

2.2 Honey Production

The total saleable crop for 1994 was assessed at 11819 tonnes (40.8 kg per hive), a significant increase over the previous year's crop of 7086 tonnes (23.3 kg per hive) and the previous 6 year average of 7698 tonnes or 24.3 kg per hive (Table 2).

3.0 AMERICAN FOULBROOD AND NBA AFB CONTROL PROGRAMME

MAF Quality Management was once again contracted to provide an AFB control programme for the NBA in 1993-94. The contract, which was reduced by \$20,000 from the previous year, called for the inspection of 3.9% (973) of registered apiaries by MAF personnel, the provision of inspection lists for NBA inspectors and diseaseathons, and various other services relating to disease control and reporting. Significant cost savings were made in the area of MAF Quality Management's involvement in NBA branch inspection activities, resulting in a smaller reduction in MAF inspections (7%), compared to the overall reduction in the contract price (17%).

The MAF inspection component of the contract was exceeded, with 1004 apiaries inspected. The target average hives per apiary (6/apiary) was also exceeded, with an average of 8.1 hives per apiary inspected. A total of 41 MAF Quality Management staff and contract beekeepers were used in these inspections (Table 3).

NBA branch inspections totalled 867 apiaries, or 57% of the 1522 necessary to achieve the target set by the NBA executive of 6.1% of registered apiaries. Two of the 13 NBA branches carrying out inspection programmes either met or exceeded their target of district apiaries inspected. A total of 194 letters of appointment were issued to beekeepers who wished to assist in NBA inspections, with 128 letters of appointment actually being used. This represented a 16% increase in participation over 1992-93 (Table 4).

The NBA AFB Disease Control Programme therefore resulted in the inspection of 7.5% of New Zealand's apiaries (MAF: 4.0% + NBA: 3.5% = 7.5%). The target inspection level set by the NBA executive for the programme was 10% of apiaries. A total of 13,427 hives were inspected (MAF: 8170; NBA: 5257). This figure represents 4.6% of beehives currently registered in New Zealand.

MAF Quality Management inspectors (and beekeepers contracted to MAF) found 532 hives infected with American foulbrood (6.5% of hives inspected). NBA inspectors found a further 192 hives (3.7% of hives inspected). The total number of hives infected with AFB reported by beekeepers was 1938, up 263 (16%) on 1992-93 (Table 5).

The overall reported disease incidence in New Zealand beehives in 1993-94 was 0.9% of hives and 5.1% of apiaries, the same as in 1992-93 (Table 6).

Table 3

PERFORMANCE OF MAF INSPECTORS*
NBA AFB DISEASE CONTROL PROGRAMME
YEAR ENDING 30 JUNE 1994

Apiary Register Location	MAF Staff	Contract Inspectors	Apiaries Inspected		Hives Inspected	AFB Found (% Inspected)		
			Target**	Completed (%)		Hives (%)	Apiaries (%)	
Whangarei	2	0	120	120 (100.0)	881	103 (11.7)	13 (10.8)	
Hamilton	3	1	119	145 (121.8)	1112	50 (4.5)	18 (12.4)	
Tauranga	3	0	139	141 (101.4)	1812	47 (2.6)	27 (19.1)	
Palmerston Nth	3	1	153	151 (98.7)	978	65 (6.6)	27 (17.9)	
Blenheim	9	0	80	119 (148.8)	812	51 (6.3)	19 (16.0)	
Lincoln	8	0	193	184 (95.3)	1212	93 (7.7)	30 (16.3)	
Invermay	9	2	169	144 (85.2)	1363	123 (9.0)	32 (22.2)	
TOTAL	37	4	973	1004 (103.2%)	8170	(8.1)***	532 (6.5%)	166 (16.5%)
1992-93	31	15	1050	1062 (101.1%)	9888	(9.3)***	771 (7.8%)	252 (23.9%)

* Includes beekeepers employed by MAF

** Based on programme target of 3.9% of apiaries per Apiary District (June 30, 1992 statistics); 1992-93 programme based on 4.2%.

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

Table 4

**PERFORMANCE OF VOLUNTEER INSPECTORS
NBA AFB DISEASE CONTROL PROGRAMME
YEAR ENDING 30 JUNE 1994**

NBA Branch	Warrants Issued	Warrants Used	Apiaries Inspected			Hives Inspected	AFB Found (% Inspected)			
			Target*	Completed	(%)**		Hives (%)		Apiaries (%)	
Far North	0	0	31	0	(0.0)	0	0	--	0	--
Northland	10	10	62	35	(56.5)	177	26	(14.7)	7	(20.0)
Auckland	14	1	94	3	(3.2)	21	2	(9.5)	3	(100.0)
Waikato	32	19	186	86	(46.2)	422	15	(3.6)	11	(12.8)
Bay of Plenty	20	13	147	147	(100.0)	1196	30	(2.5)	13	(8.8)
Poverty Bay	8	6	71	49	(69.0)	334	7	(2.1)	6	(12.2)
Hawkes Bay	12	12	60	55	(91.7)	250	6	(2.4)	6	(10.9)
S'thern North Island	7	7	179	40	(22.3)	106	4	(3.8)	2	(5.0)
Marlborough	7	7	48	38	(79.2)	261	26	(10.0)	10	(26.3)
Nelson	12	12	54	78	(144.4)	535	6	(1.1)	8	(10.3)
West Coast	2	0	23	0	(0.0)	0	0	--	0	--
Canterbury	31	18	209	159	(76.1)	1260	53	(4.2)	31	(19.5)
Sth Canterbury	11	8	93	58	(62.4)	268	4	(1.5)	2	(3.4)
North Otago	0	0	53	0	(0.0)	0	0	--	0	--
Otago	15	9	137	88	(64.2)	330	10	(3.0)	5	(5.7)
Southland	13	6	75	31	(41.3)	97	3	(3.1)	3	(9.7)
TOTAL	194	128	1522	867	(57.0%)	5257	192	(3.7%)	107	(12.3%)
1992-93	243	110	1450	901	(62.1%)	5828	217	(3.7%)	81	(9.0%)

* Based on programme target of 6.1% of apiaries in Apiary Districts (June 30, 1992 statistics); 1992-93 programme based on 5.8%

**As reported to MAF by Branch Disease Control Coordinators

Table 5

**APIARIES AND HIVES WITH AMERICAN FOULBROOD
FOUND DURING NBA DISEASE CONTROL PROGRAMME OR REPORTED TO MAF BY BEEKEEPERS
TO 30 JUNE 1994
(1993 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	13 (26)	10 (3)	94 (115)	117 (144)	103 (46)	28 (4)	155 (250)	286 (300)
Hamilton	18 (36)	11 (0)	196 (177)	225 (213)	50 (64)	15 (0)	283 (280)	348 (344)
Tauranga	27 (48)	19 (36)	187 (191)	233 (275)	47 (184)	37 (129)	318 (405)	402 (718)
Palmerston Nth	27 (36)	8 (8)	62 (76)	97 (120)	65 (254)	10 (13)	86 (75)	161 (342)
Blenheim	19 (26)	18 (3)	140 (116)	177 (145)	51 (63)	32 (5)	460 (205)	543 (273)
Lincoln	30 (31)	33 (21)	197 (134)	260 (186)	93 (56)	57 (51)	355 (223)	505 (330)
Invermay	32 (51)	8 (10)	133 (132)	173 (193)	123 (104)	13 (15)	281 (237)	417 (356)
Total	166 (254)	107 (81)	1009 (941)	1282 (1276)	532 (771)	192 (217)	1938 (1675)	2662 (2663)

* Inspectors employed by MAF (including beekeepers)

** Beekeeper inspectors under MAF direction (diseaseathons)

Table 6

**INCIDENCE OF AMERICAN FOULBROOD IN APIARY DISTRICTS TO 30 JUNE 1994
(1993 FIGURES IN BRACKETS)**

MAF Apiary Register	Diseased Apiaries/ % of Total District Apiaries		Diseased Hives/ % of Total District Hives		Apiaries Inspected NBA Programme*	
	Number	%	Number	%	Number	%
Whangarei	117 (144)	3.9 (4.7)	286 (300)	0.9 (1.0)	158 (193)	5.1 (6.4)
Hamilton	225 (213)	7.2 (7.1)	348 (344)	0.8 (0.8)	231 (134)	7.3 (4.5)
Tauranga	233 (275)	6.3 (7.7)	402 (718)	0.8 (1.4)	337 (357)	9.4 (9.9)
Palmerston North	97 (120)	2.4 (3.0)	161 (342)	0.4 (0.9)	246 (332)	6.3 (8.4)
Blenheim	177 (145)	8.9 (7.1)	543 (273)	2.7 (1.2)	235 (179)	11.7 (8.8)
Lincoln	260 (186)	4.9 (3.6)	505 (330)	0.9 (0.6)	401 (412)	7.5 (8.0)
Invermay	173 (193)	4.1 (4.4)	417 (356)	0.8 (0.7)	263 (356)	6.0 (8.1)
TOTAL	1282 (1276)	5.1 (5.1)	2662 (2663)	0.9 (0.9)	1871 (1963)	7.5 (7.8)

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