

2005/06 crop of 10423 tonnes (see Table 2). The six-year average is 9267 tonnes with a range from 4682 tonnes (2002) to 12252 tonnes (2003). Regional honey production data for the past six years are summarized in Table 2. The national average was 34.7 kilograms per hive. The New Zealand honey crop was calculated at 10,423 tonnes, up 734 tonnes from the 2004/05 season of 9689 tonnes. The six-year average is 9180 tonnes with a range from 4682 tonnes (2002) to 12,252 tonnes (2003).

Table 2: New Zealand honey crop

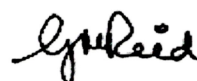
	2002 (tonnes)	2003 (tonnes)	2004 (tonnes)	2005 (tonnes)	2006 (tonnes)	2007 (tonnes)	6-year average (tonnes)
Northland, Auckland, Hauraki Plains	593	1 066	1 047	1 221	1337	1252	1086
Waikato, King Country, Taupo	708	2 210	1 164	1 095	1124	1270	1262
Bay of Plenty, Coromandel, Poverty Bay	319	2 064	2 052	1 498	1937	1897	1628
Hawkes Bay, Taranaki, Manawatu, Wairarapa	750	1 607	1 330	1 440	1935	1912	1496
Marlborough, Nelson, Westland	300	1 350	550	800	690	675	728
Canterbury	921	2 400	1 500	1 500	2100	1620	1674
Otago, Southland	1 091	1 555	1 245	2 135	1300	1040	1394
New Zealand	4 682	12 252	8 888	9 689	10 423	9666	9267
Yield/hive (kg)	15.0	40.8	30.2	33.1	34.7	30.7	30.6

5. DISEASE REPORTS

Between June 1 2006 and June 20 2007, 952 cases of American foulbrood (AFB) were found by beekeepers and/or AgriQuality staff in 540 apiaries. This is an average disease rate of 0.30% of hives. Of these AFB reports 85 cases were found and reported in hives on 31 apiaries owned by beekeepers who are not DECA holders. This represents 0.007% of the total number of hives held by non-DECA holders.

6. EXOTIC HONEY BEE DISEASE SURVEILLANCE

The inspection and sampling programme is split into the inspection and sampling of 350 apiaries in high-risk areas such as major cities, tourist centres and near ports and airports, plus the testing of bee samples from apiaries supplying bees for export. The target for the high-risk areas was almost completed with only a few apiaries still to be done. For the low risk surveillance sites, 375 samples were collected out of a target of 300 samples. No exotic bee diseases were reported. AgriQuality will prepare a more surveillance detailed report when the lab testing has been completed.



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COMMENTARY AND REPORT ON THE AFB PEST MANAGEMENT STRATEGY TO 31 MARCH 2007

1 BEEKEEPER, APIARY AND HIVE NUMBERS

As at the 30th March 2007 there were 2666 beekeepers operating 314794 hives on 20481 registered apiaries. By comparison, the March 2006 statistics quoted 2737 beekeepers, 19199 apiaries and 299077 hives. Beekeeper numbers continue to track downwards as has been the pattern in recent years. However, the trend has slowed to the point that the reduction over the past 12 months is only around one quarter of that seen over the '05-'06 time period. The average size of the remaining beekeeper's hive and apiary holdings is now increasing with an additional 15717 hives and 1282 apiaries registered. It is anticipated that the recent introduction of the varroa mite into the South Island will have a negative impact on beekeeper, hive and apiary numbers but this has yet to be seen. 214 new beekeepers have registered over the past 12 months, 110 in the North Island and 73 in the South Island.

2 DISEASE REPORTS

Between 1 June 2006 and 23 March 2007 there have been a total of 102 beekeepers reporting 576 cases of AFB in 333 apiaries. This corresponds to an average disease rate of 0.18% of hives over the whole country.

Of the AFB reports, 78 cases were found and reported in hives owned by beekeepers that are not DECA holders. This represents 0.74% of the total number of hives held by non-DECA holders, which is considerably higher than the overall disease rate. Of the 78 cases, 51 were detected in apiaries belonging to a beekeeper, who was the subject of an outbreak response (detailed in the incident reports).

3 INCIDENT REPORTS

Commercial Beekeeper (20 apiaries, 321 hives)

This beekeeper was included in the incident reports in March of last year. The beekeeper's management practices (allowing extracted supers to be robbed out), and the concomitant AFB reported in the area, resulted in an inspection of all of the beekeepers hives. 51 infected hives were found, which is a disease rate of 16%. While the beekeeper has improved his level of compliance from last year (beginning with a current ADR return), he has yet to complete a COI return as he is not an accredited beekeeper.

It is also worth noting that a significant amount of the disease found in this operation came from 'hospital yards' that were being used to store infected colonies.

Commercial Beekeeper Manawatu (21 apiaries, 340 hives)

This beekeeper has recently bought hives from a known infected operation. Unfortunately his beekeeping skills are, as yet, insufficient to manage the disease problem that he has inherited. His entire operation was inspected with a total of 20 hives diagnosed with AFB (6%), and a further 83 hives dead on site, many of which could also have AFB. This is of serious concern as the beekeeper is allowing hives to die out, which could easily result in one or more AFB rob-out scenarios. This beekeeper has a DECA but has not passed the competency exam (tried and failed) and as such, will have his DECA reviewed.

Hobby beekeeper Auckland (1 apiary, 2 hives)

Both hives were badly infected with AFB. As a result 5 additional apiaries in the area were inspected by an AP2 under direction with no additional cases found. This area is close to another find last year which resulted in a considerable number of additional infected hives being found (See 2006 reports)

Unregistered Beekeeper (2 apiaries, 40 hives)

This beekeeper was found to have 5 hives infected in one of his apiaries. The AP2 who inspected these hives commented negatively on the general state of the hives in the apiary. This beekeeper has had a letter written to him requiring that he register his sites by the 20th April 2007.

Hobby beekeeper Taupo (3 apiaries 4 hives)

This beekeeper found colonies with suspect AFB after swarms were hived and allowed to develop for the summer. AgriQuality recommended he put in varroa treatment to eliminate possible parasitic mite syndrome (PMS). AFB symptoms persisted and 2 hives were subsequently burnt. Confusion of AFB with PMS is not uncommon. It may also be a trend that strong hives with AFB are swarming or absconding more readily than in the past and now represent a significant risk to beekeepers who collect swarms.

Hobby Beekeeper Waikato (1 apiary 4 hives)

Lost 9 hives to AFB in 2005-06 caused by his bees robbing neighbours hives, which had died out. Neighbour, who had cancelled his registration in May 2003, was visited and counselled and agreed to burn all stored equipment and combs some of which were found to have AFB scale. It seems the 'neighbour' may have hived some swarms again from a recent report and he is scheduled for an inspection in April 07.

Waikato commercial beekeeper (37 apiaries 548 hives)

The beekeeper reported 3% infection rate (19 hives) after kiwifruit pollination in 2004. More hives broke down in the spring of 2005 and autumn 2006 with a total of 26 cases in the end (4.7% hive rate). The beekeeper did not have any AFB prior to this. The beekeeper has continued to practice good barrier management since 2005 and has had only 2 cases in December 2006.

Semi-commercial beekeeper Hamilton (3 apiaries 49 hives)

Reported a suspect AFB in early November 2006 that was confirmed by AgriQuality as positive. The apiary was in an area with a number of AFB reported from autumn 2005 and spring 2006 (refer next case study). Another suspect colony was examined by AgriQuality in February 2007 but proved negative on lab testing. The beekeeper was counselled to be extra vigilant when harvesting honey. All the beekeepers hives from this apiary plus another 2 apiaries went to kiwifruit pollination but were mixed up as a broker service was used.

Waikato commercial beekeeper (39 apiaries 602 hives)

Bought 140 nucs from a BOP commercial beekeeper in the autumn of 2005, 15 of which broke down with AFB, many within 10 days of receipt. This beekeeper was semi commercial at the time but has continued to expand his hive numbers and currently has over 600 hives. He has been purchasing remnants of outfits in the Waikato and is acting as a 'vacuum cleaner' of hives and latent AFB. No doubt he is also spreading some AFB from hives with in apparent infections as well as buying in AFB. He reported 43 AFB, including the 15 mentioned above, from autumn 2005 to spring 2006 (7%). He has not reported any AFB since May 2006. The area where a lot of AFB was found is scheduled for a branch inspection and is related to the case study above.

Commercial Waikato beekeeper (72 apiaries 1772 hives)

Outbreak in Taupo area with 5 AFB reported in November 2006. An api-circle report didn't show any suspect apiaries within 4 km or other reported AFB. This outbreak remains unresolved.

Hobby beekeeper Hamilton (1 apiary 1 hive)

This beekeeper has had AFB in her hives on and off for many years. AgriQuality found a positive infection in the autumn of 2006 and a lab test on adult bees was positive in March 2007. The one remaining hive is scheduled for an inspection in April 2007 to determine if clinical symptoms are present. The cause of the infection is not known but some is possibly self-inflicted. However, her hives are possibly robbing an unknown source(s) as she has had years free of AFB.

Commercial beekeeper Waikato with Turangi outbreak (104 apiaries 1832 hives)

Beekeeper reported 9 AFB in October 2006, 3 more in November 2006 and 2 in January 2007. An api-circle report in October found 3 other beekeepers and 5 registered apiaries within 3 km but no recent reports of AFB. The area is marked for an autumn inspection by the Waikato branch. The beekeeper practices good barrier management and barcodes all the hive boxes as well as the honey supers so honey supers were able to be retrieved after the initial outbreak as a precaution. The apiary remains under isolation and quarantine.

AFB outbreak in North Canterbury

Early last year, some beekeepers reported AFB cases in sites neighbouring some apiaries that belong to a beekeeper with a history of AFB. In July 2006, AQ and an AP2 went to inspect 5 apiaries, with a total of 37 hives, and found 16 (43%) hives AFB positive. These positive hives were burnt under AQ supervision.

As a follow up to this incident in November–December 2006 All apiaries from this beekeeper were inspected by an AP2 plus follow up with audits by AO's. A total of 80 apiaries and 488 hives were inspected (including dead outs) with 81 hives positive for AFB. The beekeeper was informed about the findings and he proceeded to destroy the positive hives. Discussions were held with the beekeeper on how to eliminate his AFB problem. Some recommendations given to him included wearing his reading glasses during AFB inspections and changing to a better strain of bees less susceptible to Sacbrood, which was tending to mask AFB.

AFB in the Catlins area

A commercial beekeeper reported an AFB outbreak in the Catlins area with 13 hives positive from 6 different apiaries. All apiaries are located in a bush area without other managed hives. This outbreak is possibly a result of a very cold winter resulting in many feral hives being robbed out in spring. The beekeeper has increased his inspection frequency and appears to be on top of the disease problem now.

South Canterbury commercial beekeeper: stolen honey and possible AFB spread

Beekeeper phoned to AgriQuality claiming that he had had honey stolen from several of his apiaries. He thinks that former employees might be involved and AQ are working with the Police to follow up on several leads.

He reported 10 cases of AFB this 06/07 season. As the thieves are returning extracted boxes not necessarily to the same apiary and frames are getting mixed up too, it is likely that more cases of AFB will be found within his outfit.

Wakefield hobby beekeeper picked up AFB from neighbouring beekeeper.

An apiary was inspected as a follow up of a Varroa suspect report in Wakefield. The hive was dying out according to the beekeeper although the site was outside the infested zone. AQ inspected the apiary of 6 hives under the Varroa response, and found two hives with AFB, one of them robbed out. These were the first cases affecting this beekeeper and he did not trade or exchange any equipment in the last few years. All his gear was bought brand new. An api-circle was drawn and a letter sent to all beekeepers with apiaries within 5 km. In March 2007 we received the report of 3 hives with AFB and a dead out suspect AFB in an apiary located 2.82 km from the previous report. This second beekeeper has a history of AFB with 3.61% positive hives for this season and could account for this outbreak.

Otago commercial beekeeper 4.27% (06-07) infection in recently purchased hives.

Another case of 10 hives from 5 different apiaries with disease can be traced back to the previous owner. The spread may have been self-inflicted. New owner is very vigilant and AgriQuality is confident that he will resolve the AFB problem in the purchased hives.

Banks Peninsula hobby beekeepers AFB outbreak.

4 hives of AFB were reported by an AP2, inspecting hives for the Management Agency, among hobby beekeepers in Banks Peninsula. Further inspections are planned in this area to monitor the extent of the problem.

4 DISEASE CONFORMITY AGREEMENTS (DECA'S) & CERTIFICATE OF INSPECTION (COI)

As at the end of March 2007 there were 2124 beekeepers with DECA's and a Certificate of Inspection Exemption. This represents 80% of registered beekeepers and is a 1% increase on last year. 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.

The DECA review process has started with 7 beekeepers reporting disease problems having their DECA's reviewed. The annual target is up to 40 and AgriQuality will carry out further DECA reviews of other beekeepers with a higher than average disease incidence later in the autumn.

There are 542 beekeepers who own 10476 hives on 1730 apiaries that require a COI. The number of beekeepers who fall into this category is reducing at about the same rate as the total number of beekeepers. The proportion of beekeepers requiring a COI is around 20%, which is about the same as last year.

5.1 Number of unregistered apiaries found

24 unregistered apiaries have been found during this contract period. Owners have either been located or are currently being processed. 15 of these were found as a result of a clean-up operation in Canterbury (detailed in the incident reports)

5.2 Abandoned apiaries found or destroyed

Three abandoned apiaries were found. All apiaries have been dealt with or are currently being processed.

5.3 Number of apiaries and hives inspected by AgriQuality staff or contracted AP's

AgriQuality has inspected 37 apiaries and 202 hives of the target 48 apiaries. Of these, 37 hives (18%) were infected with AFB. Remaining apiaries will be inspected in the autumn once honey has been taken off hives.

5.4 Number of apiaries and hives inspected by the NBA

The Management Agency is currently undertaking a nationwide inspection program. AgriQuality selected and allocated approximately 475 apiaries for inspection, which were separated into several inspection areas. Inspection report forms and apiary maps were produced for all 475 apiaries and sent to the PMS Manager. One of the inspection areas has completed their inspections (Hawkes Bay).

5.5 Number of apiaries with AFB destroyed on default of a notice

The NBA or AgriQuality have not destroyed any hives on default of a notice during this reporting period. All beekeepers complied with notices issued.

5.6 Number of restricted place notices sent to beekeepers

One restricted place notice was sent restricting movement of bees and bee equipment over an entire commercial operation. This was done so that AFB inspections could take place with minimum interference by the beekeeper (this beekeeper is noted in the incident reports).

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

There were no apiaries inspected on default of a notice issued.

5.8 Number of outstanding GNA's as at 24th March 2007

There are currently 10 outstanding GNA's that are being dealt with. This is considerably less than the same period last year (37) and reflects the fact that we now employ a full time administrator.



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AFB Infected Apiaries Reported Between 1 June 2006 and 24 March 2007



