

**MAF QUALITY MANAGEMENT REPORT TO ANNUAL CONFERENCE  
OF THE NATIONAL BEEKEEPERS' ASSOCIATION OF NEW ZEALAND  
GORE 20-22 JULY 1993**

**1.0 ORGANISATION AND PERSONNEL**

David McMillan was appointed Apicultural Advisory Officer (Invermay) and took up his duties in October. David will have national responsibility for the exotic disease surveillance programme and will carry out district duties including apiary registration and export certification for the former Alexandra apiary district (North Otago, Central Otago and Southland). Matthew Sole will continue his apiary inspector role at Alexandra.

**2.0 BEEKEEPING STATISTICS**

**2.1 Beekeepers, Apiaries and Hives**

There were 5622 registered beekeepers owning 298982 hives of bees as at 30 June 1993. This represents an overall decrease of 1.9% of beekeepers and 1.7% of hives during the last 12 months (Table 1).

**2.2 Honey Production and Exports**

The total 1993 crop was assessed at 7086 tonnes (23.3kg per hive), down significantly from the previous year's production of 9560 tonnes (31.4kg per hive) (Table 2).

Exports of bee products to the year ending December 1992 were worth NZ\$8.6 million, and involved the shipment of 2400 tonnes of bulk, retail and comb honey, honeydew and beeswax (Table 3).

**2.3 Queen and Package Bees**

According to Customs Department figures, New Zealand producers exported queen bees and packages of bees (including queens) worth an estimated NZ\$1.7 million FOB in the 12 months to June 1993 (Table 3). MAF Quality Management issued export certificates for 38,523 queen bees and 29,082 packages of bees (including queens) in 1992-93.

**3.0 AMERICAN FOULBROOD AND NBA AFB CONTROL PROGRAMME**

MAF Quality Management was contracted by the NBA executive to provide an AFB control programme in 1992-93. The contract called for the inspection of 4.2% (1050) of registered apiaries by MAF personnel, the provision of inspection lists for NBA inspectors and diseaseathons, publicity and extension activities, the counselling of beekeepers on bee disease issues, and the preparation of reports and disease statistics.

The MAF inspection component of this contract was exceeded, with 1062 apiaries inspected. The target average hives per apiary (6/apiary) was also exceeded, with an average of 9.3 hives per apiary inspected. A total of 31 MAF Quality Management staff and 15 contract beekeepers were used in these inspections (Table 4).

NBA branch inspections totalled 901 apiaries, or 63% of the 1450 necessary to achieve the target set by the NBA executive of 5.8% of registered apiaries. There was a variability in NBA inspection commitment throughout the country. Nevertheless, 4 of the 13 NBA branches either met or exceeded their target of district apiaries inspected. A further one branch came within 10% of achieving this target. A total of 243 warrants were issued to beekeepers who wished to assist in NBA inspections, with 110 warrants actually being used (Table 5).

MAF Quality Management inspectors (and beekeepers contracted to MAF) found 771 hives infected with American foulbrood, up 665 on the amount found during the limited inspection programme in 1991-92. This increased amount of AFB found is similar to that predicted in the MAF report presented to the NBA annual conference in 1992. NBA inspectors found a further 217 hives infected with American foulbrood, a decrease of 13 from the previous year. The total number of hives infected with AFB reported by beekeepers was 1675, 1149 (41%) less than reported in 1991-92 (Table 6).

The NBA AFB Disease Control Programme therefore resulted in the inspection of 7.8% of New Zealand's apiaries (MAF: 4.2% + NBA: 3.6% = 7.8%). The target inspection level set by the NBA executive for the programme was 10% of apiaries. A total of 15,716 hives were inspected (MAF: 9888; NBA: 5828). This figure represents 5.3% of the registered bee hives in New Zealand. The overall reported disease incidence in New Zealand bee hives in 1992-93 was 0.9% of hives and 5.1% of apiaries, down 0.1% and 0.9% respectively on the previous year (Table 7).

#### **4.0 EXOTIC DISEASE AND PEST RESPONSE (EDPR) CAPABILITY**

The Honey Bee EDPR Programme, which continues to be fully funded by central government, increased in capability during the year. A total of 45 MAF personnel received training as Field Team Leaders (FTL) and a further 15 staff received training in Emergency Headquarters (EHQ) roles. Staff in addition to those from the Apiculture Unit will be used in the EHQ to ensure that adequate human resources are available in the case of an exotic bee disease outbreak. A procedures manual has now been approved by the EDPR contractor (MAF Regulatory Authority) and will form the basis for all subsequent EDPR training, exercises, and actual emergencies.

A response one (initial not-negative sample) alert took place in the Waihi area in November 1992. All registered apiaries within a 3km radius of the suspect site were inspected by MAF personnel and all other hives belonging to the beekeeper were quarantined on their sites. A subsequent culture of the

Table 4

**PERFORMANCE OF MAF INSPECTORS\*  
NBA AFB DISEASE CONTROL PROGRAMME  
YEAR ENDING 30 JUNE 1993**

Apiary Register Location	MAF Staff	Contract Inspectors	Apiaries Inspected		Hives Inspected	AFB Found (% Inspected)	
			Target**	Completed (%)		Hives (%)	Apiaries (%)
Whangarei	3	3	128	132 (103.1)	1078	46 (4.3)	26 (19.7)
Hamilton	4	5	130	134 (103.1)	1198	64 (5.3)	36 (26.9)
Tauranga	4	1	149	149 (100.0)	2404	184 (7.7)	48 (32.2)
Palmerston Nth	3	6	165	154 (93.3)	1160	254 (21.9)	36 (23.4)
Blenheim	4	0	83	86 (103.6)	1104	63 (5.7)	26 (30.2)
Lincoln	6	0	207	222 (107.2)	1536	56 (3.6)	31 (14.0)
Invermay***	7	0	188	185 (98.4)	1408	104 (7.4)	51 (27.6)
<b>TOTAL</b>	<b>31</b>	<b>15</b>	<b>1050</b>	<b>1062 (101.1%)</b>	<b>9888 (9.3)+</b>	<b>771 (7.8%)</b>	<b>254 (23.9%)</b>

\* Includes beekeepers employed by MAF

\*\* Based on programme target of 4.2% of apiaries per Apiary District

\*\*\*Previously Alexandra

+ Average hives per apiary (>6 hives/apiary required)

Table 5

**PERFORMANCE OF VOLUNTEER INSPECTORS  
NBA AFB DISEASE CONTROL PROGRAMME  
YEAR ENDING 30 JUNE 1993**

NBA Branch	Warrants Issued	Warrants Used	Apiaries Inspected		Hives Inspected	AFB Found (% Inspected)	
			Target*	Completed (%)**		Hives (%)	Apiaries (%)
Northland	30	3	88	18 (20.5)	53	2 (3.8)	2 (11.1)
Auckland	25	3	89	43 (48.3)	533	2 (0.4)	1 (2.3)
Waikato	23	0	180	0 (00.0)	0	-- --	-- --
Bay of Plenty	32	13	125	128 (102.4)	1222	63 (5.2)	17 (13.3)
Poverty Bay	13	11	80	80 (100.0)	732	66 (9.0)	19 (23.8)
Hawkes Bay	16	8	76	59 (77.6)	219	7 (3.2)	3 (5.1)
S'thern North Island	16	12	151	119 (78.8)	318	6 (1.9)	5 (4.2)
Marlborough	9	6	40	48 (120.0)	290	4 (1.4)	2 (4.2)
Nelson	15	5	49	31 (63.3)	111	1 (0.9)	1 (3.2)
West Coast	6	3	25	14 (56.0)	75	0 (0.0)	0 (0.0)
Canterbury	18	16	196	145 (74.0)	1081	44 (4.1)	15 (10.3)
Sth Canterbury	7	6	91	45 (49.5)	210	7 (3.3)	6 (13.3)
North Otago	4	4	54	49 (90.7)	350	4 (1.1)	2 (4.1)
Otago	15	6	136	49 (36.0)	208	6 (2.9)	5 (10.2)
Southland	14	14	70	73 (104.3)	426	5 (1.2)	3 (4.1)
<b>TOTAL</b>	<b>243</b>	<b>110</b>	<b>1450</b>	<b>901 (62.1%)</b>	<b>5828</b>	<b>217 (3.7%)</b>	<b>81 (9.0%)</b>

\* Based on programme target of 5.8% of apiaries in Apiary Districts

\*\*As reported to MAF by Branch Disease Control Coordinators

Table 6

**APIARIES AND HIVES WITH AMERICAN FOULBROOD  
FOUND DURING NBA DISEASE CONTROL PROGRAMME OR REPORTED TO MAF BY BEEKEEPERS  
TO 30 JUNE 1993  
(1992 FIGURES IN BRACKETS)**

MAF Apiary Register Location	Apiaries Found with AFB:				Hives Found with AFB:			
	By MAF Inspectors*	By Volunteer Inspectors**	Reported by Beekeepers	Totals	By MAF Inspectors	By Volunteer Inspectors	Reported by Beekeepers	Totals
Whangarei	26 (5)	3 (17)	115 (127)	144 (149)	46 (20)	4 (38)	250 (249)	300 (307)
Hamilton	36 (12)	0 (0)	177 (305)	213 (317)	64 (46)	0 (0)	280 (735)	344 (781)
Tauranga	48 (8)	36 (40)	191 (331)	275 (379)	184 (37)	129 (104)	405 (695)	718 (836)
Palmerston Nth	36 (4)	8 (1)	76 (121)	120 (126)	254 (3)	13 (6)	75 (258)	342 (267)
Blenheim	26 (0)	3 (3)	116 (166)	145 (169)	63 (0)	5 (4)	205 (374)	273 (378)
Lincoln	31 (0)	21 (15)	134 (167)	186 (182)	56 (0)	51 (77)	223 (255)	330 (332)
Invermay***	51 (0)	10 (1)	132 (165)	193 (166)	104 (0)	15 (1)	237 (258)	356 (259)
<b>Total</b>	<b>254 (29)</b>	<b>81 (77)</b>	<b>941 (1382)</b>	<b>1276 (1488)</b>	<b>771 (106)</b>	<b>217 (230)</b>	<b>1675 (2824)</b>	<b>2663 (3160)</b>

\* Inspectors employed by MAF (including beekeepers)

\*\* Beekeeper inspectors under MAF direction (diseaseathons)

\*\*\*Previously Alexandra

Table 7

**INCIDENCE OF AMERICAN FOULBROOD IN APIARY DISTRICTS TO 30 JUNE 1993  
(1992 FIGURES IN BRACKETS)**

MAF Apiary Register Location	Diseased Apiaries % of Total District Apiaries		Diseased Hives % of Total District Hives		Apiaries Inspected NBA Programme*	
	Number	%	Number	%	Number	%
Whangarei	144 (149)	4.7 (4.9)	300 (307)	1.0 (1.0)	193 (186)	6.4 (6.1)
Hamilton	213 (317)	7.1 (10.4)	344 (781)	0.8 (1.7)	134 (17)	4.5 (0.6)
Tauranga	275 (379)	7.7 (10.6)	718 (836)	1.4 (1.6)	357 (250)	9.9 (7.0)
Palmerston North	120 (126)	3.0 (3.2)	342 (267)	0.9 (0.7)	332 (75)	8.4 (1.9)
Blenheim**	145 (169)	7.1 (8.3)	273 (378)	1.2 (1.6)	179 (115)	8.8 (5.6)
Lincoln	186 (182)	3.6 (3.7)	330 (332)	0.6 (0.6)	412 (57)	8.0 (1.2)
Invermay***	193 (166)	4.4 (3.8)	356 (259)	0.7 (0.5)	356 (36)	8.1 (0.8)
<b>TOTAL</b>	<b>1276 (1488)</b>	<b>5.1% (6.0%)</b>	<b>2663 (3160)</b>	<b>0.9% (1.0%)</b>	<b>1963 (736)</b>	<b>7.8% (2.9%)</b>

\* Includes both MAF and beekeeper inspectors, whether employed by MAF or under MAF direction (diseaseathons).

\*\* Blenheim 1992 figures do not include emergency response inspections, November 1991

\*\*\*Previously Alexandra