

MAF QUALITY MANAGEMENT (MQM) REPORT TO THE ANNUAL CONFERENCE OF THE NATIONAL BEEKEEPERS' ASSOCIATION OF NEW ZEALAND, WAITANGI, 22-23 JULY 1998

1.0 Organisation and Personnel

During the year the Ministry of Forestry and the Ministry of Agriculture were merged into a new Ministry with the Border Services, and parts of meat inspection and verification being relocated in core MAF.

The rest of MQM remain as separate business units within the new Ministry until 1 November when MQM will become two State Owned Enterprises (SOE's). One SOE, called SOE1 (for the time being), involves meat services while the other, known as SOE2, comprises livestock, plants, animal and plant health laboratories, dairy and apiculture. SOE2 has a staff of over 600 and a turnover of around \$50 million.

The viability of the National Apiculture Business Unit (NABU) within SOE2, will depend on securing contracts from the industry as well as government through the MAF Regulatory Authority (MAFReg). Retraining, relocating or 'right sizing' will be some of the options necessary if NABU's income stream is significantly reduced.

We lost 3 staff during the year with the resignation of Robert Rice from Lincoln and Cliff Van Eaton from Tauranga. Tribute has been paid to these officers in BeeFax December 1997. Sadly we also lost the services of a revered colleague Ted Roberts from Palmerston North who passed away in April 1998. Ted had been active in the bee industry since emigrating with his family from the UK via Uganda in 1970. Ted joined the MAF as an Apicultural Advisory Officer in 1985 and his sudden departure is still being deeply felt by his former colleagues.

2.0 Beekeeping Statistics

2.1 Beekeepers, Apiaries and Hives

There were 5356 registered beekeepers owning 298,921 hives on 23754 apiaries, as at 30 June 1998 (Table 4).

2.2 Honey Production

The total saleable crop was assessed at 8,081 tonnes (27.0 kg/hive) which is a decrease on last years crop of 8,537 tonnes (29.5 kg/hive). The six year average is 8,697 tonnes or 29.7 kg per hive (Table 5). Per hive figures are taken over all registered hives not just the productive ones.

2.3 Live bee exports

There were 25,722 x 1.5 k equivalent packages of bees (each with one queen bee) exported in 1997/98 and 20,815 queen bees.

3.0 Exotic Disease and Pest Response (EDPR) Capability

As reported in the September issue of BeeFax, an outbreak response exercise involving NBA and MQM staff was run from a base in Hamilton during the last week of August 97. A total of 2525 hives in 261 apiaries were inspected by 35 teams over two days. This was a most successful test for our response procedures as it involved 33 MQM staff, 45 beekeepers from the Waikato branch and 11 from the Auckland branch. We were planning to run a similar exercise in the South Island based at Cromwell. Unfortunately this coincided with the rabbit virus response and had to be cancelled.

Restructuring of MAF and the imminent creation of two SOE's from MQM means that outbreak response will be delivered differently in future. These changes are well underway. In future, responses will be managed from the Exotic Disease Response Centre (EDRC) operating out of a permanent facility in Wallaceville. This will remain a core MAF function although in a response, specialist staff will be contracted in. Field work will be managed from a temporary Satellite Headquarters close to the scene of the action.

MQM have the contract to manage the field part of the operation and to provide technical experts to the EDRC. As part of this contract we are to maintain a staff training program and develop new procedures for communication between the EDRC and the Satellite Headquarters. Unfortunately this contract does not include funding for a joint exercise this financial year but we are hopeful that this can be done the following year to test out the new structure.

New Outbreak Response standards and contracts from MAFReg are clearly moving in the direction of requiring all primary industries to make a greater contribution toward any future response affecting their industry. The beekeeping industry is well ahead of any other in this area. However it is probable that MAFReg will require this commitment to be formalised in some sort of contract setting out the responsibilities and contributions of all the parties.

One of the issues that will be part of such discussion is access to the information on the apiary register in the event of a response. Timely response to an exotic disease would not be possible without immediate access to high quality information from this database. Another area that needs to be formalised is accreditation of beekeepers as Authorised Persons to carry out inspections and other activities in a response. Clearly it would make sense to integrate this with accreditation as Authorised Persons under the PMS for AFB inspections. The process of accreditation of Authorised Persons under the Biosecurity Act is more difficult than the process of appointment of Temporary Inspectors under the Apiaries Act which is no longer be possible.

4.0 Surveillance

During the 97/98 season, samples of adult bees were collected from 403 apiaries, by MQM staff for exotic mite testing and 688 were submitted by exporters. In addition 380 larval samples were collected and tested for EFB using PCR technology. Thirty seven suspect EFB and three suspect mites samples were submitted and tested negative

The apiculture surveillance programme funded by MAF Regulatory Authority has two objectives

- To meet the reporting requirements of our trading partners to facilitate trade
- to enable the early detection of a new or exotic disease

In the past, apart from samples submitted by exporters, most sampling and inspection has been done by MQM Officers. Our contract with MAFReg for the current year has changed this emphasis and now has the following components

- Samples submitted as part of the PMS will also be tested for exotic mites and EFB
- MQM will be running a training programme in exotic disease identification, hopefully in conjunction with the PMS training for Approved Beekeepers
- All beekeepers will be sent an exotic disease identification pamphlet
- A declaration relating to exotic disease is to be included as part of the Annual Disease Declaration required by the PMS
- MQM Apicultural Officers will visit suspect apiaries to inspect and collect samples
- Every five years a national survey of 1000 randomly selected apiaries will be undertaken

If this programme is to work successfully it will require close cooperation between the successful PMS contract tenderers and the successor to MQM as well as good access to the apiary register.

5.0 American Foulbrood and NBA AFB Control Programme

The 1997-98 AFB Control Programme contract with MAF Quality Management (MQM) contained most of the provisions of the 1996-97 contract, including the inspection of 4% (975) of registered apiaries by MQM personnel, the provision of inspection lists for NBA volunteer inspectors, counselling of beekeepers with AFB problems, production of an education package on AFB suitable for use at branch field days as well as various other services relating to disease control and reporting. The contract also required MQM to solicit 200 samples of honey from commercial honey packers and arrange to have them tested for *Bacillus larvae*.

MQM inspection requirements were exceeded, with 1007 apiaries inspected. The average apiary size was also exceeded, with inspected apiaries averaging 6.7 hives (target minimum apiary size was 6 hives). A total of 27 MQM staff and contract beekeepers were used in these inspections.

The NBA executive canvassed branches prior to this year's contract to determine which branches wished to carry out NBA volunteer (diseaseathon) inspections. Five of the 16 branches elected not to be involved in this part of the programme.

NBA branch inspections totalled 606 apiaries, or 61% of the 987 required to achieve the target of 4% of registered apiaries. This is 6% better than last year, mainly due to the excellent performance of Waikato and Auckland beekeepers during the EDPR exercise. A total of 134 letters of appointment were issued to beekeepers wishing to assist in NBA

inspections, with 120 letters of appointment actually being used. (Tables 2 and 3)

The total of 6.8% apiaries inspected (MQM: 4.2% + NBA: 2.6%) was short of the 8% inspection level set by the NBA executive. A total of 10,859 hives were inspected (MQM: 6720 + NBA: 4139). This figure represents 3.8% of the beehives in New Zealand registered at the time the contract was let.

MAF Quality Management personnel found 201 hives and 117 apiaries infected with AFB (3.0% of hives and 11.6% 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 78 hives and 46 apiaries infected (1.9% of hives and 7.6% of apiaries inspected). Beekeepers reported an additional 866 hives and 493 apiaries to be infected.

The overall reported incidence of AFB in New Zealand beehives in 1997-98 was 0.38% of hives and 2.8% of apiaries, down from 0.46% of hives and 2.9% of apiaries in 1996-97. The current incidence of AFB in New Zealand is now at its lowest point since 1975.

Two hundred sample jars, packaging and reply paid courier tickets were sent to 48 beekeepers and/or honey packers. To date 136 jars have been returned and tested for AFB. Only 2 samples were found with any AFB contamination. One of these had only one colony of AFB growing which is not regarded as significant but the other culture plate had enough AFB colonies to suggest there was an infection in the production apiary. This proved to be the case on trace back but the beekeeper was already aware of the problem.

5.1 NBA American Foulbrood Disease Control Programme Report

Table 1: AFB Reported or Found by Inspectors to June 30 1998

Apiary District	Apiaries AFB		Hives AFB	
	97/98	96/97	97/98	96/97
Whangarei	61	72	101	118
Hamilton	153	130	266	262
Tauranga	138	147	228	345
Palmerston North	62	96	109	191
Blenheim	86	84	177	148
Lincoln	52	89	93	139
Invermay	104	76	171	131
Total	656 (2.8%)	694 (2.9%)	1145 (0.38%)	1334 (0.46%)

TABLE 2: Performance of MAF Staff and Beekeepers on Contract to MAF

Apiary District	Apiaries			Hives		Staff Used	
	Assigned	Inspected	AFB	Inspected	AFB	MAF	Contract beekeepers
Whangarei	107	131	28	793	28	3	0
Hamilton	118	124	12	872	19	5	0
Tauranga	138	138	32	1231	73	3	1
Palmerston Nth	160	163	8	981	21	2	4
Blenheim	77	73	20	801	30	1	2
Lincoln	214	214	6	1047	7	2	0

Invermay	161	164	11	995	23	4	0
Total	975	1007	117	6720	201	20	7

Table 3: Performance of NBA Inspectors to June 1998

NBA Branch	Apiaries			Hives		Letters of Appointment	
	Assigned	Inspected	AFB	Inspected	AFB	Issued	Used
Far North	0	0	0	0	0	0	0
Northland	0	0	0	0	0	0	0
Auckland	24	17	5	206	7	4	4
Waikato	163	198	20	1686	34	45	45
Bay of Plenty	125	126	9	590	19	17	14
Poverty Bay	63	42	0	198	0	6	6
Hawkes Bay	100	66	0	217	0	13	10
Sthn Nth Is	121	36	3	109	5	4	4
Marlborough	70	50	3	228	5	5	5
Nelson	2	2	0	39	0	0	0
West Coast	23	2	2	35	2	4	1
Canterbury	226	48	4	414	6	28	28
Sth Canterbury	70	19	0	417	0	8	3
North Otago	0	0	0	0	0	0	0
Otago	0	0	0	0	0	0	0
Southland	0	0	0	0	0	0	0
Total	987	606	46	4139	78	134	120

Table 4: New Zealand Beekeeper, Apiaries and Hives Statistics by Apiary District as at 30 June 1998

Apiary Register	Beekeepers			Apiaries			Hives		
Location	<i>1998</i>	<i>1997</i>	<i>% Change</i>	<i>1998</i>	<i>1997</i>	<i>% Change</i>	<i>1998</i>	<i>1997</i>	<i>% Change</i>
Whangarei	1153	1135	+1.6%	2619	2647	- 1.1%	31522	30252	+4.2%
Hamilton	511	522	- 2.1%	2955	2893	+2.1%	48722	39692	+22.8%
Tauranga	536	518	+3.5%	3029	3242	- 6.6%	46852	47964	- 2.3%
Palmerston North	1365	1333	+2.4%	3770	3831	- 1.6%	39460	37055	+6.5%
Blenheim	487	469	+3.8%	1884	1986	- 5.1%	24102	22894	+5.3%
Lincoln	799	790	+1.1%	5024	5294	- 5.1%	58926	58452	+0.8%
Invermay	505	519	- 2.7%	3746	3861	- 3.0%	49337	51149	- 3.5%
TOTAL	5356	5286	+1.3%	23027	23754	- 3.1%	298921	287458	+4.0%

Table 5: New Zealand Honey Production in Tonnes as at 30 June 1998

	Northland	Waikato,	Bay of Plenty,	Hawkes Bay	<i>NORTH ISLAND</i>	Marlborough	Canterbury*	South &	<i>SOUTH ISLAND</i>	NEW ZEALAND	Yield per hive (kg)**
YEAR	Auckland,	King Country,	Coromandel,	Taranaki,		Nelson,	North Otago	Cent Otago,			
	Hauraki	Taupo	Poverty Bay	Manawatu,		Westland	Southland				
	Plains			Wairarapa							
1993	1033	811	958	577	3379	560	1611	1536	3707	7086	23.3
1994	1295	1946	1524	1442	6207	493	2883	2236	5612	11819	40.8
1995	354	962	1426	1200	3942	499	1685	1921	4105	8047	27.5
1996	829	1639	1077	1367	4912	607	1287	1804	3698	8610	30.0
1997	766	829	933	1112	3640	919	2339	1639	4897	8537	29.5
1998	1014	1404	1314	1230	4962	598	1238	1283	3119	8081	27.0
6 yr ave	882	1265	1205	1155	4507	613	1841	1737	4190	8697	29.7

* Includes honeydew											