% of hives. Of these AFB reports only 43 cases were found and reported by beekeepers who are not DECA holders. This represents 0.29% of the total number of hives held by non-DECA holders. A small number of hives reported to have AFB were robbed out. Notices were sent to beekeepers with hives within 5 kilometres of these sites.

5.2 Disease conformity agreements (DECA's) & Certificate of inspection (COI)

As at the end of March 2004 there were 2366 beekeepers with DECA's and a Certificate of Inspection Exemption. These beekeepers are able to inspect their own hives for AFB and make reports to AgriQuality on the authorised forms. No DECA's were revoked in the reporting period although there is one beekeeper currently under review.

There were 845 beekeepers owning 14776 hives on 1650 apiaries, who required a COI at the end of May 2004. The requirement of beekeepers without a DECA to find a beekeeper with a DECA to inspect their hives is an ongoing problem. Many beekeepers sign and return their own COI's i.e. they are not getting their COI's signed by a beekeeper with a DECA. These are usually returned to the beekeepers concerned, and the beekeepers are encouraged to obtain a DECA.

6 REPORTABLE STATISTICS

6.1 Total Registered Beekeepers / Hives / Apiaries

As at 10 June 2004 there were 3211 beekeepers who owned 292530 hives on 19592 apiaries.

6.2 Total reported AFB

870 cases of AFB were reported by beekeepers, or found by AgriQuality, representing a hive infection rate of 0.30%.

6.3 Total Number of DECA's

There are a total of 2366 beekeepers currently holding DECA's.

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422/14592 op = 2.15 =2.2% A-B 03/04 19 620 op 3020 490 839 APR ADR 222(7.33/.) 4.28 6

6.4 Total Number of DECA's Reviewed / Amended / Revoked

Of the 30 DECA's to be reviewed, 9 have been completed, 14 are being processed and 7 were targeted but were resolved with local AAO knowledge. It is anticipated that some DECA's being processed may require minor amendments and at least one will need to be revoked.

6.5 Beekeepers requiring Certificates of Inspection.

There are 14776 hives on 1650 apiaries owned by 845 beekeepers who require a Certificate of Inspection. Of these, 25 beekeepers (3%) reported 43 cases of AFB (0.29%) on 25 apiaries (1.5%).

6.6 Number and Percentage of AFB found & reported by AgriQuality and AFB-PMS AP's AFB-PMS Authorised Persons (AP's) and AgriQuality inspected 1711 hives on 202 apiaries during the last year and found 108 cases of AFB (6.3%). Of these AgriQuality inspected 48 apiaries (418 hives) and found 27 cases of AFB (6.5%) while AFB-PMS AP's inspected 1293 hives and found 81 cases of AFB (6.3%).

6.7 Number and percentage of test samples taken

The lab has received 520 samples to date from DECA holders (target is up to 1000 samples). There is an elevated level of contaminated honey samples being provided for testing. It is likely that some contamination is coming from beekeepers taking honey samples from the hives rather than the honey drums due to the lateness of the request for samples this season.

- **6.8** Number of unregistered apiaries found and instructions to register sent to the registrar 13 unregistered apiaries were found and subsequently registered.
- 6.9 Number of abandoned apiaries found / destroyed by AgriQuality.

One abandoned apiary was found and dealt with as part of the inspection program.

6.10 Number of beehives infected with AFB destroyed on default of a notice issued

No hives were destroyed on default of a notice issued.

6.11 Number of restricted place notices sent to beekeepers under the AFB-PMS One restricted place notice was sent.

6.12 Number of apiaries and hives inspected on default of a notice

No apiaries were inspected.

6.13 Number of AFB robbed out hives found or reported

7 hives were found with AFB that had been robbed out.

7 EXOTIC BEE DISEASE SURVEILLANCE

7.1 Field Inspection and Sampling

500 apiaries were selected, inspected and sampled for exotic diseases, with 400 of these coming from high-risk areas and 100 from beekeepers' home apiaries. High-risk areas are those locations considered to have the greatest potential for entry of exotic bee diseases eg ports, airports, cities and tourist destinations. The high-risk sites were inspected in the South Island, by AP2's and beekeepers, as part of the varroa surveillance programme. In the North Island beekeepers were asked to inspect and sample their own hives and were sent a kit for this purpose.

In general the surveillance contract required that the hives on each site:

- Be inspected for exotic bee disease symptoms with any symptoms being sampled (namely European foulbrood, small hive beetle and other sub-species of bees).
- Have a sample of 50 adult bees taken from each hive to be examined for internal mites
- Have a 24-hour sticky board and miticide sample taken for external mites.

Over and above this programme, a further 300 apiaries were sampled by beekeepers who export live bees. These samples were tested for external and internal mites. All samples to date are negative for exotic be diseases and pests with the exception of the recent varroa discovery in the South Island, which was detected with a home apiary test. It is becoming more difficult for AgriQuality to find beekeepers who are willing to test their own hives and a number of kits are still outstanding. These beekeepers are currently being followed up.

7.2 Reports

Each year, reports on surveillance activity are prepared for MAF and the New Zealand Beekeeper magazine. These are used to meet our international reporting requirements for New Zealand's bee health status and also to keep New Zealand's beekeeper's informed of surveillance activities.

7.3 Apiary Database

MAF contributes to the cost of the management and maintenance of the apiary database through the exotic disease surveillance contract.

7.4 Beekeeper Extension / Education

A series of articles were written for beekeepers and published in the New Zealand Beekeeper magazine. These articles covered issues relating to surveillance and exotic pests and diseases and their relevance to the New Zealand beekeeping industry. An exotic bee disease web site is under development and will appear on the World Wide Web in the near future.

7.5 Screening of Exotic Bee Disease Inquires

Each year MAF and AgriQuality Limited receive a number of calls regarding suspect exotic diseases or strange symptoms that beekeepers find in their hives. AgriQuality works with MAF's National Centre for Disease Investigation (NCDI) to screen these calls and determine whether a sample needs to be taken. Often a phone diagnosis can be made which rules out an exotic bee disease or pest.

8 HONEY BEE EXOTIC DISEASE AND PEST RESPONSE (EDPR)

8.1 Testing the new EDPR Model.

This year's programme focused on the Small Hive Beetle that was recently discovered in Australia. A major field exercise involving AgriQuality and the beekeeping industry was held in Tauranga during April 2004. The exercise was designed to train beekeeper and AgriQuality staff in field response operations and was based around a simulated Small Hive Beetle outbreak. The exercise was well supported by the Bay of Plenty beekeepers, many of whom also attended a one day training necessary to obtain AP2 warrants.

8.2 Technical Advisors Training

Byron Taylor and David McMillan completed a 2-week study tour to Australia as part of their technical advisor training for exotic diseases. The primary focus of the trip was to study the impact of Small Hive Beetle. They also investigated EFB, exotic surveillance and response programmes and aspects of Australian beekeeping. David and Byron presented a very informative debrief on their findings to MAF, the beekeeping industry and AgriQuality at a workshop held in Wellington.