

# MAF Quality Management (MQM) Report to the Annual Conference of the National Beekeepers' Association of New Zealand, Wanganui 17-18 July 1996

## 1.0 Organisation and personnel

Two new consultants joined the apiculture business unit within MAF Quality Management, during the year. James Driscoll is located at Palmerston North while Paul Bolger is situated in Pukekohe. James works part time for the Quarantine Service while Paul carries out duties for the Horticulture business. The apiculture hours worked by Derek Bettesworth and Paul Bolger in North Region still amount to one full-time apiculture position.

## 2.0 Beekeeping statistics

### 2.1 Beekeepers, Apiaries and Hives

There were 5306 registered beekeepers owning 286,806 hives as at 30 June 1996 (Table 1). This represented a decrease of 1.9% of beekeepers and 2.1% in hives, a trend continued from previous years.

### 2.2 Honey Production

The total saleable crop was assessed at 8610 tonnes (30kg/hive) which is an increase on last year's crop of 8047 tonnes (27.5kg/hive). The six year average is 8735 tonnes or 29.4kg per hive.

### 3.0 Exotic Disease and Pest Response (EDPR) Capability

Three joint exercises were run this year. These used EDPR procedures for a European foulbrood response, to inspect apiaries for AFB. The exercises involved approximately 120 MQM staff and 130 members of local NBA branches, held in Tauranga, Palmerston North and Timaru. Most participants found that this was very successful in helping both groups get a better understanding of each others operations and problems.

Whether or not MAF Regulatory Authority will continue to fund a response capability for bee exotic disease is unclear as the criteria for this funding is

under review. It is likely that only those exotic diseases considered to have significant socioeconomic impact will be funded by the taxpayer. It is arguable which if any of the presently scheduled exotic bee diseases would meet these criteria. Exotic diseases not meeting these criteria will have to be funded by industry through a Pest Management Strategy, should industry consider the cost/benefits of doing this worthwhile.

### 4.0 Surveillance

The honey-bee Exotic Disease Surveillance Programme is comprised of four parts, the apiaries register, hive sampling, toxic honey monitoring and border protection.

### 4.1 Register

The maintenance of this Register (in the form of a computer database) is a legal requirement for the Government under the current Apiaries and Biosecurity Acts. To be really effective the database must have accurate statements of inspection provided by beekeepers each spring. However once again, 2583 (48.7%) of beekeepers failed to provide such statements of inspection by the deadline of 7th December. As at 30 June 1996, 883 beekeepers (16.6%) had still not returned their statements despite reminder notices.

### 4.2 Hive Sampling

In the past 12 months, MAF staff have inspected 491 apiaries for the presence of exotic bee diseases and taken samples for laboratory analysis for internal and external parasitic mites. In addition, 48 samples were taken for European foulbrood diagnosis and one sample was taken for Africanised honey-bee analysis. Apiaries were sampled in at risk areas including sea ports, garbage dumps and areas frequented by overseas travellers. No specimens of

exotic disease or pests were found. A further 509 samples of bees were tested for live bee exports at Invermay as part of the export certification programme. The samples were analysed for the presence of exotic internal and external parasitic mites. MAF Quality Management wishes to thank the beekeepers for their cooperation in providing samples.

### 4.3 Quarantine Service

The beekeeping industry continued to have a high profile in the work of MAF's Quarantine Service with numerous consignments of honey and other bee products being intercepted at the border. James Driscoll, Apicultural Advisory Officer, Palmerston North works part-time in the Quarantine Service. The disease risk posed by honey and bees continued to be brought to the attention of the travelling public by way of articles and static displays at airports and other venues.

### 4.4 New Technologies

MAF Quality Management is constantly looking for ways to improve diagnostic capabilities. We are currently investigating a PCR test for European foulbrood (EFB) and an ELISA test for Tracheal Mites. Provided evaluation of these technologies proves satisfactory we should be using these new tests within the next 12 months.

These tests are much more sensitive and faster than current methods. For example: The PCR test for EFB will give a positive diagnosis within hours rather than up to 10 days as the current test does.

### 4.5 Toxic Honey

This year there has been one incident of toxic honey poisoning. The levels of tutin (40mg/kg) and hyenanchin (260mg/kg)

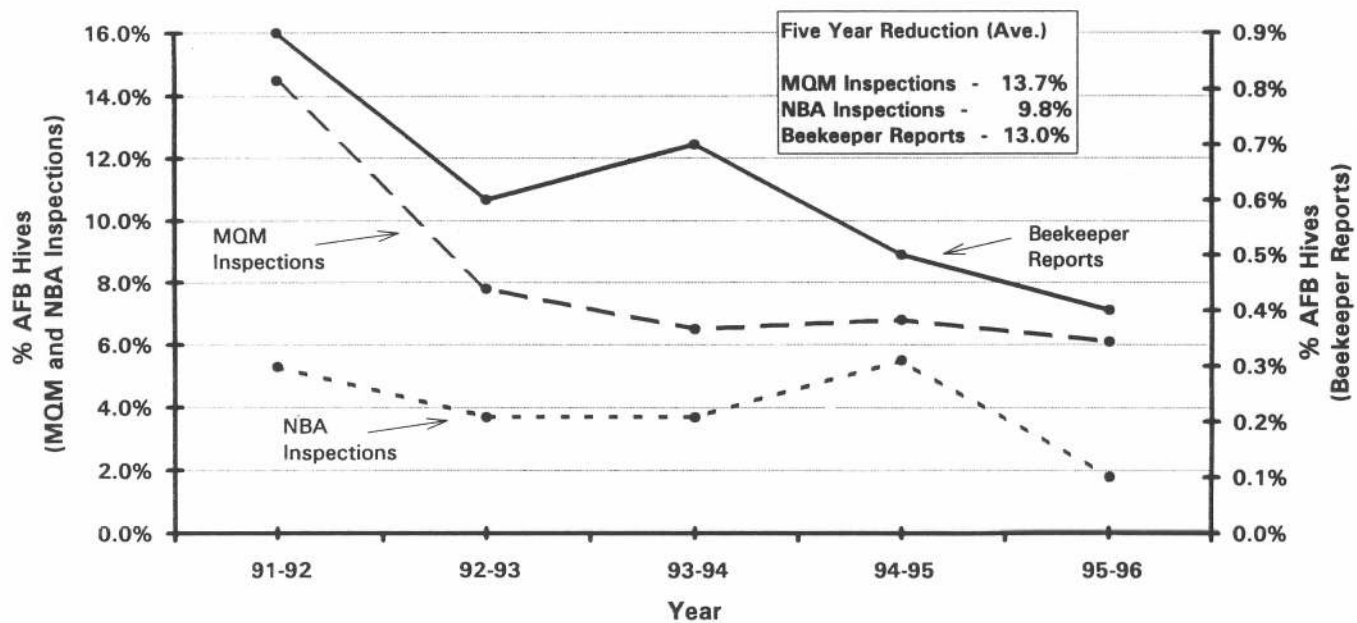
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## INCIDENCE OF AMERICAN FOULBROOD IN APIARY DISTRICTS TO 30 JUNE 1996 (1995 FIGURES IN BRACKETS)

MQM Apiary Register Location	Diseased Apiaries/ % of Total District Apiaries		Diseased Hives/ % of Total District Hives		Apiaries Inspected NBA Programme*	
	Number	%	Number	%	Number	%
Whangarei	95 ( 95)	3.5% (3.3%)	193 (181)	0.7% (0.6%)	123 (154)	4.1% (5.1%)
Hamilton	120 (151)	4.1% (5.2%)	183 (259)	0.4% (0.6%)	153 (122)	4.9% (4.1%)
Tauranga	148 (175)	4.3% (5.0%)	317 (501)	0.7% (1.0%)	480 (363)	13.0% (10.1%)
Palmerston North	122 (167)	3.0% (4.2%)	288 (442)	0.8% (1.2%)	394 (267)	10.0% (6.7%)
Blenheim	97 (153)	4.8% (7.5%)	214 (331)	0.9% (1.5%)	179 (184)	8.6% (9.0%)
Lincoln	170 (193)	3.2% (3.7%)	307 (404)	0.5% (0.7%)	467 (578)	8.8% (11.2%)
Invermay	133 (118)	3.3% (2.9%)	239 (252)	0.5% (0.5%)	218 (205)	5.2% (4.7%)
<b>TOTAL</b>	<b>885 (1052)</b>	<b>3.6% (4.2%)</b>	<b>1741 (2370)</b>	<b>0.6% (0.8%)</b>	<b>2014 (1873)</b>	<b>8.0% (7.5%)</b>

\* Includes both MQM and beekeeper inspectors, whether employed by MQM or under MQM direction (diseaseathons); apiaries inspected as a percentage of apiaries registered on June 30, 1994.

## AFB FOUND DURING PERIOD OF NBA CONTRACTS



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detected were at the lower end of values previously found to be associated with poisoning symptoms. The poisoning occurred after eating extracted honey, not burr comb or comb honey, as in several previous cases.

However, the number of beekeepers who continue to operate outside the law is a cause for concern. In the Coromandel restricted area, 18% of beekeepers, and 41% of beekeepers in the Eastern Bay of Plenty restricted area, failed to apply for a permit.

### 5.0 Export Certification

Improved price prospects for Canadian honey resulted in a strong demand for New Zealand package bees and queens for the Canadian market this past autumn. Approximately 18 tonnes of packages were shipped. All shipments through USA, which followed the protocol negotiated in 1995, transited the United States without problems.

Further efforts were made during the year under Sanitary Phytosanitary (SPS) provisions to obtain agreement from Korean authorities to reduce further the

testing requirements of New Zealand bees. These efforts have not yet proved successful.

Strong demand for honey, particularly from Germany, which began at the end of 1995, has continued. It is disappointing that the high New Zealand dollar has not permitted a significant price increase to be achieved by producers in New Zealand. However these exports have removed what could have been a reasonable surplus from the local market which has resulted in some firming of prices this season.

### 6.0 American Foulbrood and NBA AFB Control Programme

The 1995-96 AFB Control Programme contract with MAF Quality Management (MQM) contained most of the provisions of the 1994-95 contract, including the inspection of 3.9% (987) of registered apiaries by MQM personnel, the provision of inspection lists for NBA volunteer inspectors, counselling of beekeepers with AFB problems, and various other services relating to disease control and reporting. A significant new

component of this season's contract was a trial of the adult bee test for *Bacillus larvae* spores.

Once again this year, the MQM inspection requirement was exceeded, with 1033 apiaries inspected. The average apiary size was also exceeded, with inspected apiaries averaging 8.4 hives (target minimum apiary size = 6 hives). A total of 35 MQM staff and contract beekeepers were used in these inspections (see Table 3).

The NBA executive canvassed branches prior to this year's contract to determine which branches wished to carry out NBA volunteer (diseaseathon) inspections. Four of the 16 branches elected not to be involved in this part of programme. Nevertheless, total apiaries inspected by NBA volunteers during the contract period actually increased by 10%. Part of the increase may be explained by the involvement of three branches in Emergency Disease and Pest Response (EDPR) training exercises, which were held in Tauranga, Palmerston North and

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## BEEKEEPER, APIARY AND HIVE STATISTICS FOR NZ APIARY DISTRICTS AS AT 30 JUNE 1996

Apiary Register Location	Beekeepers			Apiaries			Hives		
	1996	1995	% Change	1996	1995	% Change	1996	1995	% Change
Whangarei	1150	1213	- 5.2%	2687	2898	- 7.3%	28777	29101	- 1.1%
Hamilton	530	551	- 3.8%	2947	2905	+ 1.4%	41270	43742	- 5.7%
Tauranga	511	537	- 4.8%	3414	3531	- 3.3%	47670	50631	- 5.8%
Palmerston North	1330	1352	- 1.6%	4005	4011	- 0.1%	38121	37245	+ 2.4%
Blenheim	463	469	- 1.3%	1935	2037	- 5.0%	21775	22679	- 4.0%
Lincoln	789	735	+ 7.3%	5361	5270	+ 1.7%	58983	58861	+ 0.2%
Invermay	533	552	- 3.4%	4030	4112	- 2.0%	50210	50821	- 1.2%
<b>TOTAL</b>	<b>5306</b>	<b>5409</b>	<b>- 1.9%</b>	<b>24379</b>	<b>24764</b>	<b>- 1.6%</b>	<b>286806</b>	<b>293080</b>	<b>- 2.1%</b>

**PERFORMANCE OF MQM INSPECTORS\***  
**NBA AFB DISEASE CONTROL PROGRAMME**  
**YEAR ENDING 30 JUNE 1996**

Apiary Register Location	MQM Staff	Contract Inspectors	Apiaries Inspected		Hives Inspected	AFB Found (% Inspected)	
			Target**	Completed (%)		Hives (%)	Apiaries (%)
Whangarei	5	3	116	118 (101.7%)	1191	83 (7.0%)	36 (30.5%)
Hamilton	6	0	121	153 (126.4%)	1330	15 (1.1%)	10 (6.5%)
Tauranga	3	1	144	144 (100.0%)	1472	175 (11.9%)	44 (30.6%)
Palmerston Nth	3	3	154	154 (100.0%)	824	117 (14.2%)	26 (16.9%)
Blenheim	3	0	81	81 (100.0%)	958	41 (4.3%)	24 (29.6%)
Lincoln	3	0	207	217 (104.8%)	1774	58 (3.3%)	25 (11.5%)
Invermay	5	0	164	166 (101.2%)	1094	41 (3.7%)	18 (10.8%)
<b>TOTAL</b>	<b>28</b>	<b>7</b>	<b>987</b>	<b>1033 (104.7%)</b>	<b>8643 (8.4)***</b>	<b>530 (6.1%)</b>	<b>183 (17.7%)</b>
<b>1994-95</b>	<b>22</b>	<b>10</b>	<b>979</b>	<b>993 (101.4%)</b>	<b>7489 (7.5)***</b>	<b>506 (6.8%)</b>	<b>188 (18.9%)</b>

\* Includes beekeepers employed by MQM

\*\* Based on programme target of 3.9% of apiaries per Apiary District (June 30, 1994 statistics); 1994-95 programme based on 3.9%.

\*\*\* Average hives per apiary (>6 hives/apiary required)

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Timaru. Apiaries inspected for AFB during these exercises were included in the NBA volunteer inspection figures.

NBA branch inspections totalled 981 apiaries, or 63% of the 1545 required to achieve the target of 6.1% of registered apiaries. A total of 108 letters of appointment were issued to beekeepers wishing to assist in NBA inspections, with 82 letters of appointment actually being used. Letters of appointment were not issued to beekeepers taking part in the three EDPR exercises (Table 4).

The NBA AFB Disease Control Programme therefore resulted in the inspection of 8% of New Zealand's apiaries (MQM: 4.1% + NBA: 3.9%). The target inspection level set by the NBA executive for the programme was 10% of apiaries. A total of 16,044 hives were

inspected (MQM: 8643 + NBA: 7401). This figure represents 5.5% of the beehives in New Zealand registered at the time the contract was let. Compared to 1994-95, 32% more hives were inspected by MQM and the NBA during the 1995-96 contract period.

MAF Quality Management personnel found 530 hives and 183 apiaries infected with AFB (6.1% of hives and 17.7% of apiaries inspected). As directed by the contract, all MQM inspections were targeted whenever possible to areas where there was the greatest likelihood of finding AFB (ie, trouble spots/outbreaks). NBA inspectors found a further 132 hives and 76 apiaries infected (1.8% of hives and 7.7% of apiaries inspected). Beekeepers reported an additional 1079 hives and

626 apiaries to be infected (Table 5).

The overall reported incidence of AFB in New Zealand beehives in 1995-96 was 0.6% of hives and 3.6% of apiaries, down from 0.8% of hives (25% reduction) and 4.2% of apiaries (14% reduction) in 1994-95 (Table 6).

The suggestion has been made that the reduction in AFB incidence in the last five years is due to beekeepers under-reporting AFB hives to enable them to meet disease area freedom export certification requirements. However, the reduction in AFB reported by beekeepers during that time (13.0%) is similar to the reduction in the amount of AFB found by MQM inspectors (13.7%). This tends to indicate that the decrease in reported AFB reflects a real decrease in the incidence of the disease.

**Feed-back from business trips —**

- ✦ **In a Paris hotel elevator:**  
Please leave your values at the front desk.
- ✦ **In a hotel in Athens:**  
Visitors are expected to complain at the office between the hours of 9 and 11am daily.
- ✦ **On the menu of a Swiss restaurant:**  
Our wines leave you nothing to hope for:
- ✦ **In a Bucharest hotel lobby:**  
The lift is being fixed to the next day. During that time we regret you will be unbearable.
- ✦ **In an advertisement by a Hong Kong dentist:**  
Teeth extracted by the latest Methodists.
- ✦ **In a Copenhagen airport:**  
We take your bags and send them in all directions.
- ✦ **In a Budapest zoo:**  
Please do not feed the animals. If you have any suitable food, give it to the guard on duty.

**Tax deductions on your overseas travel expenses**

Many taxpayers dream of an overseas trip subsidised by the tax system, but the IRD is somewhat particular about the costs it will allow as deductible. First, no deduction is available in relation to income from employment. For the self-employed the commissioner recently issued some guidelines. Tour organisers may apply to the department for prior approval of tour and conference deductions. These, however, will be subject to the circumstances of individual taxpayers, who will need to be able to substantiate their particular claims. This may require details of the itinerary, business contacts visited, diversions from the business itinerary for private purposes, and the total cost of the trip. Costs specifically related to business will be deductible and those specifically private will not. As to the basic travel fares, these will be deductible in full or in part, or not at all, according to the trip's mix of business and private purposes. An apportionment may be based on the number of days devoted to each activity.  
**Acknowledgement Denton Donovan**

**Costs of \$50 or less — need they be recorded?**

What record must be kept of goods or services costing \$50 or less? There can be some confusion. For GST purposes the special tax-invoice requirements under section 24 of the Goods and Services Tax Act of 1985 do not apply to items costing \$50 or less. However, this does not discard the need to fulfil general GST and income-tax requirements. As a minimum the Commissioner of Taxes requires a record of the date, description, cost and supplier of all purchases. Supporting documentation such as an invoice or receipt detailing GST content is desirable to support the claim for GST. Without such documentation, and in the event that the supplier was not registered and the purchase was not of second-hand goods, the commissioner may disallow the input tax credit. However, if a non-registered supplier has represented that GST was charged, then the commissioner will allow the purchaser the claim and seek to recover GST from the supplier.  
**Acknowledgement Denton Donovan**