# American Foulbrood Pest Management Plan Report to the National Beekeepers Association of New Zealand (Inc)

# **Annual General Meeting**

**Wairakei Resort** 

25 June 2015 (Thursday)

# **American Foulbrood Pest Management Plan AFB PMP**

#### Introduction and Background

The Management Agency for the AFB PMP is the National Beekeepers Association of New Zealand (Inc) NBA. The NBA has a statutory responsibility to implement the AFB PMP, which comprises a range of regulatory and educational programmes. The plan is funded using income generated from a mandatory levy on beekeepers and apiaries through the Biosecurity (American Foulbrood – Apiary and Beekeeper Levy) Order 2003.

#### The AFB PMP Management Board

The Management Board currently consists the following:

Mr Frans Laas(Chairman)OtagoMr Neil MossopBay of PlentyMr John HartnellCanterburyMr Stephen BlackTaranaki

#### **Governance Document**

The NBA (Inc) and Management Board operate under a mutually agreed and signed Governance Document that sets out clearly defined reporting requirements and other standard procedures.

A copy can be found on the AFB website under policies.

#### **Total Reported Incidents of American Foulbrood**

While the number of registered beekeepers, apiaries and hives (refer below) continues to trend upwards the reported AFB disease rate sits at 0.21% of hives and 1.93% of apiaries.

In the last 12 months, 666 apiaries (1,210 hives) have been reported as having AFB.

Year (June to May)	Reported AFB Cases	Number of Apiaries	Percentage
2003 - 2004	870	422	0.30 %
2004 - 2005	778	421	0.26 %
2005 - 2006	952	482	0.32 %
2006 - 2007	954	540	0.30 %
2007 - 2008	980	552	0.27 %
2008 - 2009	1,117	557	0.32 %
2009 - 2010	515	348	0.16 %
2010 – 2011(June to March)	722	321	0.19 %
2011 (June)	1,093	579	0.28 %
2012 (May)			0.15 %
2013 (February)	881 (*)	505	0.20 %
2014 (June)	1,128	582	0.25% (Hives)
			2.10% (Apiaries)
			0.21% (Hives)
2015 (February)			2.05% (Apiaries)
			0.21% (Hives)
2014-2015	1,210	666	1.93% (Apiaries)

<sup>(\*) 180</sup> relates to one beekeeper.

#### **Increased Compliance Equates to Increased Reporting**

It is important to recognise that with increased compliance in the receipt of Annual Disease Returns and completed Certificate of Inspection forms there is a counter reaction in terms of increased AFB reporting, not with-standing beekeeper and hive increases.

#### Beekeeper, Apiary and Hive Numbers

New Zealand has as at 10 June 2015, a total of 575,872 registered beehives, an approximate increase of 70,000 hives in the last 12 months. .

Of note is that of the total number of beekeepers (refer below), 3,643 own 0 to 5 hives, equating to 7,206 of registered beehives.

Year	Registered	Number of	Number of Beehives
	Beekeepers	Apiaries	
2003	3,649	20,228	300,729
2004	3,211	19,592	292,530
2005	2,911	19,281	294,886
2006	2,694	18,954	300,728
2007	2,602	19,228	313,399
2008	2,589	20,439	343,155
2009 (June)	2,663	21,593	365,709
2010 (June)	2,957	22,440	376,672
2011 (June)	3,265	23,356	391,540
2012 (June)	3,802	25,309	425,498
2013 (February)	4,127	26,263	435,619
2013 (June)	4,273	27,142	453,820
2014 (February)	4,767	29,638	496,062
2015 (February)	5,396	33,462	546,837
2015 (June)	5,551	34,476	575,872

## **Annual Disease Returns ADR's**

# Compliance Levels

Year	% ADR's Received	Registered Beekeepers
2000	85.0 %	4,864
2001	70.0 %	4,550
2002	75.0 %	3,973
2003	70.0 %	3,649
2004	79.0 %	3,211
2005	82.0 %	2,911
2006	84.0 %	2,694
2007	83.0 %	2,602
2008	91.0 %	2,589
2009	96.7 %	2,663
2010	93.3 %	2,957
2011	92.4 %	3,265
2012	92.3 %	3,802
2013 (Jan)	92.0 %	4,127
2013 (June)	94.2 %	4,273
2014 (March)	91.0 %	4,767
2015 (February)	93.5 %	5,396
2015 (June)	68.1 %	5,551

Note: The figure of 68.1% relates to the number of ADR's returned in response to the April 2015 mail out.

# Certificate of Inspection (COI)

Year (as at June)	Beekeepers holding a	Apiaries	Hives	Compliance
	Certificate of			Rate
	Inspection COI			
2005	741	1,476	14,916	14 %
2006	577	1,188	11,465	18 %
2007	534	1,187	12,027	22 %
2008	537	1,092	11,062	30 %
2009	1,090	2,559	32,081	29 %
2010	1,298	2,400	23,186	64 %
2011	1,286	2,353	14,205	77 %
2012	1,552	2,267	15,319	70 %
2013 (As at February)	1,494			55 %
2013 (As at June )	1,771	2,772	21,017	72%

2014 (As at March)	1,681			58 %
2015 (As at February)	1,943			59%
2015 (As at June)	2,387	4,091	34,321	72%

The Management Board has undertaken COI default inspections utilising their dedicated AFB auditors.

#### **Disease Elimination Conformity Agreements (DECA)**

57% of all registered beekeepers hold a Disease Elimination Conformity Agreement. This is a significant improvement when compared to 2009 when with less than half of the current number of beekeepers we could only achieve a figure of 47%.

#### **AFB Recognition Course Training**

The Management Board continues to place a great deal of emphasis on facilitating AFB Recognition Training Courses on a nationwide basis.

The following table is referred for your information.

By way of explanation, the column headed "No Course" means the beekeeper did not attend a course as such but opted to study the "Yellow Book" and take the test as a one off.

So if you look at 2006 there were actually 11 courses in total.

Calendar Year	Events (Courses)	No Course	Passes
2006	15	4	93
2007	73	29	453
2008	88	36	264
2009	112	36	357
2010	59	29	491
2011	45	14	454
2012	39	7	490
2013	47	10	580
2014	59	13	751

The paramount goal of the AFB PMP is to eliminate AFB. This objective requires a three stage process.

- 1. The identification of AFB outbreaks
- 2. The destruction of AFB infected colonies
- 3. The post infection management of affected apiaries to identify and destroy, previously subclinical or non-visual infections.

Each of these three stages is as important as the others. If the beekeeper fails to achieve any one of them, he/she will effectively end up "chasing their tail".

The AFB PMP Management Board believes any person trained in the eradication of AFB needs to have a good understanding of all three stages.

The previous AFB recognition course tested student's knowledge in relation to the first two stages, but not the third. Additionally, it was recognised that the previous course, failed to address the fact that:

- 1. There is no practical component to the course even though a very practical skill is being taught.
- 2. There is little if any opportunity for tutors to assess student experience and knowledge levels, meaning they are unable to vary their delivery accordingly.

Students with sufficient intelligence have been able to pass the exam, but in practical terms are effectively incapable of diagnosing or eradicating the disease.

What was needed was a more complete course package that included a variety of delivery techniques, while still allowing tutors to utilising their knowledge and experience.

The Management Board wishes to place on record it's appreciation and gratitude to all those who assisted in the development and implementation of the original AFB Recognition Course package.

The new course consists of three components.

- A theory component which includes a range of new videos specifically developed for the course.
- A practical component which consists of practical frame inspections and syndicate exercises.
- The AFB Recognition test.

The new course had its debut in Whangarei on Saturday the 6<sup>th</sup> of June 2015. It will be delivered again, twice during the 2015 Apiculture Conference in Wairakei by Peter Ferris. This latest course is more interesting and challenging for both tutor and student. In recognition of this, The Management Board will shortly commence a series of training seminars for those individuals selected to deliver the new training package.

#### **Nationwide AFB Recognition Awareness Training Initiative**

Planning is underway to trial, using a modified version of the new AFB Recognition Course package, a nationwide series of a 90 minute long refresher courses that in certain instances will be coordinated through local beekeeping clubs and other related organisations, such as the NBA and BIG or any future representative body.

#### **AFB PMP Technology Update**

Over the last 12 months the Management Board has been busy developing training and technology initiatives, designed to assist New Zealand beekeepers in determining the presence of AFB and it's destruction. Much of this work has been in three key areas.

- A major overhaul of the www.afb.org website, to ensure it remains a "one stop shop" for all matters pertaining to AFB.
- The development of a Smart phone application to assist beekeepers in the diagnosis of AFB.
- A complete review of the AFB Recognition Course training package, to make it more interactive and effective.

Any one of these projects by itself, would have been a reasonably significant undertaking. To complete all three within a 12 month timeframe, has been a pleasing achievement.

As always, the AFB PMP Management Board was acutely aware of the need to ensure that beekeepers levies were spent in a fiscally responsible way. To ensure this, much of the work was undertaken by skilled people working in a voluntary capacity. Our thanks go out to these people for all their efforts

#### **AFB PMP Website**

The AFB PMP website has been completely overhauled with a new "look" and the addition of a number of new capabilities. A greater emphasis has now been placed on the ease of user interaction. This has resulted in a revamped drop down menu system, improved graphics and the addition of a significant number of training videos.

The training videos can be viewed by accessing the website (www.afb.org), and going to the "Education, Training, Videos, Resources and Policy Statements" box, on the left of the screen.

Development of the website is an ongoing exercise with additional capabilities flagged for the future. These include:

- an enhanced training section
  - o complete on line enrolment for training.
  - undertake on line study or refresher training
  - The possibility of taking the AFB Recognition Course and test on-line.
- additional videos
- on line beekeeper returns

#### The AFB APP

The AFB App development started midway through 2014. It was trialled in January 2015 and is now available for downloading by beekeepers. It is a smartphone App that will operate on both Android and Apple devices. It has some functionality on tablets. The App was funded by the AFB PMP.

It is free to all beekeepers.

It must be emphasised the App is designed as a field diagnostic tool only at this stage (it is not a website) to aid beekeepers in identifying and reporting AFB outbreaks. An instructional video on its use is located in the "Video" section of the AFB website.

It is the Board's wish is to see all beekeepers eventually download the App, "just in case". You never know when you might need it. At the very least, it is a good tool for revising your AFB recognition skills.

The App has deliberately been kept simple to ensure that it is easy to use. It does not require an internet connection once it has been downloaded. This should make it a useful tool for any beekeeper looking for a bit of assistance in the field. There are a number of future enhancements already planned for the App. These include;

- electronic reporting of AFB outbreaks
  - o electronic returns
  - GPS location information from smart devices internal GPS
- the ability to request real time assistance from an AsureQuality Apiculture Officer
  - o photograph symptoms and have them viewed in real time.

Discussions have already taken place with MPI and Asurequality representatives to "come on board" in regards exotic bee disease identification, this they are currently considering.

#### **Dedicated AFB Apiary Auditors**

Beekeepers nationwide have voiced for a number of years their desire to revert back to earlier times when apicultural officers provided an inspection and where appropriate an advice / educational service.

In an attempt to meet beekeepers expectations, the Management Board initial thinking was to introduce AFB inspectors', one in the South and one in the North Island, both of whom would be retained for say 3 months of the year. Following much discussion by the Board and working through the projected costs of such an exercise it was decided to go one better and retain the services of certain AFB auditors on a nationwide basis. This approach we believe to be more efficient and cost effective.

Note: Because of possible confusion in regards the terminology used in the Biosecurity Act 1993 in regards defining and use of the term "Inspector" the Board on advice, refers to our dedicated inspectors as "AFB Auditors"

The plan is that all dedicated AFB Auditors (AP2) would where possible undertake to inspect 2 to 3 apiaries per week. We accept that this is not always possible given beekeeper work-loads and business commitments.

The programme commenced about 2.5 years ago in the Bay of Plenty, around the East Cape, Opotiki and Whakatane areas with pleasing results and positive feed- back from local beekeepers. The programme has now been widened to across the country.

It is important that I mention at this stage that inspectors take their instruction solely from either the Manager or their local AsureQuality representative. It has been made clear to all inspectors they are not to be influenced in any way by other beekeepers, if this occurs their contract is in serious jeopardy and the manager will have no hesitation in terminating it immediately.

The Management Board accepts this scheme is a "work in progress', however it is pleasing to note we now have 29 such auditors in place nationwide, all working under a formal contract and remuneration policy.

One advantage we find is that we are able to respond more quickly to AFB concerns. The inspectors are currently inspecting Certificate of Inspection (COI) defaulters and those beekeepers who have informed us that they no longer retain hives.

The Board appreciates this is not the perfect solution, however overall the initiative is receiving positive feedback with beekeepers appreciating that inspections are taking place in their areas.

### **Recent Apiary Auditor Inspection Activity**

#### **Poverty Bay**

One of our auditors has now completed inspections of a number of apiaries in the Gisborne region (of the ones that were missed from the Diseaseathon). No AFB was found

#### Coromandel

Our auditor in the region completed a number of hive inspections in the Coromandel where a beekeeper was reporting finding disease. The disease appears to be linked with boxes the beekeeper bought off the internet a year earlier from the Pinnacle Hill area, Bombay. One of our Auckland based auditors will be checking the Pinnacle Hill area

#### **Hawera Area**

Our auditor in the area has completed inspections around Hawera where it was thought a new beekeeper with 200 hives may have AFB problems. 8 cases of AFB in 14 apiaries were found and destroyed..

#### **Hawkes Bay**

An inspection programme was completed in the Hawkes Bay region several months ago, with no AFB being located. This inspection programme was as a result of complaints received from existing beekeepers in the area about outsiders moving in and possibly spreading AFB. A second inspection initiative covering the wider Hawkes Bay region has just been completed resulting in 70 apiaries being visited with all hives being physically checked. AFB was located and is being dealt to.

#### **Auckland**

One of our Auckland based auditors has recently followed-up on some abandoned hives reported in Auckland - no AFB found.

#### Wairarapa.

A commercial beekeeper registered a large number of apiary sites following a helicopter surveillance operation. The beekeeper also had his DECA cancelled.

A second commercial beekeeper failed to register any sites, he was contacted by phone and given an extension until the end of February 2015 to become fully compliant. He too lost his DECA and now his case will be handed over to the MPI Compliance Investigation Division.

A semi-commercial beekeeper who failed to control AFB and left infected hives to be robbed out lost his DECA, his beekeeping operation has been put under a notice of direction where the Management Board steps in to ensure that potentially contaminated material is clearly identified. AFB inspections are being carried out and a traceability system will be implemented for this season.

Beekeeper with hive at Victoria University reported AFB through AFB hotline. AsureQuality contacted Frank Lindsay who checked the hive. It was not AFB.

AFB inspections in Greytown area have been recently completed following up reports of AFB findings in the area. No AFB has been found

A commercial beekeeper was assisted to destroy AFB infected gear safely.

#### Nelson/Marlborough

Nelson based auditor found quite a number of AFB cases in the Nelson city area when checking apiaries in the vicinity of reported AFB cases.

Marlborough auditor checked four apiaries of a local commercial operator after a neighbouring beekeeper reported a few cases of AFB on a single apiary site

Technical advice has been given to a Nelson beekeeper who rents out hives. Our auditor found a few of his hives infected by AFB.

Reports of neglected apiaries that belong to a commercial beekeeping operation has triggered inspections of a number of apiaries belonging to the beekeeper.

AFB auditor found AFB during Exotic surveillance program in Stoke.

AFB auditor inspected a number of apiary sites in the Collingwood area.

#### West Coast/Canterbury

A West Coast auditor is carrying out a full AFB audit on a local commercial operator.

West Coast auditor checked some apiaries South of Hokitika. He also checked three apiary sites (two unregistered) of a beekeeper and found some disease

Canterbury based auditor checked a couple of apiary sites of the above. One found to be unregistered.

Another Canterbury auditor checked four unregistered sites of the above beekeeper. This beekeeper has had his DECA cancelled.

Canterbury auditor found source of an AFB outbreak in Okuti Valley all hives that belonged to the offending beekeeper were burnt.

An unregistered apiary site of a commercial beekeeper was confirmed by a land owner in Methven. This was the third unregistered apiary site found by the auditors or the public within the last 12 months. This beekeeper's DECA was also cancelled and his ADR was returned to him as it was incomplete.

A Christchurch hobbyist lost his DECA for failure to register some of his apiary sites. One of them is to be destroyed on default.

Canterbury auditor inspected hives in the Horotane Valley in near Christchurch chasing the source of reported AFB, but the source could not be found.

South Canterbury auditor carried out AFB inspection in South Ashburton and Geraldine area, no AFB was found.

A commercial beekeeper on the West Coast was reported dumping beehives on unregistered sites. The beekeeper was contacted and given a reminder that all apiaries must be registered within 30 days. Apiaries were registered immediately.

Inspections in inland South Canterbury were carried out following a tip off from a local beekeeper. A couple of unregistered sites were found and one of them had AFB. The offending Beekeeper's DECA was cancelled.

Two different commercial beekeeping operations in Mid Canterbury reported finding high levels of AFB with some of them robbed out. This occurred while doing pre purchase inspections of apiaries belonging to the same semi commercial beekeeper who wanted to sell his beehives and exit the industry. The two inspected apiary sites were unregistered sites. The DECA of the offending beekeeper was cancelled and he has now left the industry. Commercial beekeepers burned all hives diseased and healthy on site. Robbed out letters were sent to 10 beekeepers with apiaries within 5 km radius from these two apiary sites. One of these beekeepers found AFB a few days later.

Robbed out AFB was reported in Christchurch resulting in robbed out letter sent to 49 beekeepers within 5 km radius.

AFB auditor inspected a large number of COI defaulters from the Canterbury area.

An AFB reports from a single apiary site in North Canterbury has triggered inspections in the vicinity. One other AFB was found, but the source of infection for both apiaries is still to be found. Inspections will continue in Spring.

A commercial beekeeper in North Canterbury is being subject of inspections after reports that he may not be reporting AFB. First two randomly selected inspections confirmed AFB being present in both inspected apiary sites. Notice of destruction issued to offending beekeeper.

Commercial beekeeper from North Canterbury (ADR defaulter since 2011) finally contacted the Management Board to de-register all his apiary sites except from his home apiary site. The Agency was satisfied that this was acceptable as AFB auditors have already confirmed that all his currently registered apiary sites were vacant for a number of years.

#### Otago

Otago based auditor inspected 14 apiary sites of a Southland beekeeper following a report from another beekeeper concerned at high AFB levels. No AFB was found.

A second beekeeper had his DECA cancelled as a result of the neglected status of his beehives.

AFB reported in Dunedin city was followed by AFB inspections in the wider vicinity. The potential source of AFB was not found.

AFB auditor doing Exotic surveillance program found AFB in the Queenstown area.

#### Southland

Unregistered apiary site belonging to a commercial operator was found by an AFB auditor investigating the source of an AFB find. The land owner confirmed that hives have been on site for a couple of seasons and that more apiaries are put on site during the summer period. The beekeeper was contacted to confirm that hives belonged to them, once confirmed and considering this beekeeper has a recent history of keeping beehives in unregistered sites, the DECA was cancelled.

Southland auditor identified a few unregistered apiary sites and notices to register them have been left on site. These sites are still unregistered and will be destroyed.

The same AFB auditor was directed to seize and destroy all beehives live or dead from another beekeeper who purchased all hives and boxes that were left by a local beekeeper who was put out of business through non-compliance with the AFB PMP

#### **General Comment.**

AsureQuality is presently waiting for honey supers to come off hives so that they can start the auditors on autumn inspections. Please note that the MPI funded Exotic Surveillance round is due to start soon. This will result in the Exotic Disease auditors checking around 2,000 hives mainly in city/town areas and mainly hobbyist.

#### Development of Health and Safety Policies - (Including Fatigue) / Guidelines for Apiary Auditors.

The Health and Safety Reform Bill was introduced to Parliament on 10 March 2014 and is currently proceeding through the parliamentary process and is expected to be become law later in 2015.

The main purpose of the Bill is to provide a balanced framework to secure the health and safety of workers by protecting workers and other persons against harm to their health, safety and welfare by eliminating or minimising risks arising from work. The Bill is based on the principle that workers should be given the "highest level of protection" against harm to their health, safety and welfare from hazards and risks arising from work as is "reasonably practicable".

The duties under the regulatory framework will rest on those who are in the best position to control workplace health and safety risks to keep those risks as low as reasonably practicable. Those duties will fall on "persons conducting a business or undertaking" (PCBU). By comparison, under the current HSEA Act, those duties fell on a "person who controls a place of work". This is a subtle but significant change. A PCBU is defined as a person conducting a business or undertaking whether the person conducts a business or undertaking alone or with others and whether or not the business or undertaking is conducted for profit and gain.

There will be a new regulator, Worksafe New Zealand, who will be enforcing the legislation. Worksafe New Zealand will be focusing on compliance prior to incidents and that following incidents.

Legal advice states the Management Board by virtue of retaining the services of contractors are on that basis a PCBU therefore placing the onus on the Management Board to put in place all necessary health and safety systems and procedures in order to meet their legal obligations.

It is timely at this point to mention there may well be issues in regards to all future diseasathons in regards the PCBU coverage as referred above. The Management Board will be seeking advice accordingly.

Our legal advisor recommends the following steps.

#### Step One

The Management Board to prepare/identify a preliminary list of potential hazards an AFB auditor might be confronted with in his/her day to day inspection work.

#### **Step Two**

The Management Board is to liaise / consult with AFB auditors in respect of the preliminary list and ascertain what employees are currently doing and whether what they are doing is the safest way to "eliminate or minimise" risk to health and safety, so far as is reasonably practicable.

#### **Step Three**

Preparation of policies to ensure hazards and risks are eliminated or minimised.

#### **Step Four**

The Management Board to ensure "Due Diligence of Duty" - this means:

- acquire and keep up to date knowledge of health and safety matters.
- gain an understanding of the risks and hazards associated with auditors work.

- ensure the Management Agency has, and uses appropriate resources and processes to eliminate and minimise risks to health and safety.
- ensure the Management Agency has appropriate resources and processes for responding to information regarding incidents, hazards and risks in a timely way.
- ensure the Management Agency has and implements processes for complying with duties under the legislation.

#### **Step Five**

The Management Board ensures a health and safety representative is appointed and trained along with the appointment of a health and safety committee.

The Management Board is currently in the process of working through step 3 above.

In addition to the above, the Management Board is developing an "Apiary Auditor Fatigue" policy, the purpose being to put in place suitable guidelines and instructions to minimise fatigue risk when working, including work related driving and managing hours of work. The assistance of AsureQuality in regard the development of this policy is appreciated.

Two AFB Auditor seminars are planned (similar to 2014) for later in 2015 (Taupo and Ashburton) with the programme involving Health and Safety instruction as well as bee disease identification. MPI and AsureQuality are partnering the Board in this endeavour.

#### **Review of Operations Manual and Development of Policies**

The Management Board is currently undertaking a major overhaul of the Operations Manual, a task that has become necessary following the recent legislative changes by way of Section 93 of the Biosecurity Law Reform Act 2012.

The structure of the document is set to change with greater emphasis being placed on Management Board confirmed policies, these are currently being developed and can be found by visiting the AFB PMP website. There are currently 28 in place.

#### **Levy Defaulters**

With the unprecedented increases in the number of registered beekeepers comes an ever increasing number of levy defaulters requiring follow up. In early January 2015 of this year and following a substantial amount of work within this office, in excess of 400 levy defaulters were handed over to Debtworks New Zealand, a collection agency based out of Auckland.

In early April of this year, 5,619 levy invoices were mailed along with a covering letter explaining the payment deadlines as set out in the Levy Order 2003.

Following the issuing of a statement to outstanding levy payers in mid-May as required by the Order and Board policy, I can report that as of 17 May 2015, 1,272 levy payers remain outstanding.

In line with the Order 2003 and Board policy a further statement is to be mailed out by 21 June along with penalty charges. Those levy payers who fail to pay by 15 July will be handed over to Debtworks New Zealand who will proceed to recover the debt using legally accepted debt collection practice.

The issue remains, should current beekeeper registration trends continue at the same level, greater time and resource will need to be allocated to work associated with levy collection.

#### Acknowledgement

I would like to extend my sincere thanks to Frans Laas (Chairman), John Hartnell, Neil Mossop and Stephen Black for their continued support, guidance and wise council. The Management Board continues to embrace the governance model in their overseeing of the AFB PMP giving clear, concise direction and instruction for which I am most grateful.

Rex Baynes
AFB NPMP Manager