

It should be noted that although the surveillance programme is closely linked to the PMS for the efficiencies to be gained, all of the costs of the exotic disease surveillance programme, including the exotic disease brochure, the cost of the mail out containing the DECA and brochure, a contribution toward the operation of the apiary register and all of the laboratory testing for exotics, was funded from the MAF surveillance budget not the NBA PMS budget

5.0 AFB Pest Management Strategy

5.1 Apiary Register

The Register costs an estimated \$40,550 to operate for a year, although the true costs of hardware maintenance and upgrading and programming costs are not fully covered. The cost of \$40,550 was to be recovered as follows:

- \$21,250 from the NBA
- \$16,000 MAF Surveillance and EDPR
- \$3,300 from an additional fee on export apiary clearances

There have been a number of allegations of an inaccurate database and AgriQuality is working hard to correct these. It was expected, that a move to an apiary levy and a conformity management scheme involving all beekeepers, would cause more problems than in the past and this has proven to be the case. Conflicts have arisen where information, allegedly supplied to AgriQuality by beekeepers, is different to what is recorded in the database. We are working with the NBA and beekeepers to resolve these issues.

5.2 Annual Disease Returns (ADR's)

These were mailed to every beekeeper on April 20th this year. The completed ADR's were to be returned by 1st June but of the 5,200 mailed out, reminder notices had to be sent to 2,738 beekeepers. The small number of returns by the due date was disappointing given the number of reminders put in the New Zealand Beekeeper magazine, on the Beekeeper Homepage and given at NBA field days and meetings etc. The NBA has to decide on a policy, whether to send a notice to beekeepers who have failed to comply by 1st July, and what actions to take if beekeepers are in default of the notice conditions.

5.3 PMS Inspection and Audit Services

AgriQuality was able to warrant beekeepers up to 1st November, but on becoming an SOE, it lost this authority and no beekeepers were engaged by AgriQuality after this date to inspect hives. The Ministry of Agriculture & Forestry (MAF) is now responsible for issuing warrants to both AgriQuality staff as Authorised Persons and to beekeepers as Approved Persons. The accreditation and training requirements for beekeepers to become Approved Persons is still being developed by the NBA and MAF.

5.3.1 Field Inspections

AgriQuality was contracted to inspect up to 280 apiaries as well as organise or supervise Diseaseathons. The results of the inspection programme are in Table 3. AgriQuality inspected 289 apiaries and 1482 hives and found 48 hives of AFB in 26 apiaries. Beekeepers inspected a

further 927 hives in 90 apiaries and found 19 hives of AFB

5.3.2 Honey & Bee Sampling Programme

AgriQuality was required to arrange for the collection of 500 honey samples from commercial beekeepers (Table 1) and 500 bee samples from non-commercial beekeepers (Table 2). The number of samples per Apiary District was allocated on the number of beekeepers who had had AFB colonies the previous season. Beekeepers were selected within each district on the basis of previous AFB history or geographic location. 1069 jars were sent to 482 beekeepers.

Reminder notices were published in the New Zealand Beekeeper and the Beekeeper Homepage and further requests were made at field days and NBA meetings and by individual contact and a personal letter to defaulters. Despite all this, only 300 beekeepers (60%) sent in the requested samples. Some samples are still trickling in but as at 30th June 1999, 664 samples (62%) out of 1,069 had been received and tested at the Hort & Research laboratory at Ruakura. An additional 22 samples of suspect larvae or comb have also been sent in by AgriQuality or beekeepers as approved samples and there are 38 samples on hand waiting to be tested.

Of the 375 samples of honey that have been tested, 12 were positive but only 3 showed moderate numbers of AFB colonies on the culture plates (range 1-40). Of the 289 samples of bees tested, 23 were positive (range 1-1000), with 9 showing levels of AFB colonies that should indicate a visible infection in the field. Seven cases of visible AFB have so far been found or reported

A number of these cases were inspected in the late summer (February-March), but no signs of AFB were found. In other instances the hives were found to have visible AFB on subsequent inspections during late April and May. These apiaries will be marked for further inspection in the spring.

Table:1 Summary of Testing Honey Samples of AFB to 30th June 1999

No. beekeepers sent jars	No. jars sent	Beekeepers returning samples		Samples returned		* No. samples positive on culture	No. AFB hives in field
		No.	%	No.	%		
162	579	108	67	375	65	12	1

Table:2 Summary of Testing Bee Samples for AFB to 30th June 1999

No. beekeepers sent jars	No. jars sent	Beekeepers returning samples		Samples returned		** No. samples positive on culture	No. AFB hives in field
		No.	%	No.	%		
320	490	192	60	289	59	23	7

* The No. of AFB colonies on the "honey" plates ranged from 1-40

** The No. of AFB colonies on the "bee" plates ranged from 1-1000

In addition to the samples above, 22 suspect larvae or comb samples were submitted to the lab and 6 of these (27%) were positive with 2-1000+ AFB colonies.

5.4 Total AFB Reports

The total number of hives and apiaries with AFB continued to fall but it is difficult to say how significant this is. The figures are likely to be understated as more than 2000 ADR's are still outstanding. Also the ADR process has been moved from the spring to the autumn and many AFB colonies from the late summer of 1998 may not have been officially reported. These infections would normally have been recorded with the old Statements of Inspection sent to beekeepers in September each year.

Table 3: AFB Reported by Beekeepers or Found by Inspectors to June 30 1999

Apiary District	Apiaries AFB		Hives AFB	
	98/99	97/98	98/99	97/98
Whangarei	56	61	103	101
Hamilton	165	153	307	266
Tauranga	112	138	184	228
Palmerston North	57	62	93	109
Blenheim	59	86	88	177
Canterbury	46	52	66	93
Invermay	62	104	97	171
Total	557 (2.6%)	656 (2.8%)	938 (0.31%)	1145 (0.38%)

Table 3 Apiary & Hive Inspections to 30th June 1999

District	Inspections by AgriQuality				Inspections by National Beekeepers' Association				No. Unregistered Apiaries		No. Abandoned Apiaries/ Hives	No. Apiaries/ Hives inspected	No. Apiaries/ Hives with AFB destroyed
	*Apiaries	Hives	AFB Apiaries	AFB Hives	Apiaries	Hives	AFB Apiaries	AFB Hives	Registered	Destroyed	Found	On default of Notice	On default of Notice
Whangarei	8	80	5	6	0	0	0	0	0	0		0	0
Tauranga	40	259	2	4	56	600	7	7	3	0	2\25	0	0
Hamilton	25	137	11	28	0	0	0	0	0	0	1\1	0	0
Palmerston Nth	121	624	4	5	22	162	5	10	1	0		0	0
Blenheim	47	299	2	3	12	165	2	2	0	0		4\35	1\3
Timaru	48	83	2	2	0	0	0	0	1	0	0	0	0
Invermay	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	289	1482	26	48	90	927	14	19	5	0			

* Contract number of apiaries to be inspected 280