

10 July 2002

COMMENTARY AND REPORT ON THE AFB PEST MANAGEMENT STRATEGY TO 30 JUNE 2002

1 BEEKEEPER, APIARY AND HIVE NUMBERS

There were 3973 beekeepers, 20258 apiaries and 305152 hives at the end of June 2002. By comparison there were 4550 beekeepers, 20993 apiaries and 308,940 hives at the end of June 2001. The number of beekeepers requesting cancellation of their registration continued with a net loss of beekeepers of nearly 8% since March 2002 and a decrease of 13% over the past year. However, in this period there were 257 new registrations.

2 ANNUAL DISEASE RETURN (ADR'S) - figures for 2001 are in brackets

ADR's were sent to 4275 (4841) beekeepers on 14 April 2002 and these were due back to AgriQuality on 1 June 2002. There were 1823 (2310) defaulters by the due date, and 1060 (1451) defaulters after a reminder letter was sent on 14 June 2002, and a final reporting date of 1 July 2002. There has been little change in return performance of ADR's, or the former Statement of Inspections over the years. Typically, 50% of the returns are received by the due date, and another 25% after the first reminder. By the final cut off date of 1 July there are usually still 25% ADR's outstanding. This year, from the 4275 ADR's mailed out, 43% were outstanding as at 1 June 2002, and 25% as at 1 July 2002.

3 DISEASE CONFORMITY AGREEMENTS (DECA'S) & CERTIFICATE OF INSPECTIONS (COI's)

As at the end of June 2002 there were 2767 beekeepers with DECA's and a Certificate of Inspection Exemption (70%). These beekeepers are able to inspect their own hives for AFB and make reports to AgriQuality on the authorised forms. No DECA's were revoked in the reporting period but two DECA's, previously revoked, were reinstated.

There were 1214 beekeepers with a COI and 743 defaulters still outstanding at the end of June 2002. COI's for the 2002-2003 year are due to be mailed out before 1 August 2002. A list of defaulters as at 15 December 2001, was supplied to the NBA. The requirement of beekeepers without a DECA to find a beekeeper with a DECA to inspect their hives is an ongoing problem. Many beekeepers sign and return their own COI's i.e. they are not getting their COI's signed by a beekeeper with a DECA. These are usually returned to the beekeepers concerned.

4 PMS INSPECTIONS

A summary of hive inspections, audits and sampling performance is in the attached report.

4.1 Number and percentage of AFB found

AgriQuality and the NBA found 122 apiaries (22%), and 295 hives (7%), infected with AFB in the period 1 July 2001 to 31 June 2002 belonging to 204 beekeepers. The total number of AFB found, or reported in this period, was 648 apiaries (3.2%) and 1457 hives (0.48). The corresponding figures for the year ending 30 June 2001 were 714 apiaries (3.7%) and 1369 hives (0.46%) from 242 beekeepers (4.7%).

Several outbreaks have been found during these inspections and dealt with in a most commendable manner by the NBA. Two operations in Auckland had very high levels of disease through inattention and poor management. In one case there were 39 hives found in 4 apiaries but the beekeeper is working with the NBA and AgriQuality to manage the disease.

In the second case the beekeeper has been a continuous problem for many years and has been served a Notice to Destroy AFB infected hives on two occasions. The last Notice was not actioned so a complete inspection was carried out of the beekeepers apiaries in January 2002 followed up by a collection of all dead and AFB infected hives and destruction of the same. Of the 303 hives listed on the sites, 42 hives in 14 apiaries were found to be infected with AFB and 88 were dead (some no doubt with AFB). These infected and dead-outs were destroyed in a joint NBA-AgriQuality operation on January 29 2002. A follow up inspection of 4 sites found another 7 AFB, which were subsequently removed and burnt.

A third outfit in the Whangarei Registration district also had a very high incidence rate on an initial inspection by AgriQuality. The Waikato Branch of the NBA and the NBA Executive arranged for a complete inspection of the outfit and found 23 apiaries and 67 hives with AFB. However, on a second inspection, which concentrated on 'at risk apiaries', only 3 AFB hives were found.

A small outbreak occurred in the Timaru area with some robbed out hives. All hives within a 5 km radius will be inspected by AgriQuality and the NBA in the spring.

4.2 Number and percentage of samples required to be taken by beekeepers.

AgriQuality had to arrange the collection of up to 1000 bee and honey samples on a random and targeted basis. Letters were sent to 443 beekeepers in October 2001, requiring them to submit 1089 samples of bees or honey to HortResearch lab at Ruakura to be tested for *Paenibacillus larvae*. As at 30 June 2002 the lab had received 794 (73%) usable samples from 326 (74%) beekeepers as well as AgriQuality or NBA inspectors. AgriQuality will continue to collect samples through to the end of its contract period, which is the 31 July 2002 and expects to meet the 1000 sample target.

The 794 samples received by the lab were made up of 97 larval or comb samples (suspects), 145 honey and 552 bee samples. Of the 97 suspect samples submitted by 38 beekeepers, with AgriQuality approval, 67 were positive and 30 negative for *P larvae*. A number of culture plates had only a few colonies of *P larvae* on them, which does not necessarily indicate a hive infection with AFB. The results recorded as positive in Section 2 of the report represent 'positives' for *P larvae*.

Beekeepers were advised in all but one case of the results. In this case it was felt that informing the beekeeper of the lab results might have compromised the NBA sanctioned hive destruction day.

In addition to the 326 beekeepers that supplied usable samples to HortResearch, 7 advised they no longer had beehives, while another 16 beekeepers supplied insufficient bees for a lab test to be carried out. This is disappointing as instructions on how to take bees were supplied with the request and there will be insufficient bees to forward to the MAF lab for testing for exotic mites.

A reminder letter was sent on 13 March 2002 to beekeepers who had not supplied samples and requests for samples were made at NBA field days and varroa workshops. The response from beekeepers in general has not been good and a significant number of samples have had to be taken by AgriQuality and NBA inspectors. This situation is similar to other years.

4.3 Number of unregistered apiaries found

Ten unregistered apiaries were found and 9 notices sent to Registrars to update the database. In one case the bees were shifted off the unregistered site and it was not going to be used again.

4.4 Abandoned apiaries found or destroyed

Seven abandoned apiaries were found with 56 hives. Of these, 34 hives were destroyed after due notice had been served. The procedure to post a notice on the hives for 30 days and then in the local newspaper is a very cumbersome procedure, time-consuming and expensive. The procedure is there for good legal reasons but it would be more cost effective if destroying abandoned hives could be left to the discretion of an AP 1.

4.5 Number of apiaries & hives inspected by AgriQuality staff or contracted AP's

AgriQuality inspected 163 apiaries (116%) of the target 140 apiaries, and 1159 hives. Extra resources were put into the Auckland and Hamilton areas due to the problems identified there. Beekeepers contracted to AgriQuality assisted in the Palmerston North, Blenheim and Canterbury areas.

4.6 Number of apiaries and hives inspected by the NBA

The NBA has inspected 386 apiaries and 3041 hives. Waikato beekeepers inspected an additional 52 apiaries and 1000 hives in the Hauraki Plains but these are recorded under the Whangarei apiary district. The Waikato and Auckland beekeepers are to be commended for a sterling effort dealing with 4 problem beekeepers.

4.7 Number of apiaries with AFB destroyed on default of a notice

NBA and AgriQuality destroyed 20 apiaries and 50 hives, most belonging to one Auckland beekeeper.

4.8 Number of restricted place notices sent to beekeepers

Two notices were sent.

4.9 Number of clinical AFB notified and destroyed by beekeepers with COI's

Forty-three beekeepers with COI's declared 72 AFB hives in 43 apiaries. There are 743 COI defaulters as at the end of June 2002. Some of these reported AFB were in fact parasitic mite syndrome. How many false AFB hives were destroyed is not known.

4.10 Number of apiaries and hives held by beekeepers with a COI

There were 1214 beekeepers with a COI who owned 2172 apiaries and 16951 hives

4.11 Number of apiaries and hives inspected on default of a notice

AgriQuality and the NBA inspected 44 apiaries and 271 hives on default of a notice, all belonging to one beekeeper in Auckland.

5 VARROA AND AFB

If there is a good side to varroa, it is the hope that the mite will cause the speedy demise of operations like the one mentioned above, which have been a source of AFB infection for many years both within the outfit and also to hives of surrounding beekeepers. Whether varroa is contributing to the spread of AFB has not been demonstrated yet but it is a possibility. Varroa infested hives full of honey and brood, but with no adult bees, is a common sight. AFB can be found in such hives and occasionally these hives are robbed out. However, the converse is also true in that these hives do not get robbed out before being taken over by wax moths and ants etc.

6 LABORATORY FACILITIES

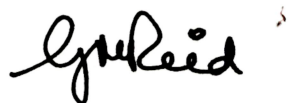
There is some confusion with diagnosing AFB when parasitic mite syndrome is present and a number of samples were referred to the laboratory for a differential diagnosis. It is recommended that a laboratory facility be maintained for this purpose.

It is further recommended that any contracts with an organization to manage the collection of samples be aligned with that of the diagnostic laboratory. In the current year the contract with HortResearch ended on June 30 while that of AgriQuality ends on the 31 July. It is desirable to have the samples collected and tested in the same contract period.

7 APIARY DATABASE

Access to the AgriQuality database was arranged last year on a read only basis for the NBA. AgriQuality had discussions with MAF over the possibility of funding re-development of the database to allow for new reporting functions and online access of beekeepers wishing to update and access their apiary records.

AgriQuality appreciates the opportunity to report on its activities and that of NBA inspectors.



G Murray Reid

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AGRIQUALITY NZ LTD REPORT TO NBA 30 JUNE 2002						
1 No & % AFB apiaries and hives found or reported and destroyed during the inspection programme by AQ and NBA						
	No AFB Apiaries AQ- NBA	No AFB Hives AQ- NBA	% AFB aps AQ_NBA	% AFB Hives AQ_NBA	Total aps inspected NBA-AQ	Total hives inspected NBA_AQ
WR	69	212	45.4	11.6	152	1826
HN	5	5	13.5	2.0	37	245
TR	2	8	3.0	1.4	67	566
PN	26	31	17.6	4.5	148	689
BN	1	1	5.0	0.4	20	227
CH	15	30	24.6	8.3	61	362
INV	4	8	6.3	2.8	64	285
Total	122	295	22.2	7.0	549	4200
2 No and percentage of test samples taken by bkprs, or supplied by AQ, and results of tests. Positives include any plates with 1 or more colonies of <i>Paenibacillus larvae</i>						
	Total No samples requested	% samples taken	No positive	No tested by lab	No still to take	
WR	159	81.8	42	130	29	
HN	160	59.4	12	95	65	
TR	168	53.6	7	90	78	
PN	170	105.3	21	179	-9	
BN	151	69.5	3	105	46	
CH	153	49.0	9	75	78	
INV	130	92.3	3	120	10	
Total	1091	72.8	97	794	297	
Contract requires up to 1000 samples.						
3 No of unregistered apiaries found						
No instructions to register sent to Apiary Register contractor						
	No aps	No Instructions				
WR	3	3				
HN	1	1				
TR	1	1				
PN	2	1				
BN	0	0				
CH	2	2				
INV	1	1				
total	10	9				

		No abandoned apiaries found	No aps destroyed	No hives	No hives destroyed
4 No of abandoned apiaries/bee hives found					
No of abandoned apiaries/bee hives destroyed					
WR		1	0	2	0
HN		2	2	13	13
TR		0	0	0	0
PN t		2	1	25	5
BN		0	0	0	0
CH		2	2	16	16
INV		0	0	0	0
Total		7	5	56	34
		No Apiaries Inspected AgriQ	No Hives Inspected AgriQ		
5 No of apiaries/bee hives inspected by contractor (ie AQ or paid AP's)					
WR	Target 20 apiaries	23	105		
HN	Target 20 apiaries	30	180		
TR	Target 20 apiaries	22	244		
PN	Target 20 apiaries	26	143		
BN	Target 20 apiaries	20	227		
CH	Target 20 apiaries	22	161		
INV	Target 20 apiaries	20	99		
Total	Total 140	163	1159		
		No Apiaries Inspected NBA	No Hives Inspected NBA		
6 No of apiaries inspected by NBA					
WR		129	1721		
HN		7	65		
TR		45	322		
PN		122	546		
BN		0	0		
CH t		39	201		
INV		44	186		
Total		386	3041		

	No default aps destroyed	No hives destroyed				
No apiaries/bee hives infected with AFB destroyed on default of a notice 7 issued						
WR	14	42				
HN	0	0				
TR	0	0				
PN	0	0				
BN	0	0				
CH	6	8				
INV	0	0				
total	20	50				
	No bkprs	No notices sent				
8 No Restricted Place notices sent to beekeepers						
WR	1	1				
HN	0	0				
TR	0	0				
PN	1	1				
BN	0	0				
CH	0	0				
INV	0	0				
Total	2	2				
	No Bkprs	No Apiaries	No hives			
No hives with clinical AFB found or reported and destroyed by beekeepers 9 with COI's						
WR	19	19	38			
HN	4	4	4			
TR	4	4	9			
PN	6	6	7			
BN	1	1	1			
CH	6	6	9			
INV	3	3	4			
Total	43	43	72			

