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Table of Contents

Deadline for articles and advertising

November issue: 10 October

December issue: 5 November

All articles/letters/photos to be with the Editor via fax, email or post:

Nancy Fithian
email: editor@nba.org.nz
(See page 2 for full details)

President's Report

Apimondia 2009

I have just returned from Apimondia 2009 held in Montpellier, France. This was quite an amazing event and there were in the order of 10,000 people attending the Congress, either as day visitors or full participants. New Zealand was well represented with nearly 30 people in attendance.

The Congress organisers need to be congratulated for keeping the entire process running very smoothly despite a few problems at the very beginning. As usual, there is always the conundrum of all the concurrent sessions, and which talks to attend. The trade displays occupied four levels of Le Corum, the venue, plus outside displays for the general public, which extended for several hundred metres along a boulevard. The sheer mass of people at the Congress takes a bit of getting used to when you come from a country with few people.

The dominant theme of the Congress was about bees being the sentinel of the environment. The issues of unfavourable habitat modification, pesticide poisonings and emerging pathogens are becoming very significant in the Northern Hemisphere. Governments are taking notice of these problems and doing something about it. The amount of support given to the problems associated with bees is quite substantial. Significant ecological issues such as land management practices are also affecting the ability of all bee species and other fauna to survive. For example, I visited some apiary sites in a forested region of central Germany. The mixed-species hardwood forests of that area looked rather beautiful until I realised that the entire structure of the forest is carefully orchestrated by humans and as a consequence there are limited numbers of old trees capable of supporting feral bee colonies. There are very few 'wild' forests left in Europe.

The issue of colony collapse disorder (CCD) was given a bit of a thrashing and no one seems to be getting any closer to a definitive answer. However, the presence of varroa mite seems to be a prerequisite because of its ability to suppress the bees' immune response systems. *Nosema ceranae* is also an issue and it is quite clearly replacing *Nosema apis* in many bee populations. A large amount of research is being carried out on the subtle effects of low levels of pesticides on bees, and especially on the development of larvae and their subsequent survival as adults.

In my own field of bee breeding, some interesting papers were presented regarding the safe transfer of genetic material across international boundaries (a significant issue for our country) and also genetic conservation of local ecotypes. The various breeding programmes managed in most parts of Europe are often supported by the various governments to some degree or another. Germany alone has 10 research institutes devoted entirely to bees. The biggest problem faced by breeding groups in general is the lack of standardised evaluation systems, thus making meaningful comparisons between colonies somewhat difficult. Everyone has their own idea about what constitutes the "best" bee, but surprisingly there are strong similarities in defining behaviours and measuring them.

Maureen Maxwell representing NZ at the Honey Queen competition. Photo: Frans Laas.

As part of the Apimondia programme a Honey Queen competition is run, although it is a low-key component of the Congress. Executive Council member Maureen Maxwell entered the competition. Despite not winning she gave a superlative public performance promoting New Zealand and its honeys. The winner was from India.

Dwarf honeybee incursion update

In my last President's report I mentioned the incursion of the *Apis florea* in Auckland. This caused a bit of consternation among Auckland beekeepers. It is unfortunate that, while MAF did destroy the colony, they failed to emphasise the fact that they did actually look for mites and other pathogens on the bees, and thankfully, they found no Tropilaelaps, etc. on the bees or comb. There was also another incursion of *A. florea* in Dunedin in May and, again, thankfully there were no problems. However, if MAF had provided all the relevant information in their public announcements, it would have prevented criticism of them and unnecessary worry for the beekeeping community. This kind of thing is important to the relationship and trust between the industry and MAF. In the meantime, the NBA will be attempting to maintain a cordial dialogue with senior MAF officials to try and resolve these issues.

Other biosecurity issues

On my return to Christchurch via Singapore we of course had to go through biosecurity screening. Being involved in the beekeeping industry meant that the four beekeepers on the flight were subject to a full and very thorough search of all our bags. It appeared that a very large proportion of the passengers were also subject to bag searches as well. This is in contrast to every other airport we visited, where the authorities took a comparatively lax approach. It was a very time-consuming process and there were clearly too few staff available to process the large volume of passengers in a reasonable time. The plane that we arrived on was already re-provisioned and on its way to Sydney before two of the beekeepers were finally processed two hours later.

While the screening of passengers on aircraft is comprehensive and effective, the screening of cargo is clearly problematic. With the recent detection of at least two *A. florea* colonies on containers from Singapore, the beekeeping industry would view with concern MAF's idea of using pre-border screening methods for containers destined for New Zealand. Having seen the absolutely staggering volume of shipping and cargo being processed through Singapore, it makes you wonder whether the Singapore authorities have sufficient time to adequately ensure that everything is thoroughly inspected before being loaded onto a ship. We have already had varroa slip through the biosecurity screen.

Honey imports

In my absence from New Zealand, MAF announced that they were delaying the import of honey from Australia for another two years. I will comment further in next month's report when I have had time to have a look at the decision.

- Frans Laas

Getting to know the industry

Many of you will be aware that in September the NBA farewelled Dr Jim Edwards and Pam Edwards as the secretariat.

Gemma Collier and Daniel Paul were appointed joint Chief Executive Officers of the NBA and Jessica Williams was appointed Executive Secretary.

(Left to right): Jessica Williams, Daniel Paul and Gemma Collier. Photo: Jim Edwards.

As many of you head into the busy beekeeping season, we realise your time for the next few months will be precious. However, we are very keen to start getting out and putting faces to the many names in the beekeeping industry.

With that in mind, we hope to have already started visiting some of you in the Wellington area by the time this issue of *The New Zealand BeeKeeper* goes to print.

For each area we will contact the branch presidents in advance of our visit and arrange to meet with several people in the area at once. If your branch or club is planning a field day, please let us know early so we can try to time a visit.

It will very likely take some months to get around the country, so if you are ever in Wellington please feel free to drop in to our office at Level 9, 108 The Terrace, so we can introduce ourselves.

This month we also look forward to our first face-to-face Executive Council meeting and a chance to work together to set the strategic direction for the NBA for the next year.

We hope to be able to feed back this information to all members in an upcoming issue of *The New Zealand BeeKeeper.*

However, in the meanwhile we would like to get a stronger picture from all members and non-members of your views on the NBA and the entire beekeeping industry.

To help us do this, we would appreciate it if you could take the time to complete a survey. Please see the notice opposite for details.

Once again, we look forward to meeting and working with you.

- Daniel Paul and Gemma Collier,
NBA joint Chief Executive Officers

NBA welcomes delay to honey imports from Australia

As many of you will be aware the Ministry of Agriculture and Fisheries (MAF) announced in September that it will undertake further work on the honey import health standard (IHS). This will delay honey imports from Australia for up to possibly another two years.

This is fantastic news and vindicates all of the NBA's efforts in demonstrating to MAF and the previous government that honey imports from Australia would be a major risk from a biosecurity standpoint.

Bees are fundamental to the future of New Zealand's agricultural and horticultural sectors and any threat or risk to the country's bee population via honey imports could be disastrous for our economy.

We will endeavour to keep you all updated via NBA website posts when more information is made available.

- Daniel Paul
NBA joint Chief Executive Officer

The NBA wants your views!

The NBA has developed two surveys to gain more information about the nature of the industry, to gauge your views on the services provided by the NBA and to get your feedback on what you consider to be the most important issues for you and the industry.

One survey is for NBA members and the other is for non-members. Both surveys are available on the NBA website: www.nba.org.nz.

You can complete the survey online at www.nba.org.nz. Alternatively, download and print a PDF version of the survey to fax or post back to NBA secretary Jessica Williams on 04 499 0876 or PO Box 10792, Wellington.

If you have any questions or would like a survey form emailed to you, please contact Jessica Williams on 04 471 6254 or secretary@nba.org.nz.

Deadline: 31 October 2009.

We look forward to hearing from you.

Many thanks,
Gemma Collier and Daniel Paul,
joint Chief Executive Officers

Progress towards setting a standard for monofloral varieties of honey produced in New Zealand

The Bee Products Standards Council (BPSC) has carried out a consultation with the industry stakeholders between 22 May and 3 July 2009, to establish a commercial table honey standard for monofloral varieties. A consultation paper and a submitter's template was prepared and approved by the BPSC and made available to the industry through the NBA and Federated Farmers website, a mail-out to regional groups, and at the annual industry conference. A total of 57 submissions were received in response to the consultation paper.

There was strong support (77% or 28 out of 36) for formally adopting mandatory standards as opposed to voluntary standards.

The majority of submitters supported defining the species which can contribute to a monofloral variety.

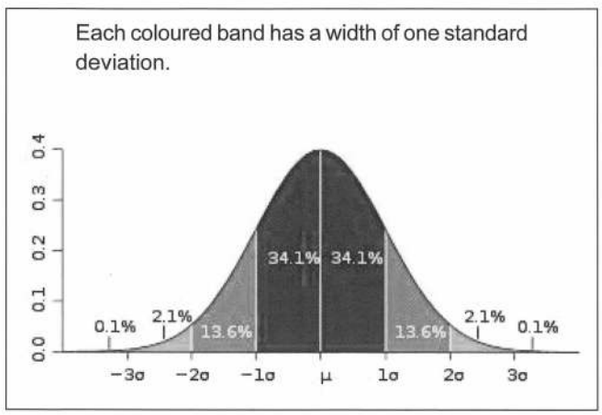
A majority of submitters (73% or 32 out of 44) supported the common name Manuka to mean nectar from *Leptospermum scoparium* and *Kunzea ericoides*.

Submitters were split over using pollen count as a tool. Many that were against the use of pollen coefficients conceded that they may have a place in the standard if used with other criteria that is given a higher priority. Supporters of the use of pollen counts agree that other criteria must be included.

Pollen counts are expressed in a range using a standard deviation around a mean value. In effect, this creates a wide range of pollen counts that will apply. The BPSC proposes using three standard deviations that will exclude only the most extreme readings.

In probability theory and statistics, standard deviation is a measure of the variability or dispersion of a statistical population, a data set, or a probability distribution. A low standard deviation indicates that the data points tend to be very close to the mean, whereas high standard deviation indicates that the data are spread out over a large range of values. *(Source: Wikipedia)*

Figure 1: A plot of a normal distribution (bell curve).



An overwhelming majority were in favour of using organoleptic properties in the standard. Most of these see organoleptic profiles as only part of the tool set.

Almost 75% of respondents agreed that "activity" measures are outside the scope of these standards. Those in favour of including them pointed to their significance to consumers and the industry, and suggest some levels of UMF® that could be used in a standard.

About 70% of submitters were against using hydroxymethylfurfural (HMF) in the monofloral honey standard, 31% were in favour. However, there was a view that that HMF may be useful as a quality parameter in a general honey standard.

There were a significant number of comments about technical issues relating to the table of criteria. There was general agreement that:

- some criteria were more useful than others for any given monofloral variety
- having a number of criteria provided more robustness than a sole criteria
- there should be flexibility for a honey to meet most but not all criteria. Some rules would need to be created to manage this.

There was strong agreement to use the accepted term "Manuka" to include both Manuka and Kanuka based on long history of practice. Both species flower at the same time in many locations, so are not easily separated.

Pollen analysis is very useful for most species and necessary to identify the species from which the honey is derived.

There was very strong support for country of origin labelling.

Timeline towards implementation

1. Industry consultation and feedback on draft standard and implementation plan

    - Report available on NBA and Federated Farmers' websites
    - Reports to all registered beekeepers in the October and April editions of *The New Zealand BeeKeeper*
    - Mechanism for further feedback

2. Set "best estimate" specifications for monofloral variety now on existing knowledge with:

    - specified review date
    - stated "interim" compliance/non compliance process
    - project on improving criteria
    - regulatory involvement

Continued on page 9

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Continued from page 7

3. Laboratory accreditation

   - Workshops with interested labs for methodology agreement
   - ISO accreditation process

4. Finalise specifications

5. Industry training

   - Education and training on new standard; e.g., workshops/website
   - Tools such as generic template for addition to RMP

6. Standard mandatory and operational indicative date: 1 October 2010

- Dr Jim Edwards
Chairman, Bee Products Standards Council

Table 1a: Proposed honey profiles and criteria for monofloral honeys

	Proposed common name	Proposed botanical name (s)	Pollen minimum % of common name species	Pollen total (mean+/- 1 standard deviation)	Colour Pfund mm	Organoleptic		Possible rules for acceptance
						Aroma	Flavour	
Native species	Manuka	*L. scoparium* and *K. ericoides*	To be determined	Mean 517,000 s.d. 66,800	84 mm,s.d.11.8	Damp earth, heather aromatic	Mineral slightly bitter, tangy	
	Kamahi	*Weinmannia racemosa*						
	Rewarewa	*Knightia excelsa*	10%	Mean 112,800 s.d. 101,900	92.9 mm s.d.9.2mm	Light aroma mild mixed fruit	Clean, sweet, smokey malty	
	Tawari	*Ixerba brexioicles*	To be determined		23mm,s.d.8.8mm	Rich perfumed musk/ incense/sandalwood orange peel liquorice	Clean musty rosehip syrup, very sweet golden syrup	
	Southern rata	*Metrosideros robusta*	45%	Mean 123,000s.d. 35,900	16.4 mm s.d. 8.6 mm	Heady aromatic	Sweet, distinctive, mildly salty Scenty	
	Northern rata	*M. umbellata*						
	Pohutakawa	*M. excelsa*	20%	No available data	Pure 0-5 mm blends 5-30mm	Musky damp leaves salty, almost seaweed but pleasant	Clean earthy sweet butterscotch Scenty	

Table 1b: Proposed honey profiles and criteria for monofloral honeys

	Proposed common name	Proposed botanical name (s)	Pollen minimum % of common name species	Pollen total (mean+/- 1 standard deviation)	Colour Pfund mm	Organoleptic		Possible rules for acceptance
						Aroma	Flavour	
Introduced species	Clover	*Trifolium. spp* and *Mellilot spp*	45%	Mean 100,000 s.d 90,000	0-60mm	Herbal, dry grass	Clean, mild sweet delicate	Pollen total and % and one other of colour or organoleptic
	Vipers Bugloss	*Echium vulgare*	45%	Mean 72,000 s.d 38,700	21.7 mm s.d. 9 mm	Initial floral bouquet when fresh	Clean tasting ,mildly herbal	
	Borage	*Borago officinalis*	To be determined	To be determined	To be determined	To be determined	To be determined	
	Thyme	*Thymus vulgaris*	20%	3,000-8,000	105mm	Pervasive, very aromatic	Resinous, aromatic, herbal very strong	
	Nodding thistle	*Carduus nutans*	N/A			Perfumed floral blossom intense	Intense floral flavour	Both colour and organoleptic required

N/A=not applicable

Table 2: Proposed honey profiles and criteria for non-floral honeys

	Proposed common name	Electrical conductivity	Colour Pfund mm	Organoleptic		Other
				Aroma	Flavour	
Non floral honey	Beech Honey dew	>800micro Siemans at 20° C	87.2 mm s.d.10.5	Musky	Complex treacley malt extract	20% Dry matter
	Beech Honey dew high grade	>1000micro Siemans at 20° C				20% Dry matter

NZFSA tutin update

Limit for tutin now in Food Standards Code

Standards that set limits for contaminants in food are set in the joint Food Standards Code that New Zealand shares with Australia. In December 2008, New Zealand set a temporary standard for tutin within the New Zealand food standards setting system under the Food Act on the basis that it would be replaced by a standard in the joint Food Standards Code.

In September of this year, the tutin limits in the New Zealand Standard were adopted into the joint Food Standards Code as temporary limits with an expiry of March 2011. This provides sufficient time for a permanent standard to be set by Food Standards Australia New Zealand (FSANZ). They will be consulting on permanent limits in due course. This means that Part 1 of the Food (Tutin in Honey) Standard 2008 is now revoked.

These changes are all administrative and the tutin limits remain the same; i.e., 2.0mg/kg in honey and 0.1mg/kg in comb honey.

NZFSA has commissioned a number of studies to look at the toxicology of tutin to make sure the limits set are appropriate. These studies will contribute to the setting of a permanent tutin standard within the Food Standards Code.

Review of Parts 2-4 of the Tutin Standard

NZFSA has commenced a review of the Food (Tutin in Honey) Standard 2008. To start the process we invited comment from beekeepers as to matters that should be taken into account in the review and discussed the standard at the industry conferences.

A lot of interesting and insightful comment has been received. Some of the matters that have been raised for NZFSA to consider are:

- whether harvesting pre-January should be another compliance option in the standard, rather than an exclusion from the standard to avoid confusion
- whether the South Island boundary line for the standard needs to be moved
- whether the option to check tutu bushes for honeydew should be removed or modified, as beekeepers that have both checked tutu bushes and tested honey have found tutin levels above the limit despite checking tutu for honeydew
- whether hoppers should be the factor that triggers extraction and testing of comb honey rather than visible honeydew presence. If so, how many hoppers are too many?
- whether there is sufficient evidence from the NBA study to remove areas over 400m in altitude from the standard in the lower North Island, and whether altitude is significant elsewhere
- whether the shifting of toxic honey by bees from bottom boxes up into new honey supers when they are placed onto hives is a risk that needs to be managed, and if so, how?
- whether the practice of extracting honey from bottom/brood boxes should be banned in risk areas
- whether comb honey production should be banned altogether from risk areas
- whether all honey should be extracted and testing made mandatory in risk areas
- whether there is a way to require laboratories to report all results to assist in better defining risk areas
- how NZFSA will ensure compliance
- whether beekeepers should have a certificate of competency to produce honey in risk areas
- can we introduce options to test drums or sample in other ways than from blended batches to improve flexibility?
- use of other plants as indicators of vine hopper activity in an area?
- mandatory data collection and reporting by labs
- is 31 December too late for a cut-off date in warmer areas?
- what data over what period is required to 'clear' areas from testing requirements under the standard: 5 years?
- does the standard need to prescribe exactly how samples may be taken?
- mandatory labelling: tested tutin free?
- laboratory calibration/inter-laboratory studies to improve consistency of results
- does tutin get into wax and carry over from year to year?
- should hobbyists have different rules?

- what's a hobbyist anyway?
- can we satellite map tutu and vine hopper distribution to better define risk areas?
- can tutu be eradicated?
- should the compliance options be set under the Food Act or Animal Products Act?
- what are the best ways to minimise compliance costs?

As you can see, there is a long list of things to consider in the review and this will take some time to do properly. Some of these matters require further research and information that can only be gathered by operating the standard for a full year.

At this stage NZFSA expects to have enough information to be able to consult on any changes (if changes are required) around the middle of 2010, in plenty of time for implementation for the 2010/2011 honey season.

Managing tutin over the upcoming summer

Beekeepers are reminded that they need to be complying with the Food (Tutin in Honey) Standard 2008, and to make sure that their product complies with the tutin limits in the Food Standards Code.

If you are relying on checking tutu bushes for honeydew as a means of managing tutin in honey, it is essential that you know where all of the tutu is in an area and check thoroughly. Some beekeepers have reported non-compliant levels of tutin in honey when it has been tested, despite checking tutu bushes. This could be for several reasons:

- the tutu bushes they checked may not have been representative of the tutu bushes in the area.
- the bees may have been gathering honeydew from tutu bushes further away than the 3-km radius specified in the standard.
- both our field study and the NBA field study this year observed bees working tutu bushes for honeydew, despite there being none easily visible on the leaves. It would seem that if vine hoppers are present, bees are likely to be collecting honeydew irrespective of whether it has been raining or whether there is visible honeydew present.
- relying on bees working other floral sources in preference to collecting honeydew appears to have no basis in fact either. If vine hoppers are present, then one has to assume that bees will be collecting honeydew.

Our advice is that if you are collecting honey in areas where there are both tutu and vine hoppers present, then testing is the most effective way to make sure your product is safe.

A recent NZFSA audit found that some beekeepers outside the traditional tutin problem areas seem to have a false sense of security and may be harvesting honey without making any effort to ensure it is safe. Some high tutin levels have been found outside the traditional risk areas. In the event that a poisoning occurs or non-compliant product is found in the marketplace and the standard has not been complied with, then there will inevitably be unpleasant consequences for the errant beekeeper or packer.

- Jim Sim
Senior Programme Manager (Animal Products)
New Zealand Food Safety Authority

Letter to the editor

I would like to make just a few comments in regard to Professor Peter Molan's article in the September issue *(Why a standard is needed for 'Active Manuka Honey': some personal opinions).*

You are right! When **BEEKEEPERS** and **BEEHAVERS** buy miticide treatments they expect to get the correct active ingredient at the correct dosage. Our industry problem is that it's not necessarily **BEEKEEPERS** that are marketing honey. Often it is businesspeople who are only out to make a fast dollar, no matter how that is achieved. They are not informed or passionate about the product they produce or where it comes from.

This attitude extends beyond the honey pot to all aspects of our industry. Poorly informed businessmen are extending their feelers to landowners, giving misinformation about what the land can produce. An example of this is happening near us where a Masterton-based business is encouraging people to buy ex-forestry land, plant it in manuka, and "make a fortune" from manuka honey. A little local knowledge will tell that this area has a large amount of tawari within the bush areas that flowers at the same time as the manuka. Any beekeeper worth his salt will know that bees won't touch manuka when they can work tawari (for those of you who don't know tawari, it will actually drip nectar when in full flower). Our bees fly over hundreds of hectares of flowering manuka to get to the tawari and kamahi. I don't think they are especially badly trained bees or that any other apiarist's bees would behave differently. In the rush for the "gold" people are becoming misguided, forgetting about integrity, giving landowners promises they can't and won't keep and having little pride in their product so long as it produces the almighty buck.

A lack of standards has the potential to wreck not only the manuka part of the New Zealand honey bee industry but the entire industry. Instead of being part of an honourable profession, we risk becoming considered as people of poor integrity in all aspects of our business. There are, of course, many very good people in our industry but unfortunately we all risk being tarnished by the actions of a few.

Standards are necessary, but please let them be logical and not driven by the dollar.

- Allan Pimm

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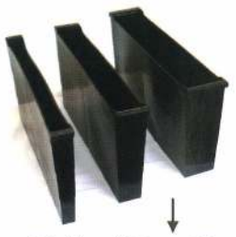

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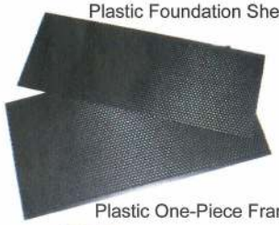

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American Foulbrood National Pest Management Strategy (AFB NPMS)

Report to the Annual General Meeting of the National Beekeepers' Association (Inc.) of New Zealand for the period 1 July 2008–30 June 2009

Introduction and background

New Zealand has had legislation to control AFB since 1906. The most recent change in that legislation occurred in 1998, when the Biosecurity (American Foulbrood National Pest Management Strategy) Order was passed into law. The Order established an American Foulbrood Pest Management Strategy (AFB NPMS) under the Biosecurity Act 1993.

The Biosecurity Act 1993 allows New Zealand agricultural industries affected by a pest or disease to determine their own goals and strategy for its control, and to use legal powers to ensure the strategy is carried out. In the case of AFB, the NBA, being the main representative organisation representing the beekeeping industry, developed the AFB NPMS, and went through the process of having the strategy approved by government.

The Management Agency for the AFB NPMS is the NBA. The NBA has a statutory responsibility to implement the AFB NPMS, which comprises a range of regulatory and educational programmes. The strategy 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 Management Agency

The Management Agency for the reporting period consisted of the following NBA representatives:

Mr Frans Laas (Chairman)	Otago
Mr Neil Farrer	Southern North Island
Ms Maureen Maxwell	Auckland
Mr Lewis Olsen	Waikato
Mr Barry Foster	Poverty Bay
Mr Neil Mossop	Bay of Plenty
Mr John Hartnell	Christchurch
Mr Glenn Kelly	Nelson

Glenn Kelly joined the Management Agency part-way through the reporting period.

The Management Agency has met on five separate occasions during the reporting period, two of which were "face to face" meetings.

Beekeeper, apiary and hive numbers

As at 30 March 2009 there were 2680 beekeepers operating 357,789 hives on 21487 registered apiaries. By comparison, the March 2008 statistics quoted 2626 beekeepers, 20,432 apiaries and 342,156 hives. It is interesting to note that while there has been a reversal in the downward trend of apiary and hive numbers in recent years, this is the first time since the arrival of varroa in 2000 that an increase has been seen in beekeeper numbers over a 12-month period. 298 new beekeepers have registered in the past 12 months: 180 in the North Island and 118 in the South. Both an increase in registrations (22%) and an increase in cancellations (14%) have contributed to the turnaround in beekeeper numbers.

	2000	2002	2004	2006	2008	2009 (31 March)
Registered Beekeepers	4864	3973	3211	2694	2589	2680
Number of Apiaries	21,633	20,258	19,592	18,954	20,439	21,487
Number of Beehives	299,712	305,152	292,530	300,728	343,155	357,789

AFB disease reports

Between 1 June 2008 and 31 March 2009 there were a total of 104 beekeepers reporting 609 cases of AFB in 414 apiaries. This corresponds to an average disease rate of 0.17% of hives over the whole country.

Disease Elimination Conformity Agreements (DECA) and Certificates of Inspection (COI)

As at the end of March 2009 there were 1578 beekeepers with DECAs and a Certificate of Inspection Exemption. This represents 59% of registered beekeepers and is a 22% decrease on last year. This reduction is mostly due to the fact that 409 DECAs were revoked in the reporting period (those who had not completed a competency test) and a further 51 beekeepers chose to relinquish their DECAs for the same reason. There are still 108 beekeepers who were granted their DECA within 12 months of the date of the first letter to non DECA holders in August 2008.

I have instructed AsureQuality to write to all 108 beekeepers informing them that they have until 31 August of this year to pass their AFB competency test or risk having their DECA revoked.

DECA review

AsureQuality reports that the DECA review policy is on target with 32 beekeepers reporting disease problems having their

DECAs reviewed. The annual target is 40 and AsureQuality will carry out further DECA reviews of other beekeepers with a higher than average disease incidence later in the autumn.

Annual Disease Returns (ADRs)

Clause 27 of the Order in Council requires all beekeepers to provide the Management Agency with an Annual Disease Return (ADR) updating their hive information. This information provides the basis for New Zealand's statistics on beekeeper and hive numbers and AFB incidence.

The Management Agency is delighted to report that 96.4% of registered beekeepers had lodged their ADR by 31 March 2009.

I have listed below a schedule detailing the percentage of ADRs returned since 1999.

Year	% ADRs Received
1999	76%
2000	85%
2001	70%
2002	75%
2003	70%
2004	79%
2005	82%
2006	84%
2007	83%
2008	91%
2009	96%

It is interesting to note that in the MAF Report on the American Foulbrood National Pest Management Strategy dated September 2008, the term "disturbing" was used when describing the lack of compliance during the late 1990s and early part of the new millennium.

The Management Agency wishes to acknowledge the work undertaken by AsureQuality staff in attaining this excellent result.

AFB Surveillance Programme 2008–2009

To date we have scheduled 410 apiaries for inspection with inspectors having so far completed 128 apiaries (31%).

Feedback so far would indicate a favourable impression, with some areas completing inspection work in the spring and others waiting until the autumn.

It is anticipated there will be another 40–90 inspections scheduled for the North Island, giving a total of 450 to 500 apiaries inspected.

Return of inspection forms has been light over the past few months (as is the norm), but it is expected this will pick up during the autumn as inspectors winter down their own hives and free up time for inspection work.

Certificate of Inspection (COI)

There are 688 beekeepers who own 15,421 hives on 1330 apiaries that require a COI. The number of beekeepers who fall into this category has increased by 40% and is largely as a result of the change in the DECA accreditation process referred to above. The proportion of beekeepers requiring a COI is around 26%.

MAF Review on AFB NPMS

Paul Bolger (Biosecurity New Zealand) reports there were 28 submissions lodged, equating to 0.9% of registered beekeepers.

In general terms it appears the beekeeping community appears reasonably happy with the PMS as it currently stands. Of course, there will be changes made once MAF has produced their analysis of submissions received and the proper consultation with the sector has taken place.

Helicopter surveillance

In 2007 and 2008 helicopter surveillance operations were undertaken in Otago and the East Cape respectively, with the following results:

Unregistered apiaries

	Non-Compliance Rate (%)
Otago (Taieri)	20%
East Cape	47%
Average	26%

Unregistered beekeepers

	Numbers
Otago (Taieri)	14 (all hobbyists)
East Cape	2 (semi-commercial)

Marking of apiaries

	Non-Compliance Rate (%)
Otago (Taieri)	42%
East Cape	34%
Total	37%

These results confirmed the reasons for undertaking the Taieri and East Cape operations, as the Management Agency at the time were concerned about:

- the overall degree of non-compliance
- the level of unregistered hives
- level of unregistered beekeepers
- compliance with sections 13 (Access requirements) and 20 (Marking of Apiaries)
- apiary location
- audit integrity of the register.

AFB NPMS website

The Management Agency, through the project leadership of Neil Farrer, now has its own website and we would invite the beekeeping industry to visit www.afb.org.nz.

The Management Agency would welcome any comment on how the site might be improved.

A recent check of the website statistics reveal that for the months January through April 2009, the site was receiving an average of 275 hits per day, equating to 6547 per month. These numbers represent the total number of requests that were made to the server during the specified reporting period.

It would appear www.afb.org.nz is proving popular.

Operations Manual

The Management Agency has continued to review the Operations Manual. This task involves time in discussion during which the development of policy takes place.

Court action to recover outstanding debt

It is with disappointment that we report that it was necessary during this period to initiate court action to recover significant debt.

The Management Agency has initiated further court action against several beekeepers who refuse to pay, despite having received various reminders.

Acknowledgement

As the AFB NPMS Manager, I am extremely fortunate to have supporting me such a dedicated and able group of people who make up the Management Agency.

My sincere thanks to you all for your continued guidance and advice.

Conclusion

I believe the strategy is meeting both its objectives and targets; however, the Management Agency cannot do it alone—it requires total support from the industry.

- Rex Baynes
AFB NPMS Manager
June 2009

Harvest Declaration updated from 13 July 2009: go to http://www.nzfsa.govt.nz/animalproducts/legislation/notices/export/harvest-statement-june-2009.pdf

Management Agency prepares for spring surveillance programme

Beekeepers will be aware of the stated policy that the Management Agency is required to both target and randomly survey between two and four percent of apiaries each year.

As plans are under way to commence another surveillance round, it is appropriate that I give thanks to those of you who assist in the running of the programme, both from a Disease Coordinators' perspective as well as those of you who assist in lifting the lids.

The Management Agency and AsureQuality Limited continue to seek the input of local Disease Coordinators in the first instance before applying the Selection Criteria as set out below. We have found in the past that upon receiving the inspection forms, the Disease Coordinators will then come back to us to ask why we did not select a certain location for inspection.

I have heard through the grapevine that a number of beekeepers are, to put it mildly, annoyed as they see themselves being targeted almost annually. It is important to note that your apiary may be targeted each year, but it will not always be for AFB. The Exotic Disease programme requires regular inspections.

Selection criteria (specific)

The confirmed policy to be applied for the forthcoming round is as follows:

1) history of AFB incidence
2) previous positive results from testing of bees and/or honey
3) beekeepers who have increasing reported levels of AFB
4) new beekeepers
5) beekeepers who may have rapidly expanded their hive holdings, in particular from a hobby level to a semi-commercial/commercial status
6) consideration of local knowledge from Disease Coordinators.

Selection criteria (consideration)

7) geography must be considered in terms of travel
8) selection criteria to take account of all beekeepers having their apiaries inspected within a 3–5 year cycle
9) those sites/beekeepers surveyed last year to be excluded from the sample for selection, unless they are in a high-risk category as above
10) if beekeeper surveillance is conducted under other sections of the strategy; e.g., ADR/COI defaulters, then these beekeepers are to be removed from selection.

- Rex Baynes
AFB NPMS Manager

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PRECAUTIONS: Store in unopened original packaging away from foodstuffs. Avoid inhalation of product vapour when opening the sealed sachet. Avoid contact with skin and eyes and wear goggles and latex gloves when handling the wafers. Wash hands thoroughly after handling and before eating or drinking. Harmful to aquatic organisms and terrestrial vertebrates.

DIRECTIONS FOR USE - GENERAL

DOSAGE RATE: Two applications of one wafer per brood chamber at a 3-4 weeks interval. Open the sealed sachet containing 5 wafers. Place one wafer (cut in half) on top of the brood chamber as depicted in the diagram. Use two wafers uncut for a double storey box of chambers. Wafers can be cut with a pair of scissors.

APPLICATION: The first part of the treatment is to put the wafer(s) on the top of the combs of the brood chamber. Close the hive as usual. Open floors have to be closed. Repeat the application of wafer(s) 3-4 weeks later. Remove used wafers after 3-4 weeks. After opening the sealed sachet all wafers should be used immediately.

TIMING: Application can be made in the spring before honey supers have been added for the first honey flow. Alternatively, an application can be made in the late summer to early autumn period immediately after all the surplus honey has been removed. Apply when maximum daily temperatures are between 12°C and 30°C. All hives of an apiary should be treated with Thymovar at the same time, to avoid robbing.

Factors such as temperatures dropping below 12 °C for a longer period during the treatment can lower the effectiveness of treatment. Also temperatures higher than 30 °C increase the sublimation of the thymol, and can have negative effects on the bees (e.g. robbing). It is recommended that the natural mite fall be monitored 2 weeks after completion of the Thymovar treatments and if more than 1 mite per day is recorded alternative non-thymol based treatments be applied. If the mite drop is not checked, all colonies have to be subjected to a follow-up treatment. Otherwise sufficient efficacy for all colonies cannot be guaranteed.

WITHHOLDING PERIOD: Not for use when honey supers are present in the hive.

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Beekeeper consultation on proposed AFB NPMS 2010/2011 Operational Budget: 1 June 2010 through 31 May 2011

Biosecurity (American Foulbrood – Apiary and Beekeeper Levy) Order 2003 – Payment of levy

– **Section 16**: Consultation on how levy is spent -

(1) *The Management Agency must, before the start of each levy year, consult with beekeepers on how the levy money is to be spent.*

(2) *The Management Agency must use the following process to consult with beekeepers.*

(a) it must send to every beekeeper a proposed budget for the levy year's expenditure: and
(b) it must give every beekeeper an opportunity to make submissions to it on the proposed budget; and
(c) it must send to every group or association of hobby and commercial beekeepers known to it a copy of the proposed budget.

The budget presented is for the coming year 2010–2011 operational period: 1 June 2010 to 31 May 2011.

The budget outlines how the Management Agency intends to spend levy income for the above period.

If the budget is approved, the levy will be set at $20 per beekeeper and $11.00 per apiary.

Important: if you wish to make a submission on the proposed budget, then please do so in writing by 1 December 2009 to:

Rex Baynes,
AFB NPMS Manager
P O Box 44282
Lower Hutt.
Email: rbaynes@ihug.co.nz

PROPOSED AFB NPMS OPERATIONAL BUDGET 2010–2011

Income :	Levies (Beekeepers)	53,400.00	
	Levies (Apiaries)	237,600.00	
	Interest Received	10,500.00	
	Defaults & Other income	10,000.00	
			$311,500.00
Expenditure:			
	Management Agency admin	60,000.00	
	AsureQuality Limited contract	90,000.00	
	Hive Inspections	60,000.00	
	AFB Spore testing	20,000.00	
	AFB Recognition Training	15,000.00	
	Meetings & travel	10,000.00	
	Accounting, legal & audit	8,000.00	
	Other general expenditure	20,000.00	
	Aerial surveillance (unregistered apiaries)	10,000.00	
			$293,000.00

NB: As with the previous year's budget, we have not allocated expenditure to the particular account categories as we have done in the past, but identified the likely main contractual arrangements that the Management Agency will have.

The Management Agency wishes to gradually build up a reserve in order to maintain the strategy's financial viability, as well as being able to call on funds for unbudgeted priorities.

Beekeepers will realise that without the formal gazette notice and because we are estimating income and expenditure up to 18 months ahead, it is extremely difficult to accurately categorise the amounts.

NBA Conference 2009 fundraisers

At the front desk we ran a raffle for a trip to White Island donated by White Island Tours. The Bay of Plenty (BOP) Branch thought that one good turn deserved another and as the prize had been donated, we should look at where best to place the proceeds.

We all work in remote places at times and would be well pleased to hear the chopper if we needed medical assistance. Unfortunately this is not a given in today's economic environment, as the rescue helicopter has to fundraise for its operating costs due to the lack of government assistance. Our local rescue helicopter is Trustpower TECT Rescue Helicopter Bay of Plenty and we decided this to be the best use of the funds. I hope never to need a ride but to hedge my bets we are friends of the rescue service and wouldn't have it any other way.

We raised $550 and president of the BOP Branch Dennis Crowley presented the cheque in August to pilot Liam Brettkelly. Liam was "blown away" by the donation, which came as a bit of a surprise to him as he hadn't had to ask for it. Liam mentioned "he had noticed a lot of beehives during his travels in out of the way places".

Liam said, "we are very thankful for the donation and anyone can come visit us to have a look at our base behind Tauranga Hospital".

Dennis Crowley (left) presenting cheque to Liam Brettkelly
Photo supplied by BOP Branch.

On conference dinner night we had a lot of fun with an auction. For those present, I am sure you enjoyed the auction run by Stuart Ecroyd with some great items up for offer. The auction items ranged from a magnum of very nice wine to bidding on Reuben Stanley ending up in the pool with not much on, plus added extras such as an Ecroyd bag and a few other bits and pieces. Lots of laughs and lots of money. The auction raised $1130, which was donated to the Leukaemia and Blood Foundation. This very worthy cause couldn't believe their luck when branch member Bronwyn Carroll presented Amy Munro with the cheque. In these sorts of organisations there is never enough money to go around, so every bit is very appreciated. We all hope to never need this type of organisation but when you do it is truly a lifeline, and needs all the support we can give it.

Bronwyn Carroll (left) presenting cheque to Amy Munro
Photo: Ross Carroll.

The BOP Branch would like to thank everyone who participated in raising this money.

- Barbara Pimm, for the Conference Organising Committee
Bay of Plenty Branch

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Telford Rural Polytechnic Annual Report, July 2008–June 2009

Telford continues to offer a wide range (12) of different courses in apiculture, including full-time, block courses and by correspondence. The three courses that are most popular include the National Certificate in Apiculture Level 2, the Telford Certificate in Queen Bee Rearing Level 4 and the Telford Certificate in Apiculture Knowledge Level 3.

Student numbers

Telford Certificate in Apiculture Level 3

2008
Five students completed the one-year full-time Telford Certificate in Apiculture Level 3 in 2007. Nicolas Green was awarded a pass with Distinction; Sarah Coppard, Maru Hoani Te Uruti and Rebecca Shoemaker passed with merit and Nathaniel Thompson was awarded a pass.

2009
Two students have enrolled in the one-year Telford Certificate in Apiculture course for 2009.

National Certificate in Apiculture Level 2 and 3

2008
Seven students completed the 5 month full-time National Certificate in Apiculture Level 2 and five students completed the 7 month full-time National Certificate in Apiculture Level 3.

2009
Two students are working on their National Certificate in Apiculture Level 2.

Telford Certificate in Queen Bee Rearing Level 4

2008
Nine students completed the four-week block (and correspondence modules) course for the Telford Certificate in Queen Bee Rearing. Nicholas Green, Melvin Kwon, Enere Vuibureta and Rebecca Shoemaker were awarded a distinction; Sarah Coppard, Maru Hoani Te Uruti, Nathaniel Thompson and Evan Price received merit passes and Nicholas Faherty a pass.

2009
Two students are enrolled for the Telford Certificate in Queen Bee Rearing this year.

Telford Certificate in Apiculture Knowledge Level 3

There were 48 students enrolled on the one-year apiculture correspondence course in December 2008 compared with 44 in 2007.

Telford Queen Bee Rearing Knowledge Level 4

There were six students enrolled on this six-month correspondence course in December 2008, compared with eight students enrolled for 2007.

Telford Certificate in Honey Production Level 3

Two students, Gloria Huang and David Lee, completed this new six-week, 40 credit, full-time certificate course.

Telford Beekeeping e-learning course Level 2

Two students participated in this 10-month video conferencing apiculture course through secondary schools, with one student passing the 20-credit programme.

STAR (Secondary Tertiary Alignment Resource)

Two students enrolled in this 7-credit secondary school course in apiculture.

Student awards and bursaries for 2008

Maru Hoani Te Uruti was awarded the NZ Honey Industry Trust bursary of $3,200 and the Airborne Honey bursary of $500. Nicholas Green was awarded the Beeline Supplies bursary of $300.

Continued on page 23

Continued from page 21

Nicholas Green won the Graeme Clarke cup for the most successful queen bee breeder. Rebecca Shoemaker won the Ecroyd Beekeeping Supplies smoker award for effort and diligence in beekeeping.

Steve Caughley won the Ecroyd Beekeeping Supplies bursary of $200 worth of beekeeping equipment for the highest aggregate marks on the apiculture correspondence course. Deana Carbett won the Ecroyd Beekeeping Supplies bursary of $100 worth of beekeeping equipment for the second highest aggregate marks on the apiculture correspondence course.

Revision of National Certificates and New unit standards

Following a meeting in Wellington on 7 November 2008 with the Agriculture Industry Training Organisation and industry representatives, the two national certificates in apiculture (Level 2 and 3) have been revised. There are a number of new unit standards that have also been developed on the following topics: basic introduction to beekeeping, feeding beehives, carrying out manual extraction of honey, artificial insemination of queen bees, honey grading, creaming and packing, risk management programmes for honey houses and export certification requirements for bee producers and bee products. It is anticipated that the revised national certificates and the new unit standards should be on the NZQA website by the end of 2009, if not before.

Queen Bee Rearing book

The book *Queen Bee: Biology, Rearing and Breeding*, has been reprinted: first print of 200 copies sold out in about 18 months. The 2009 reprint is being published by Northern Bee Books in the UK and is being sold in the UK and USA. The new reprint is larger in size and has a glossy cover. Copies of the new reprint are currently available through Ecroyd Beekeeping Supplies and Ceracell Beekeeping Supplies. Copies will be available from the author (David Woodward) from mid-August.

Honey house audit

Prior to the audit, the honey house was painted and the extractor and spinner were dismantled and a stainless steel barrel and basket arms constructed, respectively. The honey house was audited by Marco Gonzalez on 28 April 2009. Three non-compliances were identified relating to transfer documents and harvest declarations. These documents were subsequently updated and the full audit was signed off by AsureQuality at the beginning of June.

Far North beekeeping school

Telford Rural Polytechnic, NorthTec (Northland Polytechnic) and the Te Rarawa iwi have formed an alliance to provide beekeeping training to students in the Far North. Several meetings over the last six months have been held to finalise the training programme. The training will be based at Kaitaia. The anticipated start date of this training is March 2010. It is anticipated that the training will be full time and that students will be offered the National Certificate in Apiculture Level 2 and Level 3. Other courses such as Queen Bee Rearing may be offered in conjunction with the Level 3 programme.

Annual Disease Return

There were 310 hives registered belonging to Telford in the annual disease return (ADR) as of 1 June 2009. Two hives were detected with AFB (American foulbrood) in hives on the campus in October 2008 and March 2009 respectively: these hives were subsequently destroyed.

Disease recognition and competency course

An AFB disease recognition and competency course (DECA) was run on 29 August 2008 with nine participants. Another DECA course will be run on 28 August 2009 at Telford.

NBA Conference

I attended the NBA conference in Masterton 14–17 July 2008 and the Rotorua conference from 7–10 June 2009. The Rotorua conference included a very interesting tour of Comvita and the Arataki Honey extraction and packing facility.

Work experience

Work experience continues to be an important part of the students' learning. Telford would like to take this opportunity to thank the following beekeepers for assisting in providing work experience for students in 2008: Carne Clissold (Gore), Robert Laird (Gore), Doug Lomax (Te Anau), Blair Dale (Middlemarch), Neil Walker (Milton), Frans Laas (Mosgiel), Des Gent and Fergus McKenzie (Balclutha), Peter Ward (Hawea Flat), James Corson (Glentunnel) and Mark Graham (Kaikoura).

- Dr David Woodward
Head of Department, Apiculture
10 July 2009

Telford students, early February 2008: Left to right: Melvin Kwon, Maru Hoani Te Uruti, Rebecca Shoemaker, Sarah Coppard, Nathaniel Thompson, Nicholas Faherty, Nicholas Green. Photo: Dr David Woodward

Australian SHB study trip report Part 3—"General beekeeping we've seen"

"Put another sticky on mate!" It's hard to imagine hearing a phrase like that here in New Zealand in the middle of May, especially after the first couple of frosts of the season. But as I put pen to paper a honey flow was happening for our neighbours across the ditch: Spotted Gum flow to be precise.

That was just one small snippet of information I gleaned from my visit to Australia in May 2009. I was lucky enough to experience an exciting and educational trip as the representative for the Hawke's Bay region of the NBA. The tour took us (14 beekeepers in total) around Eastern Australia from Queensland to just north of Canberra then on to Sydney, in a 25-seater bus built for comfort.

The aim of the excursion was to study the Small Hive Beetle (SHB) and European foulbrood (EFB), neither of which are in New Zealand, and to share our knowledge on varroa, keeping in mind the amazing insect the bee. A wealth of information was forthcoming from the various establishments we visited, which included commercial beekeepers, the University of Queensland and the University of Western Sydney, animal research institutes, government departments, Steritech, honey packers and members of various bee clubs.

The commercial operations revealed that hives are moved four to six times during the season depending on honey flows and pollination: hence the reason Bobcats and EZYLoader hive lifters were on every truck and ute from the north to the south. It wasn't uncommon that apiaries or yard sites had more than 100 hives. In state forests, where beekeepers have sites, an annual fee of $82 is paid regardless of whether the site is used for the season. Sites are located one per square mile generally where log dump and load out areas are. This is completely different to New Zealand, where hives are usually only moved for pollination and are located on farms, Department of Conservation and Maori land.

200 kilograms of honey per hive annually is fairly common. Since the incursion of the SHB, honey production has dipped a little, particularly in hives that haven't been managed properly. Weak, failing queens or hives without queens were targets of SHB, maybe due to a yeast smell. The bees will corral and chase the SHB initially, but over time the SHB infiltrates the hive and when numbers get too high the bees will abscond, leaving the beetles to take over the hive completely. This is known as a 'slime out': see Figure 1.

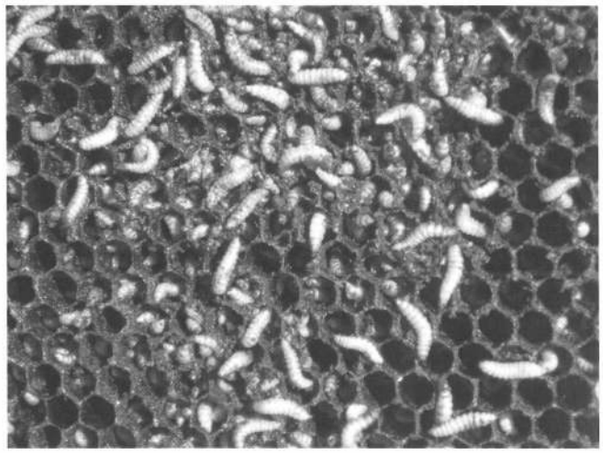

Figure 1. SHB larvae

Processing plants were very clean as good hygiene is paramount. Boxes of combs were stored in chillers to prevent SHB larvae pupating. Steritech was busy throughout the year irradiating boxes, combs, floors, lids and general beekeeping equipment. This was to ensure that diseases such as AFB, EFB, wax moth, nosema and SHB were radiated before gear was reused. Pallets of equipment would arrive at the radiation plant. The pallets would snake through the plant on rollers, being radiated at a recommended time and dosage requested by the beekeeper. An eerie but fascinating place to visit.

Figure 2. Scene at a processing plant

During the spring, splits are made as the SHB isn't too active—the numbers normally dwindle throughout the winter. From what I could gather, during the spring rounds an AFB check was done along with an EFB blanket treatment, and the process was repeated in the autumn. According to some queen breeders, EFB shouldn't be an issue as it is a genetic condition and it can be bred out of the operation. Resistance to the EFB treatment didn't seem to be a problem either and the residues do not appear to taint the honey. However, feeding pollen supplements are attracting beetles to the hive, so some different practices are used to get around the problem: see Figure 3.

Figure 3. Treating for EFB

Pulling honey is a little different. The full box of honey is taken off and an empty box put on over the excluder as all hives are run as single brood chambers. A bee escape board is then put on top of the empty super, with the full box of honey back on top of that. A day or two later, the beekeeper heads back to the apiary and takes away the full box of honey less bees ready for extraction, which generally happened within four or five days after being taken off because of the SHB. This procedure seemed to work very well and didn't seem to be an issue with apiaries having large numbers of hives.

Queen breeding is proving to be an art in dealing with the SHB. Beekeepers have a lot of hope with scientists currently developing methods to detract the SHB away from the hives. For example, hanging something in a tree or something within the apiary to attract and kill the beetles, as other methods of dealing with them are not proving to be effective.

As we all know, beekeepers are known for inventing some bizarre, crazy but functional pieces of apparatus. Some of the SHB traps are quite something: from traps inside the hive, underneath the hive, protruding from the hive, the list goes on. The most common trap is the AJ Beetle Eater filled with oil: see Figure 4.

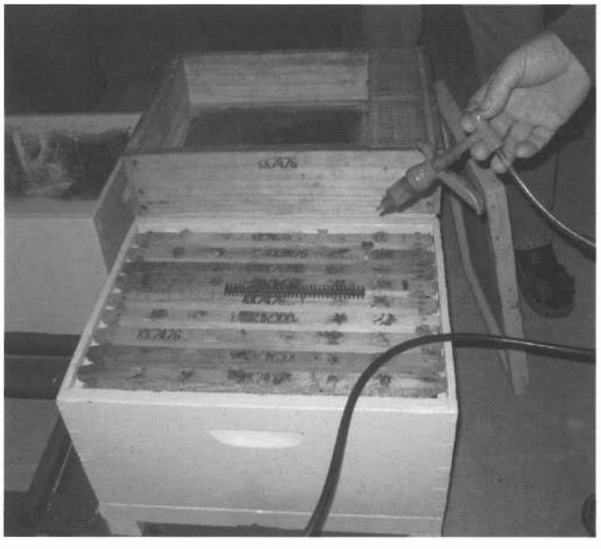

Figure 4. AJ Beetle eater

Several of the evenings were spent with various beekeepers discussing varroa and how we deal with it in New Zealand, and in turn the Australians described their experiences with the SHB and EFB. We concluded that New Zealand beekeepers would keep varroa and Australia would keep the SHB and EFB, as these are the easiest options to deal with. Beekeepers in both countries hope it stays that way for a long, long while to come.

Upon reflection the experience I had in Australia was extremely worthwhile. To the Auckland Branch a big thanks, and to those that made the time for us in Australia, it was greatly appreciated. The information freely passed onto us about the SHB and the practices the Australian beekeeping fraternity preach was very interesting. The research being done at the universities and the Department of Primary Industries was extremely fascinating.

- Damien Ward, Hawke's Bay study group representative

Asian bee interception update

As many of you will be aware from Frans Laas' report in the September issue of *The New Zealand BeeKeeper*, Biosecurity New Zealand staff in Auckland intercepted a hive of *Apis florea* (Asian dwarf honey bee) on an imported sea container in August. The NBA has since learnt a hive of *Apis florea* was also intercepted in Dunedin on 15 May 2009.

Tropilaelaps (an Asian bee mite) is sometimes found on *Apis florea*. In these instances, the bees from both hives were alcohol washed and no mites were found.

All bees and comb were destroyed. Because of the absence of any mites and no evidence of honey being robbed, no extra surveillance is planned. MAF Biosecurity New Zealand (MAFBNZ) officials assure the NBA that because both the Auckland and Dunedin ports are considered high-risk areas, hives close to both ports are targeted in the annual exotic bee disease surveillance.

The Auckland Branch recommends that despite tests finding no sign of exotics, all beekeepers in the vicinity of the Ports of Auckland should check their hive(s) for the presence of exotics, with particular reference to the Tropilaelaps Asian mite, using the detection methods as for checking for varroa.

Many of you will be aware that MAFBNZ recently made staff reductions. MAFBNZ officials advised the NBA this was due to a reduction in imports (especially of used cars) as a result of the current economic climate. Inspection of cargo is carried out on a user-pays basis, and decreasing levels of imports meant that MAFBNZ has neither the workload nor the funds to maintain staff levels in some ports.

For more information on the interception and Tropilaelaps, including images of the mite, please visit www.nba.org.nz. If you have any biosecurity concerns please contact the NBA immediately on 04 471 6254. Suspect exotic pests and diseases should be reported to MAF Biosecurity New Zealand on 0800 80 99 66—this number is answered 24 hours a day, seven days a week.

- Gemma Collier and Daniel Paul, joint Chief Executive Officers

Let's keep it simple: what's a COI?

For some beekeepers, in the next little while you will be receiving a Certificate of Inspection in the post.

A Certificate of Inspection, or COI, is the first building block in having hives inspected for American foulbrood. It is very important that hives are inspected: it is compulsory. It is also compulsory that the COI forms are completed and returned to AsureQuality Limited.

Why do you have to have a COI? Some beekeepers are exempt from completing a COI by entering into an Agreement with the Management Agency that shows:

1. that you can recognise American foulbrood
2. that you know what to do with it when you find it and
3. how you are going to eliminate it from your hives.

But let's go back to the beginning. New Zealand has a National Pest Management Strategy for American foulbrood. The whole idea—or if you like, the 'aim of the strategy'—is to rid New Zealand of American foulbrood.

All beekeepers are required to have their hives inspected by a competent person. That could be you, as long as you have demonstrated to the Management Agency contractor (AsureQuality Limited) that you have been trained sufficiently by passing the AFB Disease Recognition and Competency test and entering into a Disease Elimination Conformity Agreement, known in short as a DECA. You must pass the test to have a DECA. Once you have your DECA you are an approved beekeeper. (Refer to *The New Zealand BeeKeeper*, April 2009, page 37 for more information.)

For all beekeepers, it is important to note that if your hives die out, or you sell, barter or give them away that you notify AsureQuality Limited, which looks after the Apiary Database. This is the only way to have your information updated to the database.

Based on the information that AsureQuality Limited holds on their computer system, a Certificate of Inspection will be sent to you if you do not have a DECA, yet you have beehives registered against your name. If you do not have any beehives, then you need to write and tell them why you no longer have the hives and what happened to them.

If you still have your hives and you haven't got a DECA, then you will need to find an approved beekeeper to inspect your hives for you. I suggest that if you are not involved in a hobby club or an NBA branch that you check page two of this journal for an NBA branch near you to find an approved beekeeper that lives near you.

Be prepared to pay for this service. It does cost for an inspection, travel time and inspection time. Maybe a better suggestion would be to join a hobby club (see page 55) where it is likely that a few people in the club will be approved beekeepers.

I must stress that it is very important for the Certificate of Inspection to be completed by an approved beekeeper, signed and returned to the Management Agency.

As part of the AFB strategy you are required to return the Certificate of Inspection. In the past beekeepers have let us down by not doing this, and the Management Agency are now more actively pursuing outstanding Certificates.

Please help us to adhere to the strategy and not put additional costs onto the strategy by having to chase up on these. If you do not understand your obligations, then talk to AsureQuality Limited.

- Fiona O'Brien

Private Bag 3080, Hamilton, NEW ZEALAND
Phone 64 7 850 2800 Fax 64 7 850 2801

AsureQuality

AsureQuality Limited contact information

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Bee swarms and wasp nests

Many housewives are terrified when a swarm of bees comes filling the air, flying everywhere. It is worse when they form a 'hive' right next to the entrance of a house. Another favourite bee destination is to appear in a fireplace after deciding that a chimney top is a good place to settle. These swarm clusters are always the "biggest" that have ever been seen.

Swarms are most commonly found on a branch of a garden tree. When this happens, it is easy to shake the bees into a box for removal to a hive. It is a fascinating experience to dump a box of bees at the entrance of a prepared hive and to watch them troop in. A prepared hive is one with some drawn comb, some foundation frames and, if available, a frame of brood from another hive. These new inhabitants may require sugar feeding if there are not many nectar or pollen sources available.

Later in the season, keen gardeners disturb wasp nests when they are trimming back overgrowing shrubs or hedges. Another place where wasps fly in and out is a rock or block wall with gaps facing into the warm sun.

A swarm recovered early in 2009 by Craig Tunzelmann. Photo: Craig Tunzelmann.

Here in Hawke's Bay none of these incidents is a problem, as the branch has established a roster of beekeepers covering the area and willing to respond to these distress calls. There is likely to be a small charge to cover the respondent's time and vehicle costs; but early in the season, swarms are a good way to replace hives that have been lost through the winter. Of course it is beneficial to replace these swarm queens at the earliest opportunity, as they are usually the old queens of the original source hives. Some also say that the progeny of swarms are liable to be candidates for further swarming.

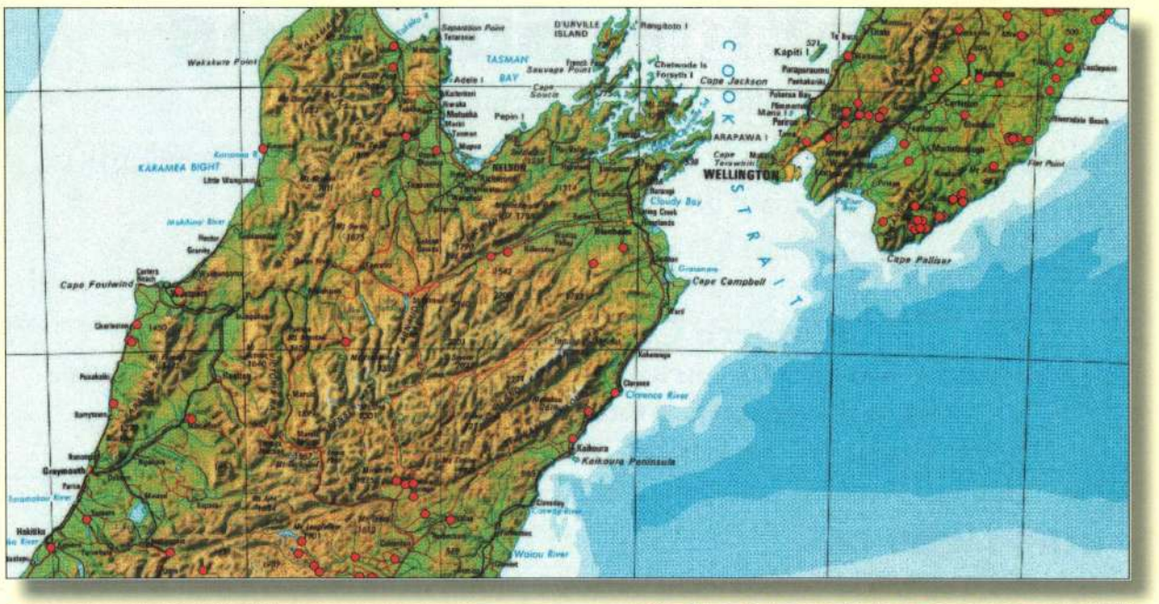
In August a list of these apiarists is posted to all those establishments that are likely to receive calls from homeowners or businesses. August is not too early to renew this post-out: this year, two swarm calls were received at the end of August.

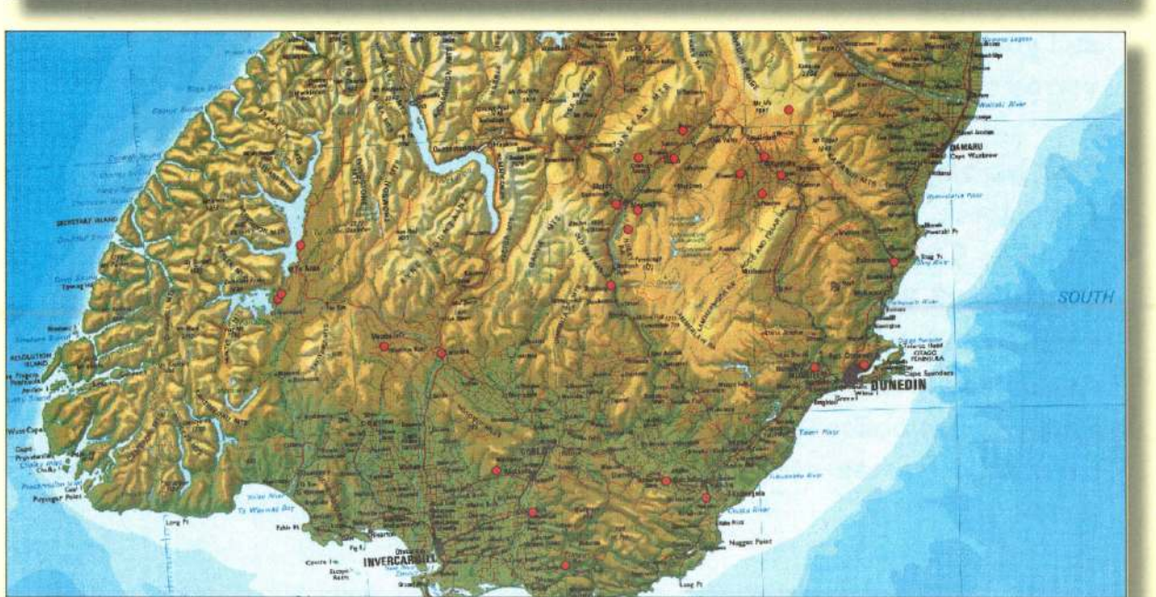
Happy swarm collecting and beekeeping.

- Ron Morison

Reported incidence of AFB,

May 2008–June 2009





Maps courtesy of AsureQuality Limited

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Or plastic frames coated with beeswax. Note boxes and floors need painting.

Biosecurity (National American Foulbrood Pest Management Strategy) Order 1998

AFB Reporting and Destruction Form

7 Day notification to the Management Agency, of a case(s) of American foulbrood

North Island notifications to be returned to:
Byron Taylor or Murray Reid, AsureQuality Limited
Private Bag 3080
Hamilton

South Island notifications to be returned to:
Tony Roper or Marco Gonzalez, AsureQuality Limited
Private Bag 4718
Christchurch

Beekeeper Name (print): Beekeeper Registration Code: _____

Company Name:

Postal Address:

Home Phone: _____

Work Phone: _____ Fax: _____

Mobile Phone: _____ E-mail: _____

MAF Apiary Number: _____ Date found: _____

Grid Reference: _____ Date destroyed: _____

Number of Hives with AFB: _____ Was the hive(s) a "robbed out hive"? _____

Name of Land owner or Occupier _____

Property Name if applicable _____

Address of property (street/road and number) _____

Possible source of infection:

BEEKEEPER'S STATEMENT — AFB DESTRUCTION

I certify that an American foulbrood case(s) was discovered in a beehive(s) as listed above, and that these honey bees and the associated bee products and equipment have been, within 7 days of my becoming aware of the case(s), reported to the Management Agency and have now been destroyed or dealt with in accordance with my DECA.

_____ _____

Beekeeper's Signature *Reporting Date*

Notes: Biosecurity (National American Foulbrood Pest Management Strategy) Order 1998:

Clause 26. Notification of American foulbrood—
(1) Where an American foulbrood case is discovered in a beehive, the person in charge of the keeping of the honey bees must, within 7 days of becoming aware of the case, notify the management agency and the beekeeper, in writing, of the American foulbrood case.
(2) A breach of this rule, without reasonable excuse, is an offence under section 154(q) of the Act.

Clause 28. Obligation of beekeeper to destroy honey bees and materials—
(1) Where an American foulbrood case is discovered in a beehive, the beekeeper who owns that beehive must, within 7 days of becoming aware of that case, destroy by burning all honey bees, bee products, and appliances associated with that honey bee colony unless directed otherwise by an authorised person.
(2) The provisions of this clause do not apply to—
(a) A beekeeper who is acting in accordance with the relevant provision of a Disease Elimination Conformity Agreement between the beekeeper and the management agency; or
(b) A person acting in accordance with a permission, regulation, or authorisation provided for in sections 52 or 53 of the Act; or
(c) A person acting in accordance with an exemption given under clause 30.

Office use only:	Update Beekeeper details ( )	Lab report authorised ( ) N/A
Signed:	Receipt notice sent to Beekeeper ( )	Rob out notice issued ( ) N/A
Date:	Follow up with beekeeper ( ) N/A Date:	

Amended September 2008

A closer look: AFB spores and vegetative rods

Clarence H. Collison and Audrey B. Sheridan
Mississippi State University, USA

American foulbrood (AFB) is a widespread disease of honey bee larvae caused by the spore-forming bacterium *Paenibacillus larvae* subsp. *larvae* (formerly known as *Bacillus larvae*). Spores are the infectious stage, and shortly after being ingested, they germinate into vegetative rods in the midgut. The rods then migrate into the hemolymph (blood), where they cause septicemia and death of the larval host. Spores are resistant to desiccation, radiation, high temperatures and disinfectants; therefore only the vegetative stage of *P. l. larvae* can be successfully controlled with antibiotics. While older larvae have physiological characteristics that slow or even prevent septicemia from occurring (Alippi 1999), individual larvae that ingest as few as 10 spores before they are 24 hours old will not recuperate once infected. After a larva has succumbed, the bacteria sporulate in the decaying corpse, which becomes characteristically brown and mucilaginous (Shimanuki 1997). Finally, the larva desiccates, leaving a dark scale on the bottom side of the cell. The scale contains millions of *P. l. larvae* spores, which re-enter the cycle when they are picked up by house-cleaning bees. It is known that large numbers of spores are required to establish infections in honey bee colonies and it has also been shown that colonies can maintain relatively large numbers of spores over several seasons without manifesting any clinical symptoms of AFB. In order to understand the epidemiology of the disease, it is important to understand the distribution and virulence of spores within the honey bee population and hive, and the susceptibility of the vegetative rods to various treatments.

Lindström (2008) studied the distribution of *P. l. larvae* spores among adult honey bees taken from different parts of eight clinically diseased colonies and found that the spores were not randomly distributed among the bees. Some bees had much higher spore loads than others and as the proportion of contaminated bees increased, the number of spores from each positive bee also increased. The data also demonstrated a relationship between the number of clinically diseased cells and the proportion of spore-positive bees in individual colonies.

The impact of spores among larvae of different castes is also of interest. An early study compared queen, worker, and drone honey bee larvae of similar ages and genotypes by giving them, in their food, continuous dosages of either water-suspended P. l. larvae spores, or water only. The spore treatment resulted in about 93% mortality of female larvae reared as queens, 82% mortality of those reared as workers, and 68% mortality of the male (drone) larvae. Control (water only) treatment mortality was less than 5% for each caste. The differences in resistance between castes were attributed to differences in the food supplied by adult bees to the larvae (Rinderer and Rothenbuhler 1969).

Regardless of the density of spores within a colony, adult bees that transfer the spores and have close contact with larvae never seem to become infected (Crailsheim and Riessberger-Gallé 2001). Furthermore, not all larvae that are fed spores develop infection. Crailsheim and Riessberger-Gallé (2001) investigated resistance to *P. l. larvae* in various larval stages and in adults of different ages. Substances inhibiting the growth of *P. l. larvae* were demonstrated in 4 day-old larvae and to a lesser extent in 1 day-old larvae. No such substances were shown in 6 day-old larvae. Extracts of adult bee midguts generally produced a greater inhibition of bacterial growth than did extracts of larval midguts. It was also discovered that the midguts of 8 day-old adult bees showed a greater bacterial growth-inhibiting potential than midguts of freshly emerged adult bees or foragers.

Riessberger-Gallé et al. (2001) further studied the influence of the adult honey bee midgut on spore germination and vegetative growth of *P. l. larvae*. Two groups of workers likely to have large numbers of spores in their gastrointestinal tracts were studied: middle-aged bees, which are known to remove or cannibalize dead larvae and clean brood cells, and winter bees which do not have frequent chances to defecate. They found that the midgut extract from winter bees and middle-aged bees of different colonies almost completely inhibited the growth of the vegetative stage of P. l. larvae and suppressed the germination of spores. The inhibiting substance or substances from the adult midgut are very temperature stable: they maintain about 60 percent of their growth inhibiting capacity after being held at 125° C (257° F.) for 15 minutes.

The observations of Riessberger-Gallé et al. (2001) were supported by an earlier study, wherein the ingestion of large numbers of spores over time by adult honey bees of three different genetic stocks did not produce observable pathological effects (Wilson 1971). Dissection and microscopical examination revealed spores abundantly present in the alimentary canal, but no vegetative rods were found in either the canal (with two possible exceptions) or the hemolymph. The recovery of spores from the three major gut regions of adult worker bees (foregut, midgut, hindgut) showed that 4 minutes after spore ingestion the main spore concentration was located in the foregut. After 40 minutes a majority of the spores were in the midgut, where they remained for more than 6.67 hrs. After 2.78 days most spores had passed into the hindgut. Spores remained viable in the alimentary canal for a period of at least 27.8 days. Viability was demonstrated through the growth of bacterial colonies in solid yeast-starch medium. When fed to young honey bee larvae, these spores proved to be infectious and caused American foulbrood disease.

The pathological consequences of artificially introducing *P. l. larvae* spores into the hemolymph of adult bees were investigated by injecting the spores into the thorax of worker bees. A majority of the spore-injected adults died in less than 2.54 days, whereas most water-injected bees lived 5.92 days or longer. A statistical analysis of longevity data demonstrated not only a significant difference between spore- and water-injected groups, but also that the pathogen reduced the life span of three genetic stocks of bees to an equal level, even though genetic differences in longevity exists (Wilson and Rothenbuhler 1968). Upon dissection of the dead bees, single vegetative rods and long chains of rods

Continued on page 35

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Continued from page 33

were observed in spore-inoculated bees, thus demonstrating not only spore germination but also bacterial multiplication in the hemolymph. Water-injected bees remained pathogen-free. When spores were injected into the abdominal hemolymph above the dorsal diaphragm, vegetative rods were recovered in samples of thoracic hemolymph. Clearly, cells of this pathogen were transported via the circulatory system of adult bees from one region of the body to another. Both abdominal and thoracic injections of *P. l. larvae* spores produced a general septicemia in adult bees. Spores were recovered in the hemolymph of only one adult bee out of 115 bees given thoracic and abdominal injections of spores (Wilson and Rothenbuhler 1968).

Within-colony transmission of *P. l. larvae* spores was studied by giving a spore-contaminated honey comb, or a comb containing 100 larvae killed by American foulbrood, to experimental colonies (Lindström et al. 2008). The impact of the two treatments on spore loads in adult bees, honey, and on larval mortality was determined by culturing spores in samples of adult bees and honey, and by measuring larval survival. The results demonstrated a direct effect of treatment on spore levels in adult bees and honey, as well as on larval mortality. Colonies treated with dead larvae showed immediate high spore levels in adult bee samples; colonies treated with contaminated honey showed a comparable spore load, but spore-spread was delayed until the bees started to utilize the honey at the end of the flight season. During the winter, there was a build up of spores in the adult bees, which may have increased the risk for infection the following spring. The results confirmed that contaminated honey can act as an environmental reservoir of *P. l. larvae* spores. They also suggested that fewer spores may be needed in honey than in diseased brood to produce clinically diseased colonies. The spore load in adult bee samples was significantly related to larval mortality, but the spore load of honey samples was not.

The transmission of AFB disease can occur by two principal means: vertical transmission (parent to daughter colony) and horizontal transmission (between unrelated colonies). Fries et al. (2006) studied the rate of vertical transmission of *P. l. larvae* in swarming colonies by culturing the spores from several samples of adult bees. The results demonstrated vertical pathogen transmission to daughter swarms, however, the spore density declined over time in both mother colonies and daughter swarms when mother colonies did not exhibit clinical disease symptoms. Robbing is considered to be of major importance to the horizontal transmission of AFB, but although it is widely recognized that honey will retain spores of *P. larvae,* and that inter-colony transmission of spores in contaminated honey does occur during robbing, the relative importance of contaminated honey for intra-colony transmission of spores remains unknown. An artificial form of horizontal transmission occurs through the inadvertent shifting of brood combs containing remains of infected larvae (scales) that have succumbed to AFB. Beekeepers must be aware that contaminated honey can be transmitted either by shifting extracted or unextracted honey combs between colonies.

Another potential source of AFB transmission would be from package bees that contain either infected workers or queens. When adult workers are taken from a diseased colony, they carry spores with them. Pankiw and Corner (1966) found that brood became diseased with AFB in 6 weeks when these spore

carrying workers were introduced into a colony. Viable spores have also been recovered from the alimentary tract of adult worker honey bees from 1 to 19 days after they had attended spore-fed adult queens. Recovery of the spores from the worker guts implies that the queens released the spores with their feces, and the feces were eaten by the workers as they removed her excrement (Bitner et al. 1972). If bees cannot defecate outside the hive and rely solely on the honey stores for food, there is a buildup of fecal matter mixed with *P. l. larvae* spores in the rectum of adult bees, and such spores remain viable (Bitner et al. 1972). If bees defecate inside the hive, spores are released into the hive environment. This likely increases the risk of larval infection due to a more spore-contaminated environment.

Currently the only treatment for AFB is antibiotics (Terramycin, Tylan). Recently, genetic research has demonstrated that some bees have a naturally-occurring immune defense against the vegetative form of *P. l. larvae*, which is inherited through the maternal line and marked by the production of the protein abaecin in both larvae and adults (Decanini et al. 2007). Other researchers have examined the potential antimicrobial effects of essential oils against the vegetative stage of *P. l . larvae.* Among those tested: thyme, lemongrass and cinnamon oil showed significant antibacterial effects on *P. l. larvae* (Gende et al. 2008, Fuselli et al. 2005, Alippi et al. 1996). These discoveries may lead to the development of alternative treatments to the current antibiotics, which are in danger of losing their potency against resistant mutations of the *P. l. larvae* strains.

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Commentary: New Zealand conditions

Radiation is extensively used in Australia but must be at 15 rads.

Antibiotics are not permitted to be used in New Zealand. AFB-infected hives must be destroyed by fire unless an alternative method is listed in your DECA.

From the colonies

Auckland Branch

Many of you will have heard or read about the Asian dwarf honey bee (Apis florea) incursion in the Auckland area in August.

The Auckland Branch recommends that despite tests finding no sign of exotics, all beekeepers in the vicinity of the Ports of Auckland should check their hive(s) for the presence of exotics, with particular reference to the Tropilaelaps Asian mite, using the detection methods as for checking for varroa. At a breeding rate of 25:1 as compared to varroa, Tropilaelaps would become established quickly.

- Ian Browning, Branch President and Bob Russell, Branch Secretary

Waikato Branch

During the winter months I have been going along to my children's combined martial arts class to give them some encouragement. These classes have proven their worth by increasing my bee dodging speed and staying power.

This month has really flown by. Last report I mentioned that it was the start of the busy season, and that's what has happened. We are seeing spring queen raising starting, and some early nectar flows and plenty of pollen from the remnants of the gorse and willows.

I have had reports of strong hives coming though the winter and with it the fear that if the good weather continues we might have an early swarming season.

The announcement from MAF regarding the honey imports is a bit suspicious; whilst they acknowledge the import standard needs further work, they seem to be pushing forward with reinforcing the standard.

- Stephen Black

Bay of Plenty Branch

As I write this report, spring has most assuredly sprung and it appears to have arrived a bit earlier than in previous years. We have had a colder, wetter winter but the first part of August was wet and warm. So far September has been fine and hot with rain for the first time today.

Beekeepers are busy completing their first round of hive checking and beehives have come through the winter in very good condition. They are strong for the time of the year, which is good because gold kiwifruit is budding up early this year, so pollination for gold and avocados will begin most likely at the end of September or first week of October.

At our last branch meeting the varroa mite was discussed and no sign of resistance was reported. Sure, the odd hive in the odd apiary may have mites, but this has been put down to such hives missing their treatment in the autumn, or from reinvasion due to a high swarming spring last year. These are easily dealt with using a synthetic pyrethroid treatment. After returning a few weeks later, voilà, no mites! Resistance is no doubt going to happen, but when and where is the big question. When it does, I for one would like it verified by Dr Mark Goodwin or some other reliable source instead of Chinese whispers fanned on by vested interests. In the past a lot of beekeepers have lost money, time and hives because of bad advice.

At the branch meeting there was a report of two beekeepers having hives stolen. This may have been fuelled by the recent programme on TV One's *Close Up*, stating that manuka honey is retailing overseas for $200 a jar. This gives a false impression that there is big, easy money to be made in beekeeping. As a producer and exporter of manuka honey these figures are ridiculous and are certainly not what the producer gets. Unfortunately the thieves and some farmers often believe the media reports, so beekeepers may need to dig deeper into their pockets to pay higher rents for their manuka sites.

Rex Baynes also gave a very good update on the AFB NPMS. The BOP branch has formed a PMS sub-committee to liaise with the Management Agency with the aims of improving buy-in of the strategy from beekeepers in the BOP region, reducing AFB and facilitating helicopter surveillance. Beekeepers who are not compliant with unregistered apiaries may need to look upward when the helicopter comes to take GPS readings of their apiary sites. On the bright side, they may have saved $10.50 per site, but stand to lose thousands if their honey being exported is stopped due to false harvest declarations.

The BOP branch has had a very busy year, hosting a successful NBA annual conference in Rotorua and continues to receive complimentary comments regarding this. We were happy to play our part in hosting the conference, as a strong NBA means a strong industry, and a strong industry is good for every New Zealand beekeeping business.

- Neil Mossop
Executive Member

Poverty Bay Branch

Hi all, I hope all is well and the warm spring has been continuing. Spring on the East Coast was three weeks early, with the willow also flowering three weeks early. As a beekeeper I call it spring when the willow flowers and the bees rip into action. The weather has been perfect for spring build-up, with swarm cells found around 8 September; something that never would have occurred pre-varroa due to the feral hives.

I mention this as something to look forward to for the Mainlanders. The hives all seem in good condition. The East Coast is looking like having another drought year: 23 degrees in early September is making for hot beekeeping work, as it is already dry after a long cold winter. Ken Ring, the 'moon man', has been very close for his predictions about August/ September but talks of a cool, possibly wet November. This is not good for the main honey flow, but we'll see.

No sign of AFB anywhere this spring. I know this is a bit late to comment on by the time you read this, but remember

or try to alternate your varroa treatments—not just chemical strips but thymol products as well.

I see the Government is going on with this emissions trading scheme (ETS), which in my opinion is not going to be good for this country. I also read Ian Wishart's book *Air Con*, as it is an important book about the implications and the scam of these carbon credits. For example, why are pine trees up for carbon credits and not native bush? Not only that, we are not affecting the weather or CO2. Please check out this web page as well: www.climaterealists.org.nz. Thank you, and please do take the time to investigate this issue, as this will cost our country $6 billion a year if we go down the ETS road.

- Don Simm, Branch President

Hawke's Bay Branch

I recently attended a meeting at Plant and Food Research Ruakura in Hamilton. The meeting was to discuss beekeeping funding and research. It's just as well that we have some wonderful dedicated brains working for us, as some of the new ideas they have for selecting varroa-tolerant bees seem to me more like science fiction than science. I have a rough grasp of what they are intending to do and as a beekeeper fully appreciate how being able to select queens and drones for their varroa tolerance by sending in a small piece of wing will make the selection process quicker with better results. I'm just glad it's not me having to do all the thinking and practical work to get this project completed.

Dr Mark Goodwin and his team are having success with their varroa-tolerant bees but they do not have all the answers yet, which brings me to my next subject. Overseas, varroa mites have shown resistance to all chemicals used against them. So far there is no sign of this occurring in New Zealand, but we are very lucky it hasn't. Every beekeeper at the meeting had horror stories of inspecting hives where treatment strips had been left in the hives for prolonged periods, sometimes years. It will only take one resistant varroa mite. What you do with your hives could result in the destruction of the beekeeping horticultural and agricultural industries in New Zealand. The products we have available now are very good and we all must do what we can to keep them effective until the glorious day when we can stop treating hives altogether.

Spring has come early in the Bay and fruit trees seem to be flowering about 10 days earlier than normal. Most reports I have had say that hives are generally in good order, although there are the normal number of drone layers and dud queens we have come to expect since varroa. There have been some nice days with plenty of pollen coming in and a lot of brood in the hives.

- John Berry, Branch President

Southern North Island Branch

Southern North Island Branch field day
Saturday 17 October 2009
at Gary Sinkinson's, 189 Reid Line East, Feilding
Starts 10am: $5 per person, $10 per family
NBA members: no charge—show your card
Inter-club competition in the afternoon

Canterbury Branch

Spring is well under way down here and the colonies are in good condition. On the first round I thought that I had had an excellent autumn queen mating, but getting into the second round not all was as well as I first thought. Testing didn't reveal mites, so I think it was the cool wet weather in the last week of February and the first two weeks of March. Cold comfort can be taken from the fact that last time this happened, I had a mountain of extra spring work but I had my best season ever; here's hoping anyway.

Varroa is now a fact of life and seems to dominate any conversation when more than two beekeepers meet on the side of the road. We're looking forward to getting through the first couple of years (hopefully) and then being only responsible for homegrown mites. This invasion phase is a real worry.

Early inquiries from overseas seem to indicate that there is a shortage of white honey in the world at present: prices seem to be firming even while the New Zealand dollar is strengthening. It's best to talk to other beekeepers and keep in the loop; no reason to sell your crop for less than your neighbour's. During the next few years we are going to need every cent we can generate to stay in business, especially if the majority of your income comes from honey. The way that farm gate prices for specialist crops are fluctuating both up and down, there may well be more beekeepers needing good production sites in the near future.

AFB Recognition and Competency course date

Jeff Chandler, AFB co-ordinator for the Christchurch Hobbyist Club, is running an AFB Recognition and Competency (DECA) course on Saturday, 13 February 2010 in Christchurch. Please telephone 03 980 5375 as soon as possible to confirm a place.

All the best for the coming season.

- Brian Lancaster, Branch President

Otago Branch

As I write it is mid-September and spring is early and warm to say the least: great for building up colonies after a pretty cold winter. What it all means for the season ahead remains to be seen but some early swarms seem likely. Otago has had less than normal winter rainfall and even though it is nice to have warm and dry weather now, we will need a few good rains soon.

This sudden return to warmer weather has beekeepers scrambling to get around hives and get colonies into pollination before the blossoms. Some hives will be filling up with willow this week if the nor'westers settle down.

A number of Central Otago beekeepers met recently to finalise plans for a local AFB eradication programme. Led by the AFB NPMS manager Rex Baynes, the pilot project will endeavour to create an AFB-free zone in Central over the next year or two. If this succeeds as we believe it can, it will be expanded further into Otago and Southland. With varroa still perhaps a year or two away the timing is good. Working together to combat AFB meanwhile will assist in the future when coordinated varroa treatment will be required.

Good luck with the season ahead.

- Peter Sales, Branch Secretary

Annual Disease Return statistics

The Management Agency is pleased to report that as at 16 September 2009 there is an 88% ADR compliance rate. This is due to some hard follow-up work from both staff at AsureQuality Limited and from within the Management Agency.

AFB percentage levels are down to 0.27% from 2008. This is especially pleasing given the increase in ADR compliance (greater level of reporting), and would suggest a greater appreciation by beekeepers in the need to report.

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Percentage of beekeepers with a DECA	60%	62%	69%	72%	72%	75%	79%	79%	79%	59%
Percentage of DECA-approved beekeepers who have completed the competency exam	##	##	##	##	##	43%	45%	49%	62%	100%
ADR compliance (by 15 June)	##	##	##	##	##	41%	65%	61%	73%	71%
ADR compliance (best for year)	85%	70%	75%	70%	79%	82%	84%	83%	91%	88%
Certificate of Inspection (COI) compliance	##	34%	47%	8%	##	14%	18%	22%	30%	29%
AFB percentage levels	0.43%	0.46%	0.48%	0.34%	0.30%	0.26%	0.32%	0.30%	0.32%	0.27%

Statistics courtesy of AsureQuality Limited. Note: ## denotes figures not available.

Recognising AFB is crucial. The earlier you can detect it, the earlier you can deal with the hive(s). Undetected AFB can cause all sorts of problems; e.g., if the hive is robbed out, you will start spreading AFB to your other hives in the apiary, and ultimately into the foraging area for bees located around your hives.

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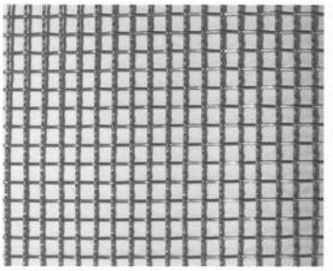

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From the archives

Following on from last month's report on the 14th AGM, the 15th AGM of the NBA was held at Hawera in June 1928.

The President (Mr R Clark) reported, *"As a result of representations to the Minister of Agriculture, a motor car has been placed at the disposal of the Canterbury Apiary Instructor, who previously had to cover an area of something like 15,000 square miles on a bicycle. I understand that there is at least one other instructor who is in the same unfortunate position, and it is the association's duty to see that motor cars are available for inspection work".*

The deputation of NBA representatives to the Minister also requested additional inspectors for South Canterbury and South Auckland districts.

In looking back 80 years to see 'progress', the mind boggles at what the next 80 years will bring. Will the internal combustion engine be replaced with a new form of cheap, fast, personalised travel? Will future beekeepers be amazed that AsureQuality staff were expected to use 'motor cars'? Will there indeed still be a beekeeping industry?

The President was also pleased that the Apiaries Act 1927 had finally been passed by Parliament. Mr Clark stated, *"Our old Act was recognised as the best in the world for the protection of the beekeeping industry but the new Act is a great improvement and its enforcement will be of inestimable benefit to the NZ beekeepers."* However, we do note that there was a remit for an amendment to the 'new' Act: such are the politics associated with laws!

It is evident that foulbrood was on the mind of the beekeepers judging from the remits, President's report, presentations, and discussion. It would appear that there was a concerted effort by the Government Inspectors, supported by 40 beekeeper inspectors who contributed part-time inspection work funded by Government. The President commented, *"The part time inspection scheme has been continued with excellent results, as will be seen by the expression of opinion contained in the various remits which will later be brought for discussion".*

A couple of regulations appear to have upset beekeepers. The Food & Drugs Act 1908 limited manufacturers of food items to use sugar as a sweetening agent, and the Executive made representations to the Department of Health to have honey included under the Act. This was refused and the President stated, *"the Head of the Department taking rather an unreasonable stand on the matter".* Efforts also were made to amend the regulations to permit the sale of honey in dairies.

The Cawthron Institute was investigating a *"means of removing dark colours or strong flavours from honey, the value of which is detrimentally affected by those characteristics".* No doubt this refers to the manuka honey produced at the time. I guess we can be pleased that a process was not found to turn manuka honey into DELICATE WHITE LIQUID HONEY.

It seems ironic that the President concluded his report by stating, *"the Association has for some time been hampered for a lack of funds by means of which to organise the industry and a possible solution was provided by means of a remit put before last conference asking that a fee be charged upon registration, the funds so collected to be handed to the NBA. Your Executive have gone into this matter very thoroughly."*

It appears that there were slow moving wheels in motion for a compulsory levy scheme. A remit was passed *"that a fee of 5/-* [Editor's note: about 50 cents in today's currency] *on registration of apiaries of 5 hives and over be asked for, a portion of the nett amount so realised to be handed to the Dept of Agriculture for specified purposes, the balance to be handed to the NBA."*

We note in reports that 1100 tons of honey was exported to the United Kingdom and this represented more than one quarter of the UK requirements.

The conference report concluded, *"a social was held in the evening, members and friends passing a very enjoyable time in dancing, etc till a late hour".* After a very full and detailed set of minutes, it's a pity that the secretary did not elude what the "etc" referred to!

- Roger and Linda Bray, NBA Librarians

National Beekeepers' Association Conference – 2010

Rutherford Hotel, Nelson
27–30 June 2010

Sunday – Specialty Groups Meetings & New / Small Beekeepers' Seminar
Monday – Seminar Day
Tuesday – Seminar Day
Wednesday – AGM

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Publications Committee news

Long-time members of the Publications Committee, Fiona and Jeremy O'Brien, have resigned from the committee to pursue other projects. Fiona was the secretary of the Publications Committee and also served in a voluntary capacity as the editor of *The New Zealand BeeKeeper* during 2003 and 2004. The Publications Committee thanks them for their contributions over the years and wishes them well.

The committee welcomed Kushla Haenen of Tauranga as a volunteer proofreader beginning with the September issue.

The committee is seeking another volunteer or two to assist with proofreading the journal. Experience is not essential. Broadband is preferred and the committee uses 3-way calling for our monthly teleconferences. Give me a ring if you are interested.

Frank Lindsay
Chairman, Publications Committee
(04) 478 3367

AFB NPMS EMAIL NEWSLETTER AVAILABLE TO ALL LEVY PAYERS

In response to a call for more information on the American Foulbrood Pest Management Strategy (AFB NPMS), several times a year the Management Agency publishes a newsletter dealing with issues relating to AFB.

This newsletter can only be accessed by way of email as the cost of mailing is prohibitive. If you are not on email, I recommend that you contact your local NBA area representative or hobby group and request a copy.

Those who are on email and would like to be on the distribution list are asked to contact me at rbaynes@ihug.co.nz

- Rex Baynes
AFB NPMS Manager

Some things never change

MAF hasn't a clue who really owns all these hives — over the bank with them!

The cartoon shown above is by John Smith, and accompanied his article entitled 'Errant hives' in the Autumn 1987 issue of *The New Zealand BeeKeeper.* John commented, "We not only wish that everybody would mark hives with either a registration number or a name and address; we wish they would also remove old numbers when they buy hives."

Management Agency places ADR defaulters in hands of MAF Prosecutions

While it is pleasing to note the compliance rate for the completion and return of Annual Disease Returns hit 96% earlier this year (2008/2009), the Management Agency is still frustrated with a relatively small number of beekeepers who refuse to comply.

The Annual Disease Return is a crucial element of the Pest Management Strategy as it provides important detail that in turn assists in the running of the PMS.

Several months ago a number of the most recidivist defaulters who had a history of non-compliance were handed over to MAF's Enforcement group for investigation. Failure to comply with the requirements of the American foulbrood strategy is a breach of section 154q of the Biosecurity Act.

The Management Agency is determined that a small number of beekeepers will not undermine the efforts of those who comply with the strategy. Therefore we are determined to use all available tools to tackle those who are unwilling to follow strategy requirements. MAF is being strongly encouraged to prosecute offenders.

- Rex Baynes
AFB NPMS Manager

Being an Approved Beekeeper gives you an exemption from completing a yearly Certificate of Inspection: COI for short. However, it doesn't exempt you from doing your actual inspection(s); you must still retain records about inspection dates and what you do if you find anything.

Update on review of American foulbrood national pest management strategy

In September 2008, MAF notified a review of the American foulbrood (AFB) strategy and published a discussion document. This article provides a short update on what has happened since.

MAF received 26 submissions. These came from the Management Agency, the two industry representative groups [the National Beekeepers' Association (NBA) and Federated Farmers Bee Industry Group (BIG)], regional NBA branches, hobbyist clubs and interested beekeepers of all sizes. MAF greatly appreciates the effort that many people put into these submissions.

MAF will release an analysis of submissions, and make recommendations for the future of the strategy. On some topics, MAF will outline the different options suggested by submitters and ask beekeepers to state their preference. This document was originally scheduled for release in June/July, but was delayed due to pressure from other work. I am currently working towards a release date in October 2009.

Anyone wanting a copy of all submissions prior to the release of the MAF report can request them from either the NBA or BIG, or contact me at the email address below.

One point that came through clearly in almost every submission is that there is strong support for continued regulatory control over American foulbrood. While every submission had criticisms of the current strategy, very few people wanted it abolished. However, there are a wide variety of ideas on how the strategy should be changed, and it will not be possible to satisfy everyone's demands.

One area many submissions addressed is enforcement of strategy rules. Many people feel the strategy needs more 'teeth'. As the Biosecurity Act has reasonably tight restrictions on the powers that it makes available to management agencies, there is a need for closer cooperation between MAF and the management agency. The law doesn't permit some of the measures suggested by submitters, such as instant fines and confiscation of hives.

Other topics that the MAF report will address include:

- duration of the strategy
- who should manage the strategy
- what the objective of the strategy should be
- changes to the Certificate of Inspection system
- whether regional AFB-free zones are an option for future management.

I apologise for the delay in progressing this review, and look forward to additional input from beekeepers in suggesting ways to improve the AFB strategy.

- Paul Bolger
Paul.bolger@maf.govt.nz

About the Apiary

It's been a very early spring. Most of us should have now completed our initial spring inspection and disease checks. We have also had a lot of rain and quite a few of us have been bogged in the mud, requiring assistance to get out. All the early sources have flowered about three weeks early, providing the bees with a great build-up. Beekeepers have reported a particularly good willow flow, mainly because the weather was warm and settled. This really boosted the bees' development and some hives put on half a super of honey. Some of my overwintered nucs (in a full-depth super) have packed honey in the space above the frames. Most years I would be feeding them at this time.

Controlling swarms

The first swarm I heard about was in Masterton on 29 August, and I've heard that bees have been swarming in the Waikato already. City environments are particularly good for bees and with the warm weather they have had in the Wairarapa, perhaps it's not surprising that the bees are swarming. Here in Wellington it's cooler and we get lots of northwest winds with low cloud, so the first swarm was a lot later (mid-September). Most of the swarming will occur in our area within the first two weeks of October.

Generally swarming is attuned to the flowering of the cabbage tree, hawthorn and barberry in the rural areas. You can put out a bait hive on a shed roof (placing it on the ground doesn't work). Use a full-depth super with a couple of dark frames and the rest foundation frames. Restrict the entrance to 25 mm and hope for the best. A day or two before a swarm arrives, there will be a lot of scout activity around the hive with excited bees going in and out. Once the swarm arrives, gently move it to a permanent location. Prime swarms are the best to collect but will need requeening shortly afterwards. Small secondary swarms contain virgin queens, so it's best to put a frame of brood in the super with them to stop them absconding.

We don't actually want our hives to swarm. First, this will only repopulate the feral hive cavities nearby. These hives will eventually die during the winter, repopulating your hives with mites again when your bees rob the remaining honey and requiring you to re-treat your hives. Second, you will lose your honey crop along with the swarm.

Swarming is initiated when hives become overcrowded and the colony can no longer expand the brood nest. An indication that a hive is likely to start swarm preparations is if you see bees covering all the frames in the hive and a ring of honey over the top of the brood frames.

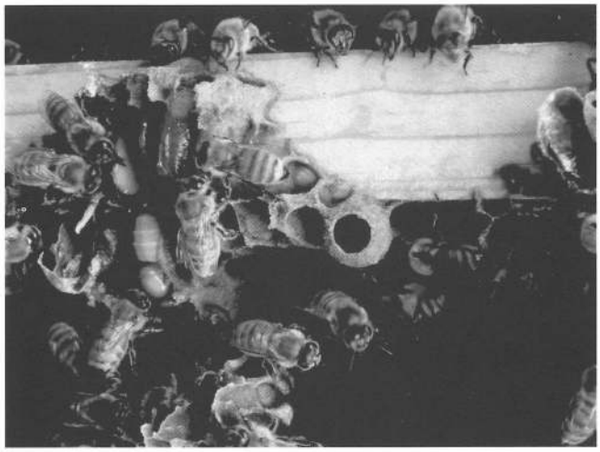
How to determine whether the hive needs a super: bees will be covering all frames underneath.

Not supered in time.

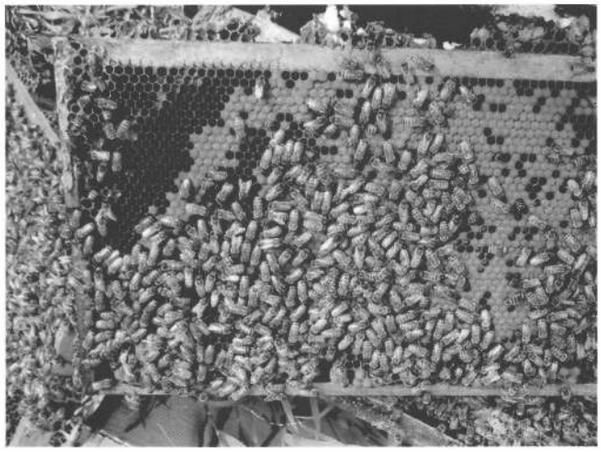
There are several things we can do to alleviate swarming. Replace your queens annually. Once a month, reverse the first and second supers of the brood nest so there are part combs available for the queen to lay in. If you only use a single brood nest, move three or four frames of fully capped brood

up into the second super above the queen excluder and put fully drawn empty frames in their place. If you can't find the queen, shake the majority of bees off into the bottom super before you transfer the frames.

During your 10–15 day inspection of your hives, check a couple of frames of emerging brood for signs of AFB in larvae that have not emerged. Rub out queen cell buds around the tops and sides of the frames but leave those that are along the bottom bars. If the bottom ones are left, it's easier to see whether swarming has been initiated when the top brood super is tilted back (you will see eggs or young larvae in the buds).



Queen cell bud.



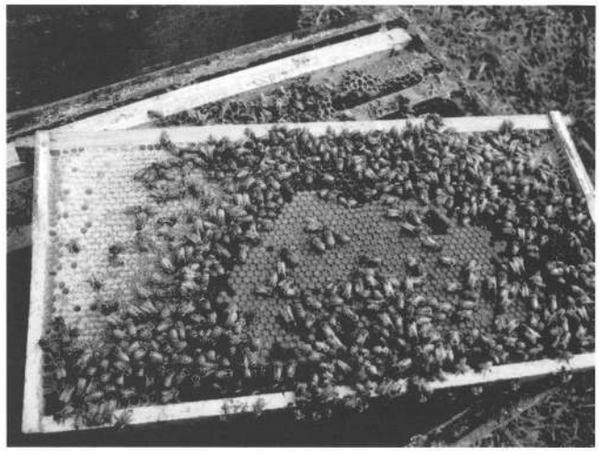
Spot the queen cell bud.

Give the bees foundation to draw out. Place these beside and above the brood nest (i.e., move the pollen frame out one frame). If the hive still has a super of honey in the top super, interspace the full frames with foundation frames and add another super. Keep the bees building. Top up the hives with sugar if they need feeding.

The experienced beekeeper will have already spotted swarm preparations well before the queen cells appear. Bees start preparation by producing lots of drones. Mark these hives and split them as soon as you see an egg in a queen cell bud, or whenever you have mated queens or ripe queen cells available.

To split the hive or to make a nuc, first find the queen (learn to mark them, it's easier). Take four frames of mostly sealed brood and bees (brood covering only half the frame is better as they are easier to keep warm), plus two honey and pollen frames. Or simply split the hive in half by dividing the hive in half vertically: that way each half is equal. Add a super to the half that remains on site and move the other half to another apiary so it doesn't lose its field bees. If you use a split board and the split remains on top of the original hive, plug the entrance of the split with grass for a day so the bees settle down.

Continue to regularly inspect your hives until the honey flow starts; give each hive a quick check for queen cells and continue to give the bees room by adding supers when the top super is half covered with bees. If there is no queen cell development, all is well.



Example of a nice brood pattern.

There are alternatives to dividing hives. Swapping a weak hive for a strong hive will immediately strengthen a weak hive and remove most of the field force from a strong hive. Taking four frames of brood from strong hives to make extra nucs will also help congestion and prevent swarming. If you don't want extra colonies, combine them back on to the original hive using the newspaper method when the main honey flow starts.

Making frames

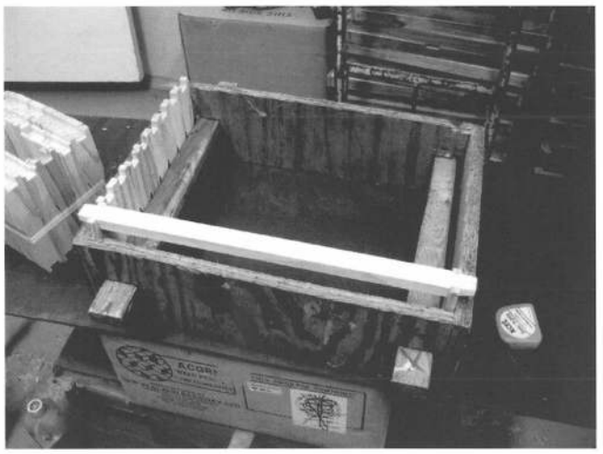
A lot of beekeepers are switching over to plastic frames as these save a lot of time and will last for years. One little problem I have noticed with plastic frames is that if they're placed on the hives soon after manufacturing, the bees are reluctant to move onto them, perhaps because of the plastic smell. Air your new frames well before putting them on the hive, and roll or brush on beeswax to make them attractive to bees.

Although I use plastic frames for honey (no damage during extraction), I use wooden frames in my brood nest. The bees move quicker onto natural wax and seem to draw them out faster than plastic frames, especially when there is only a dribble of nectar coming in. These frames also fit well into my replacement plan as I burn the old frames during winter on the fire. If purchasing new frames, I would also purchase those with a grooved bottom bar. These frames give you the

option of either replacing the old drawn-out wax at a later date with either another sheet of wax, or using a wax-coated plastic insert (which saves rewiring the frame).

In making up frames I use three devices: a frame holder, a framing board and an embedding board that supports the wax while it's being embedded.

Framing



Framing jig.

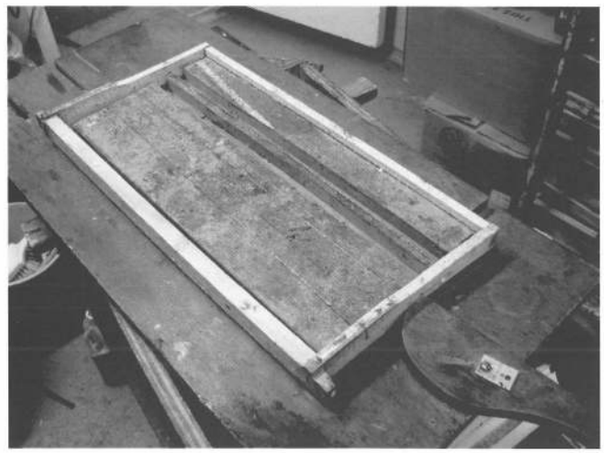
The frame holder is like a half super but has slightly smaller internal dimensions (330 x 451 mm), which gives a couple of millimetres extra so you can get the frames out. The one pictured is about four millimetres larger and used to have a corrugated cardboard insert to hold the frames tight in place. Over the years I've discarded it.

The sides have a slot cut in them: one side is slightly longer than the other to fit the slightly tapered bars. These tapered bars hold the end bars in place firmly against the ends of the jig while you press on the top bars. You can either staple or nail the 10 frames. I use 38-mm staples but 40-mm concrete-coated nails work just as well, and they have more grip.

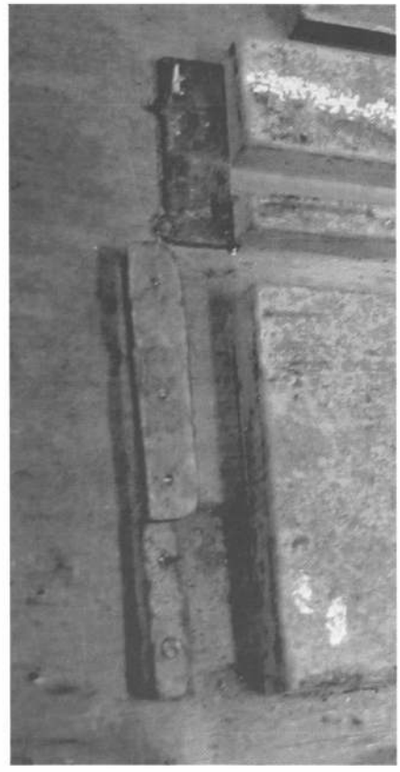
After stapling or nailing the frames, turn the jig over (frames and all) and put one end of the bottom bars in place. Release the bars slightly and put the other end of the end bars in place and nail or staple. Remove the two bars, lift the frame holder and the frames will fall out, ready for wiring.

(My frame board has been designed to take all sorts of frame sizes but I now mostly use full-depth for brood supers and three-quarter-depth for honey supers. The reason I use full-depth frames is that 40 years ago these supers had a greater resale value, especially to commercial beekeepers. Anybody starting now should consider using all three-quarter-depth woodware as it's easier on your back.)

Wiring and waxing



Wiring board.



Wiring board end.

Put the frame in place on the wiring boards and tension it with the handle. This puts a small bow in the sides of the frame that will keep the tension on the wire once it's nailed. Feed the wire through all the holes in series: the direction will depend upon whether you are left or right handed. Tap a wiring nail in place at each end with a tack hammer (magnetic ones are easier to use). These tiny flat head nails are available from beekeeping stockists. Twist the wire three or four times around the stem of the nail and drive the nail home. Then wiggle the short end of the wiring until it breaks off. You can cut the wire off with side-cutters but I find this leaves a tiny bit of wire that can stick in your fingers when you handle the frame. (Place the bit of discarded wire on a magnet—this makes it easier to

Continued on page 49

Continued from page 47

clean up afterwards.) Tension the wire by winding it back on the spool so there is the same tension on each section of wire, then wrap it three times around the other frame nail shaft and drive home. Break off the wire as before. If you have soft fingers, use a pair of pliers.

Waxing board.

Place the sheet of wax into the top bar groove and place the frame, wax down (underneath the wires) on to the embedding board. Then, using a six- or 12-volt transformer, touch the head of the nails at each end of the frame so that a current goes through the wire. As the wire heats, it will sink into the wax. I apply a little downward pressure with my palm onto the sides of the frame when doing this to speed up the process.

If the wire has a kink in it or for some reason it doesn't totally embed the first time, go to either side of the bit of wire that hasn't embedded and give it a quick touch. This will immediately heat the wire and with a probe, press the wire down slightly so that it embeds correctly. When completed, the wire should be only slightly visible in the bottom of the cells. If the wire is not embedded far enough the bees will not use this line of cells for the first couple of cycles until they propolis it in.

Embedding takes a bit of practice. Sometimes you might put the power on the wire for too long, and it will cut the wax right through. If this happens, either discard the wax (make a candle out of it), or reheat the wire again and gently press both pieces of wax together around the wire. Wait 30 seconds for the wax to cool and gently slide the frame lengthways a little to break any wax that has stuck to the embedding board, then lift off the frame. The bees will generally fix up any mess but they will build drone comb over your mistakes.

You can stack up the fully assembled frames to make a square, bottom bars to bottom bars, then stack the next pair 90 degrees to the first. I put a couple of ties around each 50 frames to keep them together.

Note: Years ago we used to get six-volt transformers from old valve radios and used them as a power source for embedding. Now we can use a power supply out of an old computer. Ask your local computer technician which wires to use.

Ready for replacement gear.

Things to do this month

Check food levels. Feed sugar syrup or raw sugar for strong hives when reserves get down to only three frames of honey (a week's supply).

Check pollen: there should be a ring of pollen around the top of each brood frame. Some areas run short of pollen during November. Commercial beekeepers feed a substitute but part-time beekeepers should not have a problem.

AFB check: always check a couple of frames where bees are emerging for AFB every time you inspect a hive. Report any AFB found to AsureQuality Limited immediately. Your infestation might be the tip of an iceberg.

Raise queen cells. Requeen hives with mated queens. Make nucs and take swarm control measures. Cull out old frames and broken lugged frames from hives. Check stored supers for wax moth. Monitor mite fall. Replace old or damaged supers with new gear.

- Frank Lindsay, NBA Life Member

Remembering Sir Howard Morrison

As you know, the late Sir Howard Morrison passed away on 24 September 2009. NBA Life Member Frank Lindsay recalls that Howard Morrison (he received his knighthood in 1990) presented a taniwha pendant to Ian Berry, then-President of the NBA, as a symbol of his authority at the NBA conference, Rotorua, July 1986.

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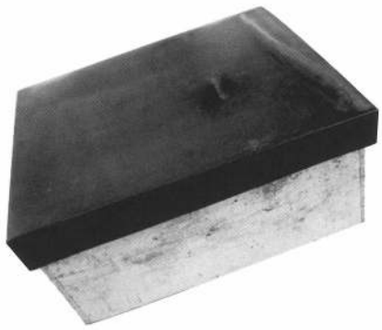

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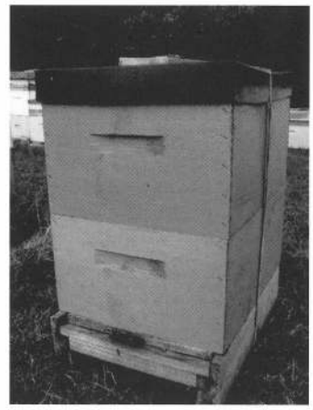

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Food hygiene for hobbyists

With the new season coming up, it is timely to remind hobbyist beekeepers that if they sell honey then they are deemed commercial beekeepers and must comply with the regulations under the Food Act 1981 (and labelling requirements of the Food Standards Code). The Food Act 1981 and the Food Hygiene Regulations 1974 also apply for honey for domestic consumption. All beekeepers that sell honey must also comply with the Food (Tutin in Honey) Standard 2008.

Contact details to get further information are provided on the New Zealand Food Safety Authority website: www.nzfsa.govt.nz and also at District Health Boards: http://www.nzfsa.govt.nz/processed-food-retail-sale/food-safety-coordinators.htm

Local District Health Boards (DHBs) can provide further information. A Health Protection Officer at your DHB will be able to:

- investigate food complaints
- provide general advice on food safety and the process for implementing a Food Safety Programme.

Local councils can also provide information you need—refer to http://www.localgovt.co.nz. An Environmental Health Officer at your local council will be able to:

- investigate complaints regarding poor hygiene standards in premises registered under the Food Hygiene Regulations 1974
- register and inspect food businesses not operating an approved food safety programme
- provide general food safety advice.

There are courses in food hygiene run at local polytechnics and if you handle food for sale you must complete a food handlers' course.

- Barry Foster, NBA Vice President

Do's and don'ts of AFB control

[This excerpt is from the revised edition of Elimination of American Foulbrood Disease without the use of Drugs—a practical manual for beekeepers, *by Dr Mark Goodwin.]*

Do

- Inspect your hives for AFB at least twice a year.
- Inspect hives before removing bees, honey or equipment.
- Inspect all brood frames.
- Shake bees off frames before inspecting them.
- Train yourself and your staff in techniques to recognise and eliminate AFB.
- **Report AFB to the Management Agency within 7 days.**
- Burn infected colonies.
- Feed pollen substitutes rather than pollen.
- Feed sugar syrup rather than frames of honey.
- Use hive and apiary quarantines.
- Only use approved sterilisation methods.
- Use a thermometer and timer when paraffin wax dipping (10 min at 160°C).
- Treat hives to clear up parasitic mite syndrome (PMS) before checking for AFB.
- Become an approved beekeeper.
- Get suspect AFB samples tested.

Don't

- Don't feed drugs for control of AFB.
- Don't scorch boxes to sterilise them.
- Don't try to control AFB by removing diseased frames.
- Don't extract honey from infected colonies.
- Don't feed bee-collected pollen to colonies.
- Don't feed extracted honey to bees.
- Don't let hives be robbed out.
- Don't shook swarm.
- Don't let stock knock over beehives.
- Don't use steam chests to sterilise infected equipment.
- Don't distribute the equipment from dead hives between other hives.
- Don't allow colonies to die of varroa or any other cause.

Beekeeping and the law

[This excerpt is from the revised edition of Elimination of American Foulbrood Disease without the use of Drugs—a practical manual for beekeepers, *by Dr Mark Goodwin.]*

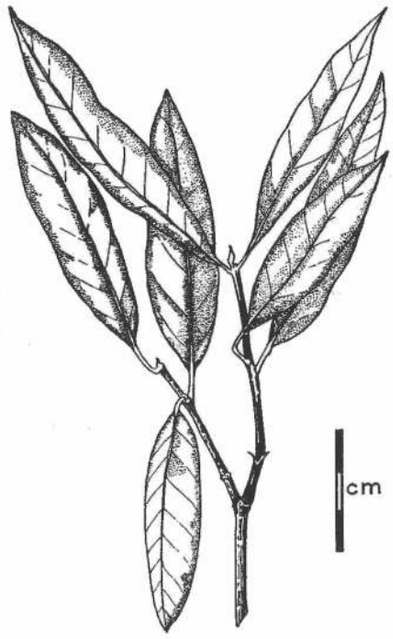
New Zealand beekeepers have a number of legal obligations that must be met regarding American foulbrood disease. In summary, the most important of these obligations are to:

1. Only keep bees in moveable frame hives.
2. Keep access to apiary sites clear from obstruction.
3. Not feed drugs or substances that mask, obscure or conceal the symptoms of AFB.
4. Not keep beehives more than 30 days in a place other than a registered apiary.
5. Register all apiaries with the Management Agency.
6. Mark all apiaries with the beekeeper registration code.
7. Change registration numbers only by the beekeeper who has the code number assigned to them, unless permission to do so is provided by the management agency.
8. Remove all identification codes when transferring the ownership of the hives.
9. Where a case of AFB is found, the owner of the hives must report to the Management Agency within 7 days of becoming aware of the case.
10. Complete an Annual Disease Return by 1 June each year.
11. Destroy equipment and bees associated with a case of AFB within 7 days.
12. Not deal with or transfer ownership of material associated with a case of AFB.
13. Sterilise beekeeping equipment only by approved methods.
14. Ensure hives are inspected for AFB by an approved beekeeper with a DECA provided to the Management Agency by 30 November (unless there is a certificate of inspection exemption).

Under certain conditions there are some exemptions for these obligations.

Trees and Shrubs of New Zealand

Beilschmiedia tawa
Maori name: Tawa



Beilschmiedia tawa

The Tawa is a tall tree up to 25 metres high. The trunk is up to one metre in diameter and has smooth bark. Tawa is found throughout the North Island and as far south as Westport in the west and the Clarence River in the east of the South Island. The Tawa is much sought after for papermaking. The leaves are a light yellow-green in colour and look willow-like.

The flowers are greenish-yellow and produce a dark nectar between September and November, and the bees also collect a dull yellow pollen.

The Tawa berry was much prized by the Maori and kereru alike. The Maori made spears out of the Tawa wood to impale kereru drinking at water troughs they had placed in the branches.

The bark of the Tawa was used to make a concoction drunk for pains in the stomach, or for coughs and colds.

- Tony Lorimer, NBA Life Member

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GALVANISED LIDS Due to the higher kiwi dollar and lower world steel prices we can offer reductions on our galv. lids. Please see page 14 of our price list for full details.
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Club Contacts & Beekeeping Specialty Groups

WHANGAREI BEE CLUB
Meets first Saturday each month (except January)
Time: 10.00 am, wet or fine (we are keen)

Contact: Mike Maunder
Phone: 09 437 5847
Arthur Tucker
Phone: 09 438 4283
Kevin & Melissa Wallace
Phone: 09 423 8642 (Wellsford)

AUCKLAND BEEKEEPERS CLUB INC
Meets first Saturday monthly at Unitec, Pt Chevalier, Auckland.

Contact: Kim Kneijber, President
Phone: 09 418 1302
Email: kimk_bees@hotmail.com

Carol Downer, Vice President & Secretary
Phone: 09 376 6376
Email: thefairy@xtra.co.nz

Website: www.aucklandbeekeepersclub.org.nz

FRANKLIN BEEKEEPERS CLUB
Meets second Sunday of each month at 10.00 am for a cuppa and discussion. 10.30 am open hives.

Contact: Peter Biland
Phone: 09 294 8365

WAIKATO DOMESTIC BEEKEEPERS ASSOCIATION
Meets every third Thursday (except January) at Lab 1,
Wintec Campus classroom, Hamilton Gardens, Gate 2, Cobham Dr., Hamilton, at 7.30 pm

Contact: The Secretary
Phone: 07 853 6304
Email: davew@gallagher.co.nz

HAWKE'S BAY BRANCH
Meets at 7.30 pm, Arataki, Havelock North for workshops or meetings as advised to the members
Contact: Mary-Anne Thomason, Branch Secretary
Phone: 06 855 8038
E-mail: kintail_honey@xtra.co.nz

John Berry, Branch President
Phone: 06 877 6205

TARANAKI BEEKEEPING CLUB
Contact: Stephen Black
685 Uruti Road RD 48, Urenui 4378
Phone: 06 752 6860
Email: beeclub@beesrus.co.nz

WANGANUI BEEKEEPERS CLUB
Meets on the second Wednesday of the month.

Contact: Neil Farrer
Phone: 06 343 6248

MANAWATU BEEKEEPERS CLUB
Meets every fourth Thursday in the month at Newbury Hall, SH3, Palmerston North

Contact: James Gellen
55 Bruce Road
Levin 5510
Phone: 06 368 8553
E-mail: james.gellen@paradise.net.nz

WAIRARAPA HOBBYIST BEEKEEPERS CLUB
Meets the second Sunday of the month except January, Norfolk Road, Masterton, 1.30 pm.

Convenors: Diana and Neale Braithwaite
Phone: 06 308 9101
Fax: 06 308 9171
Email: nandd12@xtra.co.nz

WELLINGTON BEEKEEPERS ASSOCIATION
Meets every second Tuesday of the month (except January) in Johnsonville.
All welcome.

Contact: John Burnet
21 Kiwi Cres, Tawa, Wellington 5028
Phone: 04 232 7863
Email: johnburnet@xtra.co.nz

MARLBOROUGH BEEKEEPERS ASSOCIATION
Contact: James Jenkins, President
159a Budge St., Blenheim
Phone: 03 577 5433
Mark Biddington, Secretary
8 Belvue Crescent
Witherlea, Blenheim 7201
Phone: 03 578 9746
Email: amandab@xnet.co.nz

NORTH CANTERBURY BEEKEEPERS CLUB
Meets the second Monday of April, June, August and October

Contact: Mrs Noeline Hobson
Phone/fax: 03 337 3587
Mobile: 021 2112 655
Email: n.hobson@slingshot.co.nz

CHRISTCHURCH HOBBYIST CLUB
Meets on the first Saturday of each month, August to May, except in January for which it is the second Saturday. The site is at 681 Cashmere Road, commencing at 1.30 pm

Contact: Jeff Robinson, President or
Lee Carmichael, Secretary
PO Box 167, Kaiapoi
Phone: 021 662 973
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DUNEDIN BEEKEEPERS CLUB
Meets on the first Saturday in the month September–April, (except January) at 1.30 pm. The venue varies so check phone or email contact below.

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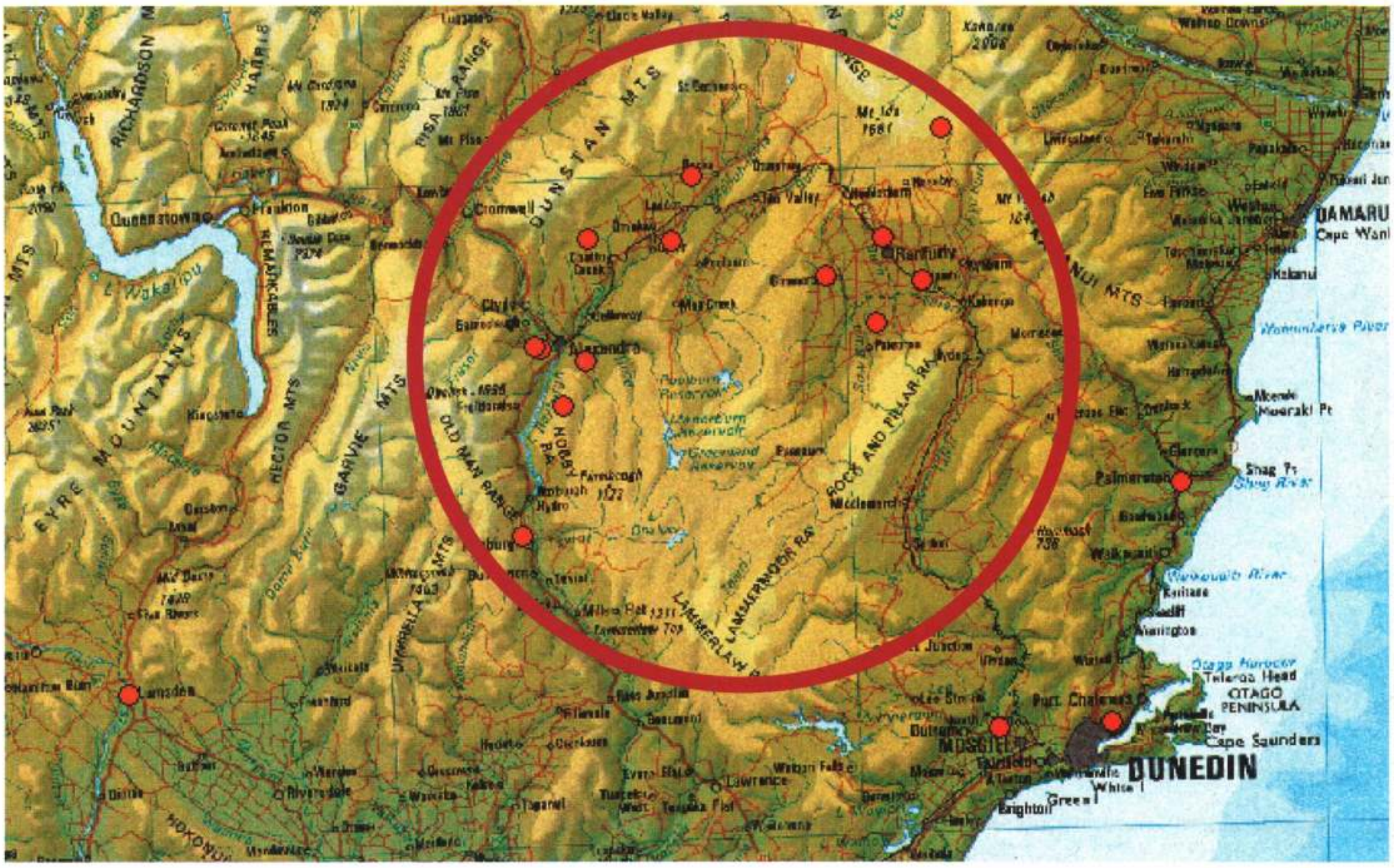
Otago–Southland AFB eradication pilot project report



A meeting of Central Otago beekeepers was held at Alexandra on 12 September 2009, which heralded the first practical steps in the quest for AFB–free status for the Otago and Southland regions. This project is a joint effort between the National Pest Management Agency, the Otago and Southland NBA branches, and the beekeepers of the area to achieve for the southern regions, at least, the ultimate aim of the National PMS for AFB: the elimination of AFB from managed bee colonies in New Zealand.

The Otago/Southland Region has a relatively low incidence of reported AFB: 0.08% of registered hives compared to the national average of 0.24% (June 2009 NPMS statistics). Last year AFB was reported by only 17 beekeepers from around 340 registered beekeepers in the region. Notwithstanding there may be some who have not reported fully on their AFB status, the problem is seen as easily manageable, and elimination of AFB entirely from the region is quite achievable on this basis.

The Alexandra meeting was attended by 18 local beekeepers and the National AFB NPMS Manager, Rex Baynes. Strong and encouraging support was received at the meeting to work towards the desired goal of an AFB-free region, and it was agreed the Central Otago district was an excellent starting point to launch from. The area selected for the pilot project is circled on the map above. This was selected as a result of a small cluster of reported AFB there last year, and beekeepers operating within the designated area were personally invited to attend the meeting and participate in the discussions.

It was agreed that three of the key ingredients for success were: compliance with PMS requirements, especially reporting obligations; continuing AFB education for new and existing beekeepers; and good communication amongst the beekeepers in the area.

Key decisions from the meeting for the AFB-free programme were:

1) Establish an on-line notification network for AFB status reporting
2) Every outbreak of AFB to be followed-up and assistance provided for containment and elimination. (PMS and Branch funds to support this work)
3) Identification of unregistered apiaries and beekeepers, with reporting to the PMS Agency, aiming to have every hive in the region on the national register
4) Investigate the possibility of funding a regional AFB elimination controller and advisory person, similar to part of the role of the former MAF Apicultural Advisory Officers.

The meeting agreed that the project would work best with total participation from beekeepers in the area in conjunction with the Management Agency. While it would not be a compulsory participation project, it was agreed a common goal of AFB-free status for the region was a very desirable and worthwhile target.

- Allen McCaw
President, Otago Branch and NBA Life Member