1.0 MAF QUALITY MANAGEMENT REPORT TO THE ANNUAL CONFERENCE OF THE NATIONAL BEEKEEPERS' ASSOCIATION OF NEW ZEALAND : RAROTONGA 9-11 JULY 1990

2.0 ORGANISATION

The National Apicultural Business Unit (NABU) became part of the Animals Business during the year instead of the Plants Business. This is mainly an administrative re-organisation and no changes in business activities were required.

3.0 STAFFING: NATIONAL APICULTURE BUSINESS UNIT

Clive Vardy, Apicultural Advisory Officer, Gore, resigned during the year and Matthew Sole, Field Officer, Alexandra, assumed some of the regulatory roles formerly held by Vardy. A decision was made by Regional Management South Region to advertise for an Apiculture Services Manager to be based at Lincoln. To date the position has not been advertised.

Apiary registers and systems were maintained and disease control programmes operated by Apicultural Advisory Officers at Whangarei (Derek Bettesworth) Hamilton (Murray Reid) Tauranga (Andrew Matheson) and Palmerston North (Ted Roberts). Field Officers were employed at Ashburton (Mike Mcphillips) and Alexandra (Matthew Sole) and a Livestock Officer at Blenheim (Dave Grueber).

Brian Milne (Lynfield) continued to provide a disease diagnostic and queen quality evaluation service.

4.0 BEEKEEPING STATISTICS

4.1 Beekeepers, Apiaries and Hives

There were 6210 beekeepers owning 318203 hives of bees at 31 May 1990. (Figure 1). Beekeeper numbers declined by 485 or 7.2% over last year and hive numbers declared also declined by 12135 or 3.7%. There is no single explanation for this trend.

4.2 Honey Production

The total honey crop was assessed at 8752 tonnes (27.5 kg/hive) compared with last years crop of 5752 tonnes, (17.4 kg/hive) and the six year average of 8688 tonnes (26.7 kg/hive) (Figure 11).

Prices remained similar to last seasons and realised $1.70 - 2.20 kg with most early sales falling in the $1.80 - 200/kg range.

For the year to December 1989 New Zealand exported over $4 million worth of honey and beeswax to over 22 different countries (Fig 111). The major markets were Germany, Japan, the UK, Australia, Taiwan and the Netherlands.

4.3 American Foulbrood Disease (AFB)

The 3831 diseased hives found by MAF, or reported by beekeepers, was an increase of 155 over last season. The number of infected apiaries also increased by 130 from 1530 to 1660. Fig 1V. The increase in diseased apiaries can be traced to hive management for kiwifruit pollination and undue levels of disease in hives owned by a few irresponsible commercial and semi-commercial beekeepers. MAF took a prosecution as a test case against one of these beekeepers but a trial date has yet to be set. Over 216 MAF officers and beekeepers appointed as temporary inspectors again examined hives for AFB. These teams inspected just under 15000 hives (4.8%) in 1966 apiaries (8.0%) and found 664 hives of disease. Figure V.

Beekeepers again proved willing to offer their vehicles and time to inspect hives. Working as teams on "disease-athons" appears to be the most effective system and will need to be continued if the target of 10% of apiaries inspected is to be achieved.

4.4 Queen and Package Bee Exports

A second shipment of drone semen was imported from the Western Australian Department of Agriculture's Bee Breeding Programme. The semen tested negative for exotic diseases. The inseminated stock were kept in a MAF controlled quarantine apiary before being cleared for release.

New Zealand producers exported 30743 queen bees worth NZ $300,000 (fob) and 9594 1 kg equivalent packages worth NZ $320,000 (fob). Most of these went to Canada but shipments were also made to the UK, Japan, France, Israel, Portugal and to some Pacific Islands. Package bee exports were the same as last year but queen bee numbers were down by 10,000.

5.0 POLLINATION

The largest pollination group, the Kiwifruit Pollination association, moved to a systems audit as well as an end point hive check. Based on a questionnaire, personal knowledge of the individuals operation and statistical tables MAF prepared inspection specifications for the KPA's own hive auditors. This meant that beekeepers with a poor, suspect or unknown business and hive management system had more of their hives examined than those with a good record. MAF also continued to audit hive quality on a contract basis for both beekeepers and growers. In all cases permission to check the hives was obtained from the beekeepers concerned.

Beekeepers and growers in Canterbury began to set hive standards and audit procedures for berry and pip fruit pollination. An estimated 1500-2000 hives were placed in orchards in Canterbury last season.

The use of sugar feeding, Hicane (cyanamide) and artificial pollination continued in kiwifruit orchards. Growers required even more hives because of Hicane use and some beekeepers attempted to use the same hives twice, firstly in Hicane blocks for 6-10 days then into later flowering orchards. This operation wasn't always successful and showed that negotiation and carefully worded contracts between beekeeper and grower are essential. Where hives were used twice, beekeepers heavily discounted each "drop" and this caused some concern amongst other pollinators.

Beekeepers acting as brokers continued to provide a useful service and one fulltime professional broker employed his own hive auditing system independent of the Kiwifruit Pollination Association and MAF.

6.0 MAF SYSTEMS

6.1 Exotic Bee Disease Response

Work continued on writing manuals, job cards and specifications for regions to deliver this service. MAF expects to control or eradicate any exotic disease by using a mobile task force of MAF officers and teams of local beekeepers. Thorough training of these people is continuing.

6.2 Apiary Registration and Inspection Fee (ARIF)

This fee was to be collected by the beekeeping industry to fund MAF's activities in registration and hive inspection. The proposed fee of $20 for the first apiary and $6 for each other apiary owned was to be levied on all beekeepers under the Commodities Levy Bill. This Bill did not get introduced to the House and is not expected to be passed until the New Year.

MAF will continue to fund the registration costs but cost recovery for hive inspections will require further negotiation.

A computer programme was developed so the apiary register programme could be used to administer the collection of the fee.

FIG II NEW ZEALAND HONEY PRODUCTION, IN TONNES

AS AT 31 MAY ANNUALLY

Year	Northland, Auckland, Hauraki Plains	Waikato, King Country, Taupo	Bay of Plenty, Coromandel, Poverty Bay	Hawkes Bay, Taranaki, Manawatu, Wairarapa	NORTH ISLAND	Marlborough, Nelson, Westland	*Canterbury / N. Otago	South & Central Otago, Southland	SOUTH ISLAND	New Zealand	Yield per Hive (kgs)
1985	1502	1697	1550	1088	5837	685	1650	2142	4477	10,314	33.3
1986	1498	1492	1150	887	5027	871	950	2623	4444	9471	29.0
1987	1122	1506	1450	1012	5090	966	1070	2965	5001	10,091	29.7
1988	480	1298	976	834	3588	807	1503	1850	4160	7748	23.1
1989	379	730	401	530	2040	621	1290	1801	3712	5752	17.4
1990	660	1154	1296	894	4004	471	2774	1503	4748	8752	27.5
6 year average	940	1304	1137	874	4255	737	1540	2147	4424	8688	26.7

* Includes 342 tonnes honeydew

FIG III EXPORT FIGURES FOR HONEY, HONEYDEW AND BEESWAX

FOR THE YEAR TO DECEMBER 1989

PRODUCT	TONNES	NZ$ (FOB)	NO OF COUNTRIES	$/KG
Bulk honey	582.25	1405730	10	2.41
Retail honey	264.04	1005699	22	3.81
Comb honey	162.30	1085922	10	6.69
Honeydew	31.34	106997	8	3.41
TOTAL Honey	1039.93	3604348		
Bees Wax	85.51	457895	11	5.36
Total Honey and Wax Exports		$4062243		

FIG IV AMERICAN FOULBROOD DISEASE LEVELS

IN APIARY DISTRICTS TO 31 MAY 1990

(1989 FIGURES IN BRACKETS)

Apiary District	Diseased Apiaries				Diseased Hives				% Apiaries Inspected by MAF Inspectors	
	No.		%		No.		%.			
	1990	1989	1990	1989	1990	1989	1990	1989	1990	1989
Whangarei/ Auckland	175	(235)	5.0	(5.6)	521	(643)	1.5	(1.5)	4.7	(10.3)
Hamilton	390	(293)	12.5	(9.6)	641	(491)	1.3	(1.1)	14.6	(8.7)
Tauranga	362	(358)	9.9	(9.4)	863	(681)	1.6	(1.1)	7.0	(5.1)
Palmerston Nth	136	(184)	3.3	(4.4)	253	(732)	0.6	(1.9)	7.7	(5.6)
Nelson	242	(160)	11.6	(7.2)	497	(427)	2.0	(1.7)	10.4	(13.0)
Christchurch	209	(147)	3.6	(2.9)	694	(421)	1.1	(0.7)	5.6	(6.1)
Gore	146	(153)	3.3	(3.4)	362	(281)	0.6	(0.5)	6.3	(7.8)
Total	1660	(1530)	7.0	(5.6)	3831	(3676)	1.2	(1.1)	8.0	(8.3)

FIG V NUMBER OF APIARIES AND HIVES WITH AMERICAN FOULBROOD DISEASE FOUND BY MAF OR REPORTED BY BEEKEEPERS TO 31 MAY 1990 (1989 FIGURES IN BRACKETS)

	No. Apiaries	No. Hives	% Apiaries Inspected	% Hives Inspected
Inspected by MAF	889	8728		
Inspected by beekeeper inspectors	1077	6040		
Total Inspected (216 inspectors)	1966	14768	8.0	4.8
AFB found by MAF or beekeeper inspectors	181 (191)	644 (438)		
AFB Reported by Beekeepers	1479 (1348)	3167 (3228)		
Total AFB	1660 (1530)	3831 (3676)		

NEW ZEALAND BEEKEEPER, APIARY & HIVE STATISTICS BY APIARY DISTRICTS AS AT MAY 31 1990

	1-5 Hives		
	Beekeepers	Apiaries	Hives
Whangarei	1176	1324	2538
Hamilton	417	479	967
Tauranga	365	426	855
Palmerston North	923	1019	2088
Nelson	356	418	761
Christchurch	479	585	1040
Gore	337	384	742
NEW ZEALAND	4053	4635	8991

6-50 Hives		
Beekeepers	Apiaries	Hives
334	747	4696
179	395	2646
191	397	3313
398	867	5750
134	368	2192
189	526	3083
153	340	2468
1578	3640	24148

51-250 Hives		
Beekeepers	Apiaries	Hives
41	379	5116
32	321	4294
56	496	7099
40	459	4449
31	291	3496
63	633	7499
48	539	5794
311	3118	37747

	251-500 Hives		
	Beekeepers	Apiaries	Hives
Whangarei	14	265	5364
Hamilton	7	154	2857
Tauranga	15	317	5322
Palmerston North	15	489	5656
Nelson	13	348	4905
Christchurch	22	401	7542
Gore	116	486	5932
NEW ZEALAND	102	2460	37578

501-1000 Hives		
Beekeepers	Apiaries	Hives
10	492	8389
11	390	8175
16	600	13219
9	353	5647
11	436	8082
13	790	9533
22	1070	15952
92	4131	68997

More than 1000 Hives		
Beekeepers	Apiaries	Hives
5	369	7879
13	1368	28657
13	1428	24956
6	877	16138
3	191	4277
17	1913	30980
17	1656	27855
74	7802	140742

	1 - 50 Hives		
	Beekeepers	Apiaries	Hives
Whangarei	1510	2071	7234
Hamilton	596	874	3613
Tauranga	556	823	4168
Palmerston North	1321	1886	7838
Nelson	490	786	2953
Christchurch	668	1111	4123
Gore	490	724	3210
NEW ZEALAND	5631	8275	33139

More than 50 Hives		
Beekeepers	Apiaries	Hives
70	1505	26748
63	2233	43983
100	2841	50596
70	2178	31890
58	1266	20760
115	3737	55554
103	3751	55533
579	17511	285064

Totals		
Beekeepers	Apiaries	Hives
1580	3576	33982
659	3107	47596
656	3664	54764
1391	4064	39728
548	2052	23713
783	4848	59677
593	4475	58743
6210	25786	318203