October 2010, Volume 18 No. 9

The NEW ZEALAND BeeKeeper

Have your hives been inspected?

- Report from the earthquake zone
- Nosema update
- Honey bee exotic disease surveillance
- AFB courses under way

HIVE DOCTOR

Quick and easy Varroa monitoring

If Varroa has been detected near your hives, or you have been treating Varroa yourself for several years, you should be checking Varroa fall. Without monitoring, it is nearly impossible to know if your treatment timing is correct or if Varroa are becoming resistant to your treatment. Traditional sticky-board testing is time consuming, disrupts the bees and requires preparation. A Hive Doctor pest tray makes Varroa assessment quicker, easier, less intrusive, and it can be removed for checking while the hive is still strapped-up, so you won't disturb the hive.

Hive Doctor Bottom Board and Tray

Patent pending NZ 586140 Design registration pending NZ 413745

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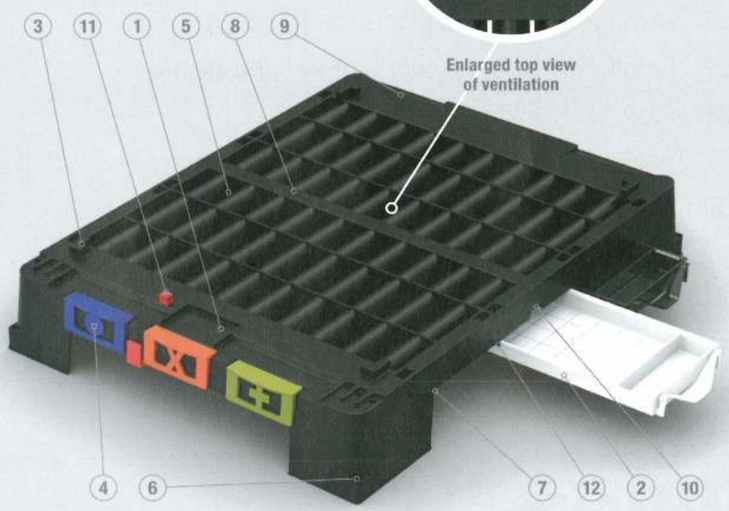

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- Suitable for 10 and 8 frame hives

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- Ensure there is adequate room under the bottom board for easy tray removal and optimal air flow
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Contents

Front cover: Hawke's Bay Branch President John Berry inspecting hives under the Certificate of Inspection programme. At right is Caroline Burnett. Photo: Joe Riley.

GIA: careful consideration needed

By Frans Laas, NBA President

With a rather chilly start to spring, the bees in our area are also feeling the effects, with a slow build-up and being inside for most of the time.

It's a bit frustrating trying to get my cell-raising colonies up to strength.

Varroa field days in Otago

I attended and spoke at a well-organised series of varroa field days organised by the Otago Branch on 10 and 11 September, held in Cromwell and Outram. Around half the beekeepers in Otago and Southland attended both sessions, which is very pleasing. Thanks to the organising committee for a great show.

We are constantly hearing stories of people who try to deal with varroa during the acute phase with inappropriate techniques and fuzzy thinking. They sustain high losses unnecessarily. The use of organic treatments during the acute phase is like playing Russian roulette with five cartridges in the cylinder. You may get away with it, but most don't. Dead hives don't produce honey or an income.

For those who are about to experience varroa in the coming year, don't take shortcuts and don't wait for mite levels to build up before treating. Alternate your treatments as well and follow manufacturers' instructions. It is astonishing that beekeepers ignore sensible and robust advice and recommendations, then wonder why they have problems like hive losses and early onset of mite resistance to synthetic treatments.

Canterbury earthquake

Being woken up at night by earthquakes is not an uncommon experience in my area. Although the house swayed quite violently on 4 September, we just thought it was another decent Fiordland earthquake and went back to sleep. Next morning I was rather surprised to see on the news that Christchurch and surrounding areas had taken a severe hit, amazingly with no loss of life and relatively few injuries. We have not had many reports of damage to beekeepers' hives and infrastructure in the area, but I understand one commercial beekeeper sustained significant damage to his shed.

Government Industry Agreement

On 6 September I attended a GIA workshop in Wellington, where the majority of primary industry representatives were present. During the course of the meeting it became evident that most of the other industries shared our industry's concerns and criticisms of the GIA process.

> "Robust pre-border and at-border systems are absolutely critical to prevent unwanted organisms coming into this country."

Two substantive issues that are rearing their heads are (1) an industry's ability to pay and (2) whether each industry can get a mandate from all its participants. This is applicable to a number of industries like ourselves where the dominant component consists of lots of small players, many of which are not aligned to an industry organisation. If an industry can't get a mandate from its participants or is not able to afford the costs, then there is no option but to withdraw from the process. What are the consequences to those industries if a new pest enters this country and they are not part of the GIA? Another issue is what does the Government do if the majority of primary industries do not sign up to the GIA for a variety of reasons?

Robust pre-border and at-border systems are absolutely critical to prevent unwanted organisms coming into this country. Any failure in that system can have significant consequences to a particular primary industry, such as with the varroa incursion in 2000. Some view the GIA process as a fallback position to make the affected industries pay for failures in the biosecurity systems of the Government.

A common view at the meeting was, "why should we, the affected industry, have to pay for someone else's failure?" MAF was reluctant to pursue this argument: it appeared to be in the too-hard basket for them.

At the last conference the Auckland Branch moved a notice of motion to the effect that importers of risk products should pay some sort of levy to provide a mitigation fund. This was passed at the conference. This concept was brought up by another industry at the GIA workshop and they also suggested liability insurance as another option. The response from MAF was that this approach was considered by international convention (GATT) to be a form of trade barrier. It imposed costs on importers/exporters over and above the actual and reasonable costs of certifying and checking products across a border. The Minister of Agriculture also indicated this position at the Nelson Conference.

One comment has been that the GIA should be referred to as the "Government Imposed Agreement". Clearly MAF is intent on netting everyone in the primary sector into the process regardless.

The GIA could have far-reaching consequences to New Zealand's primary industry sector, regardless of whether industries choose to opt in or out. Many people seem to be quite oblivious to this situation. It seems that there is a very poor appreciation of the potential financial cost that they could face if a new pest arrives on the scene if the GIA is enacted.

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Report from the earthquake zone

By Brian Lancaster, Canterbury Branch President

We are unlucky enough to be living within five kilometres of the epicentre of the earthquake that recently hit Canterbury.

Earthquake-ravaged hives in Canterbury, September 2010. Photos: Brian Lancaster.

We were woken in the early hours on Saturday, 4 September to violent shaking and a roaring sound that can only be described as a freight train coming through the house. The noise of the quake was so loud that we couldn't distinguish the sound of the chimneys smashing into the roof from the breaking glass that was happening all around us. Not many people out this way could even get out of bed—the shaking was that violent.

Daylight brought to light the extent of the devastation. Personally we got off really lightly: while our house had been turned upside down, its structural integrity was intact and is still very liveable.

Looking at the movements in the road we have moved northeast about five metres, and the road corner about 500 metres from our house had risen about 0.5 metres from one side of the intersection to the other. The shake up that occurred in the early hours on Tuesday lifted it another 0.5 metres. Absolutely incredible.

I have included a photo of a bee yard near this intersection. This is the only yard that I know that was tipped up but considering how close it is to the fault line, it could have been worse. A lot of vehicles around here have moved at least 0.5 metres, begging the question if the vehicles moved or if the vehicles stayed still and the ground moved off.

> "Normally the boxes are stacked 10 high but not any more."

The worst part of this for us is the mess in our storage sheds. Normally the boxes are stacked 10 high but not any more. I'm not looking forward to tidying up this mess. I'm insured with Farmers Mutual and they have been very supportive—we will keep you posted.

I would also like to say that Orion has been incredibly quick in restoring the power grid around here and the effort they made to make sure all customers were reconnected. It was also a good reminder that we live in a pretty cool community where everyone looks out for each other with neighbours helping each other out.

On a personal note, I would like to thank everyone for their offers of support.

[Editor's note: our thanks to Brian for taking the time to write this report. We send our best wishes to everyone in Canterbury.]

Postscript: NBA Library intact

NBA Librarian Linda Bray advises that the library was not damaged by the quake.

Up the valley where the water is purer, a spot by the stream is a good place to st[illegible] lunch. Photo: Fi[illegible] O'Brien. This photo won both the people's choice and guest judge's choice for the best entry in the 'Lunch/[illegible] [illegible] annual Ecroyd/NBA Photographic Competition [illegible] NBA conference [illegible] June 2010.

Committee instrumental in pollination issues

By Neil Mossop, Chairman, NBA Pollination Committee

Since the formation of the NBA Pollination Committee a couple of months ago, we have been instrumental and successful in addressing a number of issues facing beekeepers involved in pollination.

The purpose of the Pollination Committee is to consult with and represent the views of beekeepers involved in the pollination industry, and to establish a better communication and liaison between all parties reliant on good pollination. The aim of the committee also is to improve the understanding between pollinators, growers, industry organisations, research agencies and Government agencies to deal with issues that the industry faces, now and into the future.

In the last issue of the journal I mentioned we had asked Bayer for a copy of the research done by Dr Mark Goodwin on the systemic spray Movento®, used in the horticultural industry. Although the research was done almost two years ago, to date Bayer has not released the report and we have had no response from them in regard to our request. Despite this, we are pleased to inform you that Zespri has arranged for Dr Mark Goodwin and his team to do research on their behalf on Movento® and fungicides used in Kiwifruit orchards. This Zespri-funded research will be released to the kiwifruit and beekeeping industries.

We are hoping this new research will answer some questions; in particular, why beehives leave the orchards in such poor condition. It has been reported that 30% bee loss occurs during kiwifruit pollination.

Meeting at Zespri

I recently attended a meeting at Zespri with Dave Tanner (Zespri, Head of Technical & Innovation team, who works with Shane Max and Roger Gilbertson), Mark Mayston (NZ Kiwifruit Growers Inc. Mark is a kiwifruit grower and is the elected member to represent growers on behalf of NZKGI), Shane Max (Zespri, Tech transfer, grower education, best practice), Roger Gilbertson (Zespri, Marketing Assurance Manager, crop protection, compliance programmes), and Bob Cook (Spray Technical Group). Bob has been a kiwifruit grower for over 30 years, and is a spray contractor. The Spray Technical Group takes a strategic approach in assessing sprays and making recommendations on their uses.

I opened the meeting by introducing the structure of the NBA, our connection with the Bee Industry Group (BIG) and the composition and role of the NBA Pollination Committee (which currently has five members—three from the North Island and two from the South Island, who are on the BIG board). All are NBA members.

After some discussion on Movento® research, we also talked about hive auditing, which is a part of orchard best practice policy. Agreements are encouraged between grower and beekeeper on beehive standards and auditing procedures. This is something both parties must work out between themselves.

Last year kiwifruit pollination hive audits found hives well above the standard, as well as well below it. I stated that auditing should be done within 24 hours of hive placement in an orchard, as often there are bee losses after only a few days in the orchard.

I also suggested that if hives are audited within 24 hours after placement to assess bee numbers, hive strength, and to ensure that orchardists are getting what they paid for, hives should also be audited within 24 hours prior to leaving the orchard to assess the level of bee loss. This would enable beekeepers to know what they will need compensation for; i.e., loss of bee numbers and hive strength and the potential loss of honey.

Up until now, auditing has been a good tool for the orchardist, but this could be a useful tool for the beekeeper as well. It was agreed that during Dr Mark Goodwin's research this year, he would audit hives within the 24-hour threshold of introduction and within 24 hours prior to removal.

Dr Mark Goodwin will be undertaking new research for Zespri on bees, brood and pollen. During this meeting, Zespri confirmed that the NBA Pollination Committee will be able to provide input and comment from the perspective of beekeepers on the project descriptions for this new research.

I also recommended that one of the pollination committee members (Barry Foster) be involved with the Spray Technical Group. Barry's purpose would be to give a beekeeper's perspective on sprays. In addition, Shane Max invited me to join the Pollination Research Steering Group. These are strategic opportunities, reflecting the purpose and aim of the Pollination Committee.

Honey imports were also discussed at length during this meeting, including the impact of the introduction of new and unwanted bee diseases that will most likely enter the country in imported honey. We discussed their effect on pollination as we know it today, and their impact on the beekeeping industry generally.

New bee diseases are very likely to create a situation where fewer hives will be available for pollination and pollination fees will increase, possibly by as much as double the current rate.

Dave Tanner commented that Zespri would support the beekeeping industry on the back of reviewing credible science. Zespri has a good relationship with Government, which would be damaged if it lobbies for or supports issues that are not backed by credible scientific results. This will be a decision for the full Zespri board to make.

New ERMA account manager

Following a recent meeting attended by officials at ERMA, Frans Laas, Daniel Paul and Barry Foster, ERMA has appointed an account manager to the NBA. Cora Drijver will be our first contact on all issues and concerns affecting our industry and hobbies.

Submissions on new sprays

ERMA has been referring a number of new sprays to us that are in the process of registration for submissions. We have made submissions on each of these sprays. This will be an ongoing process.

New agrichemicals being registered go under the following names:

a) Atlantis Flo
b) Coronet
c) Migrate/Rejex-it
d) Pronto
e) Prolan

The Pollination Committee plans to continue the work that has been started and to represent beekeepers who are actively involved in pollination.

I trust you all have a safe and successful pollination season, followed by a bumper honey crop.

[Editor's note: see related article on page 11.]

Central Otago report

By Michael Vercoe, NBA Pollination Committee

The earliest apricot pollination has been on 24 August, but not this year.

Many were lulled into thinking we were going to have an easy run this season, but as the old hands will tell you, nature has its way of reminding us that the winter is not over till the fruit is well set.

It's been a cold wet one in Central, which is unusual, going by the last few years of relative drought. As the first apricot blossom showed white in Roxburgh, the mountains got a coating of snow that set the frost alarms ringing.

The timing between flowering in Roxburgh, Alexandra and Cromwell varies from year to year, depending on the amount of snow and which direction it has come from. It's a struggle to get hives up to strength for pollination of apricots: fortunately each flower doesn't need too many visits.

Our hives are dormant from April to August. With no stimulus from nature, we need to kickstart them with pollen patties and a slurp of syrup. Often the window to pollinate is only an hour in the afternoons, and in total maybe only four hours over two weeks. The cherries flower a few weeks later; if all goes well the hives have had a lift on the willow. Much of the cherries are under nets now. This poses quite a few problems for the bees in regard to finding the hive on the return flight. It's a learning process for beekeepers and orchardists alike. The newer developments are well spaced and easy to get around; with the side nets down we have fewer problems and the bees have no trouble navigating home.

With varroa here now we will likely see greater demand for pollination hives. It has been estimated that some areas are getting 70% of their pollination done by feral bees. Some growers have never paid for commercial pollination.

Following are some approximate export statistics on stonefruit and pipfruit produced in Central Otago:

	Apricots	Cherries	Apples
Hectares	340	450	400
Returns ton/ha	12	7.5	37
Returns $/kg	$4.50	$11.00	$1.20
Total return (millions)	**$18.36**	**$40.275**	**$17.82**

Not included here are plums, pears, nectarines and peaches, to name a few.

At the present time there are about 2000 hives placed in orchards for pollination. It would be fair to say there will be some interesting changes here in the next few years.

Left to right: Cora Drijver (Environmental Risk Management Authority), NBA Vice President Barry Foster, John Hartnell (Federated Farmers Bees) and NBA President Frans Laas at an NBA Executive Council meeting on 1 October. Cora is the NBA's new account manager with ERMA and John was invited along to meet her as well.

They discussed issues surrounding agrichemical use and misuse as well as our concerns over several pesticides currently registered, as well as one called Pronto that is undergoing registration.

Neonicotinoid pesticides and honey bees

By Barry Foster, NBA Vice President and member of the NBA Pollination Committee

In recent years New Zealand beekeepers have been increasingly concerned about the neonicotinoid class of insecticides and have suspected their role in the loss of many hives.

This probably occurs through the plant process known as guttation, which results in tiny amounts of xylem sap gathering on the tips or edges of leaves of some plants, particularly grasses.

The NBA Pollination Committee is to review new pesticide registrations of interest and submit on them where appropriate. Pronto is a new pesticide to New Zealand containing neonicotinoid that is currently undergoing registration with ERMA. Until now they have not been able to be detected in honeybees at lethal doses.

The following is an abbreviated version of the abstract from an article written by Alaa Kamel (who works at the Environmental Protection Agency) in the Journal of Agricultural and Food Chemistry (Kamel, 2010; see the reference at the end of this article).

> "An analytical method was refined for the extraction and determination of neonicotinoid pesticide residues and their metabolites in honey bees and bee products ... Good recoveries were observed for mostanalytes and ranged between 70 and 120% ... The method limits of detection were 0.2 ng/g for the parent neonicotinoid pesticides and ranged between 0.2 and 15 ng/g for the neonicotinoid metabolites. This refined method provides lower detection limits and improved recovery of neonicotinoids and their metabolites, which will help researchers evaluate subchronic effects of these pesticides, address data gaps related to colony collapse disorder (CCD), and determine the role of pesticides in pollinator decline."

NBA's position on Pronto

The NBA is to submit both written and orally against the registration of Pronto insecticide as its active ingredient is Imidacloprid. This family of pesticides within the nitroguanidine insecticide class of neonicotinoids containing the active ingredients of Imidacloprid, clothianidin, dinotefuran, and thiamethoxam are coming under increasing scrutiny overseas as a possible contributing factor in CCD with some pesticides within this class being suspended or at least temporarily suspended.

According to Alaa Kamel (Kamel, 2010):

> "Members of neonicotinoid insecticides containing the nitroguanidine moiety such as imidacloprid, dinotefuran, thiamethoxam, and clothianidin (Figure 1) have very selective toxicity to insects. Spraying can contaminate nectar and poison honey bees either through direct contact with the product or through contact with its residue. Seed dressing can also poison honey bees through oral contact with the parent compound or metabolite compounds."

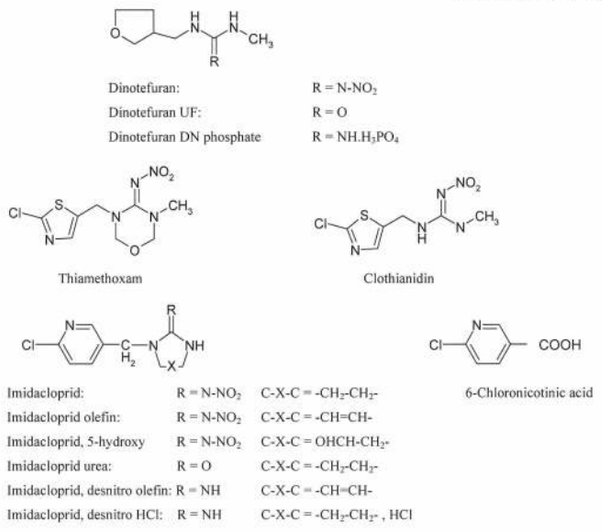

Figure 1. Chemical structures of the investigated neonicotinoids.

These chemicals are currently used as seed dressings in New Zealand on maize, corn, squash and some grasses.

While the application for the registration of Pronto is to target cereal crops only the active ingredient has double the concentration of currently registered pesticides in this class and its potential to leach into ground water and be up taken by subsequent crops is being studied overseas. We are to submit that this pesticide should not be registered or at least there should be only very limited release of this pesticide until studies done overseas are completed.

NBA bee losses survey

The NBA is conducting an ongoing Bee Losses survey: see the insert in this issue of the journal. The survey is also on the NBA website.

If you have suffered unexplained bee losses—particularly through autumn/winter that are NOT attributed to varroa or other identifiable biological causes—and instead from observation are likely to be caused by pesticides, then we would like you to complete this survey so we can obtain some data on the size of this problem.

Reference

Kamel, A. (2010). Refined methodology for the determination of neonicotinoid pesticides and their metabolites in honey bees and bee products by liquid chromatography-tandem mass spectrometry (LC-MS/MS. *Journal of Agricultural and Food Chemistry, 58*(10), 5926–5931, DOI:10.1021/jf904120n.

Honey Bee Exotic Disease Surveillance

By Byron Taylor, Apicultural Officer, AsureQuality Limited, Hamilton
byron.taylor@asurequality.com

The following report summarises programme status as of autumn 2010.

June 2010 saw the completion of the Honey Bee Exotic Disease Surveillance Programme for another year. The main goals of the programme are to:

- complete a surveillance programme concentrating on the detection of exotic diseases and pests of honey bees
- educate the beekeeping industry in the area of exotic diseases and pests of honey bees
- contribute to the ongoing technical development of the AsureQuality Apiculture Technical Team and the apiculture surveillance programme.

The entire Honey Bee Exotic Disease Surveillance Programme is funded by MAF Biosecurity New Zealand. The programme not only delivers field surveillance, but also contributes in other areas to help prevent establishment of exotic pests and diseases. The programme delivers the following activities.

Industry education

It is unrealistic to inspect every hive in the country for pests and diseases, thus the Honey Bee Exotic Disease Programme generally targets apiaries in 'high risk' sites. Apiaries in 'high risk' sites are more at risk of invasion or infection because of their proximity to ports, airports and tourist destinations, which provide pathways for transport of pests and diseases.

Biosecurity New Zealand, like any organisation, has to meet its objectives as best it can within the budget that it has been allocated. This means that funds are not available for every hive in the country to be inspected by a suitably qualified beekeeper.

Beekeepers should keep themselves informed about biosecurity issues, pests and diseases that affect apiculture, and regularly inspect their hives for any suspicious signs of pests or disease. The more educated the industry is, the greater the chance that beekeepers will report something unusual in their hives.

MAF Biosecurity New Zealand funds preparation of three articles per year for publication in *The New Zealand BeeKeeper* journal. These are written by the AsureQuality Apiculture Technical Team and generally summarise the latest information on a particular pest or disease of honey bees in an easy-to-read format.

> "The more educated the industry is, the greater the chance that beekeepers will report something unusual in their hives."

Additionally, the surveillance programme periodically funds the update of the honey bee exotic disease and pest pamphlet which is sent to all registered beekeepers.

Technical development

The AsureQuality Apiculture Technical Team receives support from this programme for maintaining technical competence in the area of exotic honey bee pests and diseases. This funds subscriptions to technical magazines, technical workshops and research time for popular articles.

Apiary database

The creation of an effective surveillance programme depends on good information. The Surveillance Group at MAF Biosecurity New Zealand funds a portion of the costs associated with keeping the information on the apiary database current (i.e., the Annual Disease Return). In return, the apiary register is used to manage the data management aspect of the surveillance programme.

Field surveillance

This autumn, as in previous years, MAF Biosecurity New Zealand, the beekeeping industry and AsureQuality Limited worked together to deliver the field component of the Honey Bee Exotic Disease Surveillance Programme. This programme has two goals:

1) to detect an exotic honey bee pest or disease early enough for an eradication attempt to be considered
2) to enable New Zealand to make country freedom statements with respect to these exotic pests and diseases. This helps facilitate the negotiation of more favourable overseas market access conditions.

Partnering with industry to deliver the field inspection component of this programme is vitally important to achieving these goals. To this end approximately 30 Authorised Persons – level 2 (AP2) sourced from within the industry offered their services for this year's programme. A number of these AP2s are beekeepers who have many years of experience inspecting beehives for exotic diseases while for others, although experienced beekeepers themselves, inspecting for exotic diseases is relatively new. I would like to offer these individuals my thanks for a job well done this season and look forward to working with you again next season.

AP2s are experienced beekeepers who are warranted under the Biosecurity Act 1993. These beekeepers are authorised to enter property and inspect beehives under the direction of an Authorised Person – level 1 (AP1), who are current employees of AsureQuality Limited or Biosecurity New Zealand. AP2s are warranted 'by programme' rather than 'by industry'. What this means is that AP2s may be warranted for exotic disease surveillance and response but not AFB, and vice versa. Having trained inspectors within our industry effectively means that we can get more done with the money that is available than we could by sending apiary officers from central locations. Training for AP2s is funded by MAF Biosecurity New Zealand.

Adult small hive beetles. Photo: Murray Reid.

The surveillance programme requires 350 apiaries to be inspected and sampled in two risk categories. Hives were sampled for a range of pests and diseases of importance to the beekeeping industry. Every hive in each of the apiaries was required to be inspected and tested in order to maintain the sensitivity of the surveillance programme.

A total of 338 apiaries were inspected as part of the high-risk site surveillance against a target of 350 apiaries. A significant number of the sites visited this year did not currently have hives, which made reaching the target difficult. High-risk areas were selected as the most likely points of introduction for an exotic pest or disease, and include seaports, airports, large population areas, tourist areas, rubbish dumps and any other area deemed to be an elevated risk.

AP2s perform a thorough inspection of every hive in each selected apiary. During this inspection they look for a variety of pests and diseases. The inspectors start by approaching the hive and assessing the behaviour of the bees; i.e., how aggressive they are, how active they are compared to other hives in the apiary and whether there are significant amounts of dead bees in front of the hive. As the inspectors open the hive, they are looking particularly for evidence of adult small hive beetles in the extremities of the hive. These beetles move very quickly and will actively seek cover when exposed.

While inspecting the frames, the inspector will be noting the bees' activity on the frame. If the bees are highly active and also very aggressive, the inspector may note potential Africanised genetics. If evidence of multiple laying workers is evident, particularly if they are behaving and being treated like a queen and hive activity is low, the inspector will take one or more of the laying workers to test for Cape Bee genetics. The inspector will inspect the brood for symptoms of EFB and will test samples of suspect larvae using an ELISA-based field test kit.

The AP2 will also take a sample of approximately 300 older adult bees from the honey frames. These bees will be tested for tracheal mites and possibly Africanised genetics if suspected. If there are significant numbers of dead bees in front of the hive, a sample of these will also be taken to test for tracheal mites.

Lastly, the AP2 will insert miticide strips into the brood nest and a sticky board onto the floorboard to test for external mites (particularly the Asian mite, *Tropilaelaps clareae*). The AP2 will return the next day to extract the sticky board and strips from the hives.

All samples are sent to MAF's Investigation and Diagnostic Laboratory (IDC), where samples are tested for the range of exotic pests and diseases of interest. No exotic pests or diseases of honey bees were detected during the high-risk site surveillance programme this season.

Export samples

Samples from 599 low-risk apiaries that supply bees for export contributed to the programme this year, which was almost double the target. This was a result of an exceptionally strong live bee export season which resulted in more apiaries being used to supply bees. Additionally, the number of samples requested from beekeepers supplying bees for export has remained at a maximum of 25 apiaries per beekeeper. This could be reduced to 20 apiaries without compromising our ability to meet the 300 apiary target, provided live bee export volumes remain at the current level.

Exotic disease inquiries

In addition to the scheduled surveillance programme, each year MAF Biosecurity NZ and AsureQuality Limited receive a number of calls from beekeepers reporting suspected exotic bee diseases or unusual symptoms in hives. AsureQuality Limited worked with MAF Biosecurity New Zealand's Investigation and Diagnostic Centre in Wallaceville to screen these calls and determine whether sampling was justified. Eight calls were received, six of which resulted in further sampling being required. It is becoming increasingly common to test suspect samples for a variety of potential exotic pests or diseases, as telephone-based diagnosis is becoming increasingly difficult. This resulted in 11 different tests being carried out on the samples submitted: four EFB tests, two tracheal mite tests and two *Nosema ceranae* tests. The balance of the tests included insecticides and undesirable bee genetics. All tests showed negative for any exotic pests and diseases.

Testing for tracheal mites. Photo: Byron Taylor.

Lastly, thanks to all those beekeepers who endure, in some cases, almost annual apiary inspections. You are not being 'singled out'; rather, your apiary happens to be one of the few that fits the risk criteria for the surveillance programme.

Happy beekeeping and good luck for the coming season!

Control of Varroa: A Guide for New Zealand Beekeepers by Mark Goodwin and Michelle Taylor, and *Elimination of American Foulbrood Disease without the use of Drugs: A practical manual for beekeepers* (revised edition) by Mark Goodwin, can be purchased from the NBA. Please contact Jess on secretary@nba.org.nz or 04 471 6254 to order a copy.

Bi-national tutin limits under review

By Dr Chris Schyvens, Senior Toxicologist and Risk Manager, Food Standards Australia New Zealand

Tutin limits in honey and honey comb are set in the *Australia New Zealand Food Standards Code.*

The limits apply to honey businesses on both sides of the Tasman and they are enforced by NZFSA in New Zealand and state and territory jurisdictions in Australia. Food Standards Australia New Zealand (FSANZ) is responsible for developing and making changes to the Code.

Standard 1.4.1 in the Food Standards Code sets tutin limits of 2 mg/kg for honey and 0.1 mg/kg for honey comb. As this Standard expires on 31 March 2011, FSANZ is working with NZFSA to review the scientific basis for the present tutin limits and to establish a permanent food standard.

In October 2010, FSANZ will publish an assessment report for tutin in honey products on its website, and invite comment from beekeepers, honey manufacturers, consumers and government agencies on any recommendation to amend the present tutin limits in the Code. The FSANZ standard setting process is separate from the consideration of the NZ Tutin Standard and the compliance guide developed by NZFSA.

This period of public consultation forms part of FSANZ's standard process for amending the Food Standards Code. The intention is to allow all interested parties the opportunity to comment on the regulatory limits for tutin. If FSANZ proposes any changes to the maximum levels on the basis of its risk analysis, this would need to be supported by showing there would be a clear net benefit to the community, in terms of safety or the economy.

> "We would like to encourage beekeepers and honey packers to provide us with their views on this issue and any impacts it may have on them..."

FSANZ's General Manager for Food Standards in Wellington, Dean Stockwell, comments: "we would like to encourage beekeepers and honey packers to provide us with their views on this issue and any impacts it may have on them".

It is important to note that beekeepers and packers will need to continue to comply with any requirements for tutin management made under the New Zealand Food Act or Animal Products Act, as well as limits set out in the Food Standards Code.

If you are interested in registering a specific interest in the review of tutin limits by FSANZ, please contact standards.management@foodstandards.govt.nz and ask to be put on the interested parties list for P1009 – Maximum limits for tutin in honey. Alternatively, you can follow progress on the review at www.foodstandards.govt.nz.

MAF investigates *Nosema ceranae* finding

MAF recently confirmed it had found the *Nosema ceranae* disease present at one apiary on the Coromandel—the first finding of this sort in New Zealand.

An investigation was immediately launched and a sampling programme in the area surrounding the infected hives has already been completed. Full lab results are expected in mid-October.

The objectives that MAF has set for its active surveillance programme are:

1. determine if *Nosema ceranae* is established or not in New Zealand based on criteria developed by MAF in consultation with the bee industry and affected stakeholders
2. provide a likely diagnosis for the health problem at the hive, apiary and beekeeper levels on the property we are investigating
3. consult with the bee industry and affected stakeholders over our respective involvement in appropriately managing the first finding of Nosema ceranae in New Zealand.

The NBA is working closely with MAF and a joint meeting took place on 1 October to discuss how the investigation will move forwards once testing is complete on this first sampling programme. A wider Stakeholder Advisory Group meeting will take place in the next week or two to discuss the technical aspects and criteria for the investigation.

For the most up-to-date information, please keep checking the NBA website www.nba.org.nz. Please remember that if you have any suspected problems with your hives, you should call MAF's exotic pest and disease hotline—0800 80 99 66.

VSH honey bee breeding programme

Michelle Taylor, Mark Goodwin and Omar Martinez, Plant and Food Research

Plant and Food Research (PFR), in conjunction with Sustainable Farming Fund (SFF), the National Beekeepers' Association (NBA), individual beekeepers, ZESPRI and the Avocado Industry Council, have been working together to develop sustainable varroa control methods.

This type of research is imperative as we observe the worldwide occurrence of varroa developing resistance to the synthetic chemical controls that we readily rely on in New Zealand.

What is VSH?

Varroa Sensitive Hygiene (VSH), previously known as Delayed Suppressed Mite Reproduction (SMRD), is a behavioural trait in honey bees that suppresses varroa reproduction. The primary mechanism of VSH is the ability of worker bees to detect, uncap and/or remove honey bee pupae that are infested with reproductive varroa (Harbo & Harris 2005; Ibrahim & Spivak 2006, Harbo & Harris 2009). The mother mite is often removed or escapes without damage to the pupa. When this occurs the bees sometimes re-seal the cell with the pupa intact.

When VSH is present, a large percentage of the mites in cells that are not uncapped by the bees have no female offspring. Identifying this percentage of "non-reproducing mites" is how we determine an increase or decrease of the VSH trait across successive honey bee generations. The percentage is identified by uncapping honey bee cells containing purple-eyed pupae. For a cell to be included it can only contain one mother mite. To identify 20 cells with a single mother, this may require the uncapping of over 400 cells. For each suitable cell the presence/absence of female offspring is recorded. For example, a colony with no mite offspring in five out of 20 cells has 25% VSH. In other words, 25% of the mites are not reproducing. If 15 of the 20 had no offspring, this translates to 75% VSH.

Normal varroa reproduction.

In 2002/03 an initial "presence/absence" survey of some New Zealand honey bee populations revealed a maximum of 18% VSH. The positive identification of this trait within New Zealand deemed it worthwhile to establish a breeding programme to select for VSH.

Assessing a brood frame for varroa sensitive hygiene (VSH).

Purple eyed honey bee pupa with one adult varroa. Photos courtesy of Plant and Food Research.

The purpose of this article is to report on the progress that has been made, the issues that have arisen whilst breeding for the VSH trait, as well as the future requirements that will enable this trait to be utilised by the beekeeping industry.

Methods

In spring 2004, 65 genetic lines (F = the initial stock) were established. Twenty-five of these lines were from five commercial beekeepers/queen breeders and 40 were selected from the 2003 trial. Once the queens had produced the majority of the offspring in their colony (at least 8 weeks), the percentage of non-reproducing mites was analysed. Ten (F) colonies with VSH between 17% and 56% were selected for further breeding. This included at least one queen from each of the beekeepers and three queens from the 2003 PFR stock.

Artificial insemination (AI) using a Latshaw AI instrument enabled us to mate drones from VSH colonies with VSH queens. The semen from one drone was collected and immediately put in to the virgin queen produced from the same VSH colony (single-drone insemination, or SDI). Crossing a queen with semen from her brother may result in a spotty brood pattern due to the alleles being incompatible. For this reason we grafted and inseminated approximately fifty queens per line to increase the chance of producing queens with viable brood patterns. Only 14 (5.2%) of the first 267 SDI virgin queens (F1 = First generation) produced healthy looking brood patterns. Their VSH was less than 20% so they were removed from the programme.

The low survival of SDI queens led to the use of double-drone inseminations (DDI) for the remainder of the breeding →

programme. This had the advantage of increasing brood viability. However, it also increased the amount of genes being passed to each generation, which effectively increased the number of generations required to isolate/increase the VSH trait. Fifty DDI (F1) were conducted in April 2005 and 18 (34%) of them survived winter. These survivors were bred from five of the ten original (F) lines.

In September 2005 an F2 generation of queens was produced. The majority of F2 queens were artificially inseminated using two drones from their F1 mothers. However, if the F1 colonies had insufficient mature drones for insemination, they were inseminated using two drones from either their F mother or another F1 line that had at least 17% VSH. A total of 146 inseminations were conducted but only eight F2 colonies produced suitable brood patterns for assessment. The VSH levels of the 18 overwintered F1 queens and the eight F2 inseminated queens were assessed. Eight of the queens representing five genetic lines displayed between 36–65% VSH.

In autumn 2006, 23 new lines from four additional beekeepers were introduced into the programme. This was to increase the genetic pool as the number of suitable lines had reduced to five. However, as the project was in the final year of funding, the research team agreed the resources were best used to increase the VSH % for the lines that were above 45%.

In spring 2007, the amount of VSH from 31 AI queens that were produced in autumn was assessed. The highest percentage of non-reproducing mites was 83%. However, care must be taken when interpreting these results, as the low number of mites in the colony caused by VSH meant we only found 12 cells containing one adult varroa, rather than the required 20 cells.

Enabling the industry to use genetic gains

Now that we had increased VSH to 83%, we needed to find a way to enable these genetic gains to be used by the beekeeping industry. In December 2007 an attempt was made to create a self-sustaining, closed mating population on Great Mercury Island (GMI). GMI is eight kilometres from the mainland off the coast of the Coromandel Peninsula, northeast of Whitianga. GMI consists of over 5500 acres of rolling farmland, pine forest, gorse, stands of manuka, and is ringed with pohutukawa trees. There were no managed or feral honey bee colonies on GMI before the introduction of VSH breeding stock. This geographical isolation was to allow natural mating between the VSH lines without dilution of the VSH gene pool. The first attempt to establish a VSH population was unsuccessful. The success is likely to have been hindered by our inability to genetically identify the VSH genes in the drones that we were including in the mating process. We therefore unwittingly introduced non-VSH genes through drones from sister-queens. During successive seasons at GMI we used the sites to naturally mate the breeder virgins in nucleus colonies rather than establishing a sustainable VSH honey bee population.

The 48 single-super colonies that were moved to the two GMI sites contained no drones and a caged queen. This ensured the bees did not raise additional queens before or during the trip to GMI. The colonies were last treated in autumn 2007 so received a 24-hour Bayvarol® treatment prior to moving. On GMI the caged queens were removed and breeder cells grafted from the three highest VSH breeders (83%, 75% and 65%) were introduced. Three breeder colonies were also moved to GMI to provide a source of drones for mating.

During April 2008 the colonies were assessed for varroa using the sugar shake method. Forty-six colonies had more than 40 varroa (our varroa threshold) so were treated with Bayvarol®. One of the remaining hives reached 58 mites in May and was treated. This was five months after the 24-h treatment and 13 months after the 6-week treatment. The remaining untreated hive had seven varroa so was not treated until February 2009. This was 14 months after the 24-h treatment of Bayvarol® and 22 months after the previous six-week treatment. The reason for the treatment of this latter colony was to ensure that the bees were healthy for the new queen as the old queen was being superseded. Before the queen was replaced, cells from the breeder colonies were produced. Of the 40 colonies on GMI, 19 died by June 2008 due to varroa levels and a further six colonies died of starvation as lambing prevented access to the colonies before September 2008.

Why were most GMI queens unable to control varroa?

The following hypotheses for why the majority of GMI queens were unable to control varroa were developed and assessed in 2008 if possible:

Hypothesis 1: The colonies were introduced to GMI with high varroa levels that damaged the colonies before the resistance mechanism was established by the new queen.

The surviving colonies were brought back to Hamilton and treated with Bayvarol®. However, they were unable to maintain the varroa levels over summer 2009, which suggests the colonies were simply not resistant.

Hypotheses 2 and 3: Feral colonies were present on GMI that had not been observed previously, which diluted the VSH trait through mating with non-resistant drones; or GMI was not far enough offshore and drones from the mainland had flown to the island.

We introduced queen cells to GMI in spring 2008 and removed all known drone sources. None of the virgins was able to mate, which suggests the only source of drones on GMI were the ones that we introduced.

Hypothesis 4: While selecting for the resistant genes, we may have simultaneously selected for genes that make the drones less competitive than any non-resistant genotypes. This lower propensity to mate with the queens may have resulted in the non-resistance being displayed.

We were unable to test this as a genetic marker was not available to identify the VSH trait in drones. It is likely that the expression of VSH, as observed with the AI queens, is highly variable and when combined with the drones from these VSH lines the VSH genes were not displayed.

The remaining GMI colonies were requeened with cells from the two reduced-treatment VSH queens on GMI and also from three other VSH lines based at Ruakura. These new queens were naturally mated during the 2008/2009 season with drones from the selected breeder colonies. Three staggered introductions, each with at least 30 nucleus colonies containing breeder cells from the two reduced-treatment GMI colonies, were

also naturally mated on GMI. Additional AI of queens from four genetic lines was also conducted.

At the end of the 2008/2009 season 67 nucleus colonies from GMI were based in the Waikato. All commercial colonies were reassessed for varroa in May and any that had more than 10 varroa were treated with Bayvarol® for six weeks (a threshold of 10 was made up as we were not able to revisit the sites until September).

In spring 2009, 29 VSH colonies based in the Waikato survived the winter. During spring seven of the queens were superseded. The virgins from three of these colonies were DDI but the remaining four colonies were removed from the programme. One colony died because of the large amount of varroa (>195 mites per 300 bees), and four died because of starvation. In an attempt to keep the bees alive due to the excessively wet spring, all the colonies were fed sugar syrup every second week until 24 December 2009.

The amount of VSH observed between different queen-lines or between sister-queens is variable. For example, the percentage of VSH from Line 7 sister-queens ranged from 5% to 83%. The amount of time invested in each queen is in excess of 16 weeks and includes: drone colony selection; grafting; nucleus setup; AI or GMI mating and VSH assessment. To discard the majority of queens after this level of investment makes the remaining queens expensive to produce commercially. We began to look for a genetic marker that would enable the identification of the trait in a non-fatal, yet timely manner. In 2009/2010 Environment Canterbury funded some initial research to determine whether the genomic DNA of individual honey bees that display VSH behaviour could be used to identify this VSH trait. This enabled the development of a successful method to extract DNA from the wing tip. This season we will continue to assess whether the VSH trait (in comparison with genomic sequences) can be identified from individual honey bees that display VSH behaviour.

In March 2010, 68 virgin queens from four VSH colonies were naturally mated on GMI with drones from three sister-breeder colonies. Thirty-six of the virgin queens successfully mated. These colonies were treated with Bayvarol® in May 2010 to ensure winter survival. The VSH of these colonies will be assessed in November and a graft from those with the highest VSH will be conducted in December. The VSH of these will be assessed in February and a graft from the highest VSH colonies will be conducted in April 2011. These will be naturally mated on GMI and 40 of these VSH queens will be supplied to five specific beekeepers. These beekeepers will analyse these queens based on specific protocol and provide feedback.

> "... we are calling for expressions of interest to continue to maintain and license/sell this VSH trait to the beekeeping industry."

It is not expected that the presence of the VSH genes in the population will adversely affect other traits of economic significance. Also in colonies headed by VSH queens open-mated with "normal" drones, varroa mite populations were 44% lower than in "normal" colonies (Harbo & Harris 2000).

Register your interest

As this is the final year of funding for this Sustainable Farming Fund Project, we are calling for expressions of interest to continue to maintain and license/sell this VSH trait to the beekeeping industry. Please register your interest with Jane Lorimer, Chairman Research Advisory Committee, email hunnybee@wave.co.nz. For further information regarding this research please refer to the SFF website http://www.maf.govt.nz/sff/about-projects/search/09-011/index.htm.

Acknowledgements

Our special thanks go to all those beekeepers that have been involved in this VSH research. Providing sites, managing specific colonies over winter and analysing queens have supported this research significantly. We would also like to thank Michael and Sarah Fay, the staff at Great Mercury Island and R & R Charters. The use of GMI and the generous supply of your vehicles and time has enabled this isolated part of the research to been conducted.

Suggested reading

Harbo, JR and Harris, JW. (2000). Using free-mated queens to introduce genes for varroa resistance into a population of honey bees. *American Bee Journal 140*(11): 904.

Harbo, JR and Harris, JW. (2005). Suppressed mite reproduction explained by the behaviour of adult bees. *Journal of Apicultural Research 44*: 21–23.

Ibrahim, A and Spivak, M. (2006). The relationship between hygienic behaviour and suppression of mite reproduction as honey bee (*Apis mellifera*) mechanisms of resistance to Varroa destructor. *Apidologie 37*: 31–40. DOI: 10.1051/APIDO: 2005052.

Harbo, JR and Harris, JW. (2009). Responses to Varroa by honey bees with different levels of Varroa sensitive hygiene. *Journal of Apicultural Research 48*: 156–161. DOI:10.396/IBRA.1.48.3.02.

Part 2 of the Department of Labour 'Big 6' information for employers will run in the November issue.

Varroa caused high hive losses in British Columbia because beekeepers were unfamiliar with varroa control and delayed treatments until they noticed visual symptoms of mite damage.

Source: Control of Varroa: A guide for New Zealand beekeepers *(revised edition), by Mark Goodwin & Michelle Taylor, page 119.*

Export non-compliances: APA obligations

Export non-compliances can have a serious impact on trade and compromise New Zealand's reputation as a trusted supplier of food and food related products.

This is a reminder to all beekeepers of the legal obligations with specific regard to reporting export non-compliances.

Refer: *Animal Products Act 1999* (APA), Part 5 Export of animal material and products, Section 51 Duties of exporters: Exporters are required to notify the Director General (Chief Executive NZFSA) as soon as possible, and in any case not later than **24 hours** after the event or first knowledge of the event, in any case where animal material or products exported or to be exported by the exporter

i. Are not fit, or are no longer fit, for intended purpose, from any event which occurred or could have occurred prior to entry into the importing country (regardless of when the event was detected); or
ii. Are refused entry by the foreign government concerned; or
iii. Do not or no longer meet relevant requirements notified or made
iv. available under section 60A; or
v. Do not have, or no longer have, the required official assurances.

If in doubt contact the Senior Manager (Export Eligibility) directly to discuss on +64 4 894 2416.

These obligations should already be incorporated into your existing procedures as required by section 51(d) of the Act.

In the case of products "to be exported", i.e. not yet left New Zealand, the exporter's obligation to notify begins at the time the product leaves the final NZFSA registered/ listed operator (excludes transporters).

Where animal product has been refused entry at the border due to export certificate errors, and a replacement certificate or additional official assurance is needed to gain entry, the normal replacement request process must be followed **in addition** to submission of the export non-compliance notification: http://www.nzfsa.govt.nz/animalproducts/publications/manualsguides/oap/oa-programme/index.htm

Note: Failure to comply with these obligations is a serious non-compliance. Refer also to Animal Products Act 1999, Part 10 Offences & Penalties, Section 135 Failure to comply with Act etc.

Some exporters use a form to report these non-compliances. This ensures all the information required by NZFSA is captured. A generic form for exporters is available on the NZFSA website. There is a form for dairy products and a form for non-dairy animal products: http://www.nzfsa.govt.nz/animalproducts/publications/forms/exporters/non-conformance-index.htm

All notifications are to be sent directly to the Senior Manager (Export Eligibility) by emailing alisa.bradley@nzfsa.govt.nz. In some cases NZFSA may be able to provide assistance to resolve market access issues. We cannot do this unless we are advised of the non-compliance and have all relevant details.

While notification is obligatory, use of the form is optional and exporters may submit the necessary information in a format of their choosing, as long as it is written notification.

An information pamphlet detailing the above is located on the NZSA website: http://www.nzfsa.govt.nz/animalproducts/publications/info-pamphlet/exporters/information-pamphlet-exporter-obligations.htm

Disclaimer

This publication is not a legal interpretation of the Animal Products Act or the Animal Products (Ancillary and Transitional Provisions) Act and is intended only as a guide.

LETTER TO THE EDITOR

Meet some colouring-in competition winners

By the Hyslop family (Mark, Karen, Angus, Gemma & Alice)

Our family were the incredibly lucky winners of the amazing prize pack for the colouring in competition.

This is a very belated message to say thanks so much to the NBA, Buzzy Bee and Raymond Huber for all the gorgeous goodies!

It was particularly special as the rural postie arrived with the box just as we were opening presents on Angus's 5th birthday. It was great that twins Alice & Gemma got to open parcels that day too.

Tutin compliance options standard consultation

By Jim Sim, Principal Advisor (Animal Products)

The New Zealand Food Safety Authority (NZFSA) is to consult further on a revised version of the Food (Tutin in Honey) Food Standard 2008.

In June 2010 NZFSA released *Review of the Food (Tutin in Honey) Standard 2008, NZFSA Public Discussion Paper, No 06/10.* The paper reviewed the operation of the standard and set out NZFSA's view of how the various compliance options had been working. It noted that many beekeepers had found that several of the current options were either not practical or not sufficiently reliable for them to use. The paper discussed possible changes to the compliance options to address the identified issues. As an alternative to amending the compliance options, the paper outlined the consequences of revoking the standard and also sought comment on that option.

The consultation period formally closed on 30 July 2010. By Wednesday 4 August NZFSA had received 23 submissions. During the consultation period NZFSA officials also attended, by invitation, five meetings with beekeeping groups (Waikato, Whangarei, Auckland, Hawke's Bay, and Bay of Plenty) and made presentations to the National Beekeepers' Conference in Nelson and Federated Farmers Bee Industry Group in Blenheim.

The submissions were fairly evenly split between those supporting retention of the standard and those supporting revocation. Similarly, discussion at the various meetings covered both options. While support for revocation increased as more meetings were held, there remained a firm level of support for retention of the standard, albeit with amendments. The Bee Products Standards Council does not have a united view on the long-term retention or revocation of a standard, but are unanimous in their support for the interim retention of an amended standard.

The reason most often given or implied in favour of retaining a Tutin Standard is to maintain a profile for the need to manage tutin, particularly with smaller scale domestic only operators (often referred to as 'hobbyists'). Those supporting revoking the standard most often referred to the continued existence of the maximum limits for tutin in the Food Standards Code (FSC). Several also mentioned that there would be increased flexibility to demonstrate that the limits were not exceeded. Other concerns were raised that in the absence of a standard, some operators would do nothing to ensure their product met the limits.

> "NZFSA will be releasing a revised draft standard in mid-October for a four-week consultation period."

Before the introduction of the Tutin Standard, there was no specified limit for the presence of tutin in honey and commercial testing was not available. By establishing limits and providing for testing as an option for demonstrating compliance, testing is now inexpensive, available from several laboratories, and being widely used as a management tool.

There remains a concern that small operators or hobbyists can pose an increased risk of exposing consumers to higher levels of tutin relative to the larger commercial operators. The larger export operators have risk management programmes in place, and are more closely monitored under the Animal Products Act requirements. Smaller domestic operators may have little honey available to blend toxic honey with (in an effort to dilute the tutin level), are more likely to be selling comb honey, and/or may have a low knowledge of the tutin problem. They are also not subject to the same level of regulatory oversight as the export operators. There is, therefore, a level of risk relating to tutin that will need some management into the future and a standard under the Food Act provides for a level playing field for all operators, whether export or domestic.

In the future, the proposed new Food Act regime will be the regulatory framework for regulation of domestic food businesses (should the Food Bill be enacted). However, as the Food Bill is still being considered by Parliament this future regime, and its particular requirements as they may relate to honey, is not and can not be fully developed at this time.

The Minister for Food Safety has now considered the outcome of the review of the Tutin Standard and the results of the consultation. The Minister has noted that on balance, NZFSA considers that retention of an amended standard for the next two honey seasons is the best course of action and has directed NZFSA to undertake further consultation on an amended Tutin Standard. NZFSA will therefore be releasing a revised draft standard in mid-October for a four-week consultation period.

The revised standard would likely take effect from 1 January 2011 and can be expected to include:

- revised options as follows for ensuring compliance with the tutin limits:
  - blending and testing product
  - harvesting honey produced after 30 June and before 1 January in a given season
  - absence of significant amounts of tutu from the likely bee foraging area surrounding hives
  - harvested from the South Island below the area covered by the Tutin Standard (line to be shifted further south to cover the full known *Scolypopa australis* range)

- o a history of low or nil tutin levels in honey over successive seasons
- requiring data on honey source locations (broad areas rather than specific apiary sites) and test results to be supplied to NZFSA to better delineate risk areas; and
- that a review of the standard commence by June 2012, if the standard has not been revoked or amended.

NZFSA will also develop a draft of the guidance material on the various options for management of tutin risk and set out all the currently available information as to the conditions under which the options can be most effective. This will be circulated with the draft revised standard to let the public and industry have a full view of the proposed system. Documents relating to the proposal for a revised Tutin Standard will be available from mid-October from the NZFSA website and hard copies will be provided on request by contacting Cathy Corbett on 04 894 2439 or cathy.corbett@nzfsa.govt.nz.

NZFSA staff will also be available to meet with beekeepers to discuss the proposed requirements during the consultation period. Please contact Jim Sim on 04 894 2609 or jim.sim@nzfsa.govt.nz if you would like to arrange a meeting.

BURNING QUESTIONS

Scolypopa and tutin

I am a hobbyist in the Auckland area. I want to know if honey (whether creamed or comb) is safe to eat, and free of tutin, if harvested by the end of December or the beginning of January.

Answer: Not necessarily. 31 December is just an arbitrary date set by NZFSA on knowledge known when the regulation was set. This date takes no notice of climatic and breeding conditions for scolypopa in your area; that is, you could be seeing scolypopa on tutu a lot earlier than December where your hives are situated. However, generally the conditions have to be very dry and scolypopa numbers need to be high for the bees to switch to gathering honey dew off the tutu bushes.

It also depends upon the number on tutu bushes in the area and whether the bees are actually working the tutu. It pays to do a little observing. Discuss this with Auckland Beekeepers' Club members. If your hives are in the city, you should be perfectly safe as there are numerous shrubs and trees flowering. If your hives are in the countryside, near streams and bush areas, it's best to take a look at what's happening before you take your honey off.

The tutin plant. Photo: Frank Lindsay.

We want to know your burning beekeeping questions. Do you want to know how to set up your hives for spring? How to deal with varroa? Whatever your question, simply email it to editor@nba.org.nz and we will post the answers in the next issue of The New Zealand BeeKeeper *and on www.nba.org.nz.*

BUSINESS

New honey bioactivity website online

A new website is now online (www.molangoldstandard.co.nz) which contains a large amount of educational information on the various health-promoting bioactivities of honey.

The website gives full details of all of the published journal articles and postgraduate theses from the Honey Research Unit at the University of Waikato, and gives links which allow free access to many of these publications. The website also gives an outline of research work currently being done on honey at the University of Waikato.

This new information resource for global consumers, researchers and members of the honey industry is part of the new 'Molan Gold Standard' certification system for bioactivities in honey. The website explains how the new certification system can be used by companies marketing honeys for their bioactivities to global consumers.

Gold: Original Manuka (non peroxide) Activity; Green: Defensive Antioxidant Capacity (D-AXC™); Cerise: Pre-emptive Antioxidant Capacity (P-AXC™) Photo credits: Logos supplied by the University of Waikato.

AFB Recognition and Destruction Courses

By the Management Agency, AFB NPMS

We are providing non-DECA holders with the opportunity to attend a course and take the test. This is an essential step to becoming a DECA holder.

Please note that at the time of going to print certain arrangements still needed to be confirmed on some courses. Courses have already been held in the Bay of Plenty, Hawke's Bay, Wellington, Auckland, Waikato, Poverty Bay and Takapau.

Northland

Host:	Northland Branch of the National Beekeepers' Association (Inc)
When:	**(TBA) March 2011**
Venue:	To be confirmed Kerikeri
Cost:	To be advised
Catering:	BYO Lunch (Coffee, tea provided)
Registration:	**Deadline TBA**
Contacts:	John Gavin (09) 433 1892 (021) 408 450 Dan Lambert (09) 407 8226 (027) 352 9295

Auckland

Host:	Auckland Beekeepers' Club
When:	**6 November 2010 (Saturday)**
Venue:	Point Chevalier Unitec Auckland
Cost:	Full Course $60.00 Refresher: $30.00
Catering:	BYO lunch (coffee and tea provided)
Registration:	**Deadline 22 October 2010**
Contacts:	Kim (09) 418 1302 Email: kimk_bees@hotmail.com Carol (09) 376 6376 Email: thefairy@xtra.co.nz

South Auckland

Host:	Franklin Beekeepers' Club
When:	**19 March 2011 (Saturday)**
Venue:	Ramarama Hall Maher Road SH1 Ramarama
Cost:	$55.00 Course and Exam $25.00 Course only (Refresher)
Catering:	Lunch and drinks supplied.
Registration:	**Deadline 5 March 2011**
Contacts:	Matt Tunzelmann (09) 236 0290 or (022) 420 3040 Email: nismo_nz@hotmail.com Dan Lambert (027) 352 9295

Wairarapa

Host:	Southern North Island Branch of the National Beekeepers' Association (Inc)
Venue:	348 Francis Line Carterton
When:	**31 October 2010 (Sunday)**
Cost:	$30.00 Course $30.00 Test
Registration:	**Deadline 12 October 2010**
Catering:	BYO Lunch (coffee and tea provided)
Contact:	Peter Ferris (060 379 5558

Horowhenua

Host:	Southern North Island Branch of the National Beekeepers' Association (Inc).
Venue:	Thompson House Near War Memorial Levin
When:	**30 October 2010 (Saturday)**
Start:	9.00am
Cost:	$25.00 Course $30.00 Test
Registration:	**Deadline 18 October 2010**
Contacts:	Andrew Beach (04) 904 1634 or (027) 613 8059

Raetihi

Host:	Southern North Island Branch of the National Beekeepers' Association (Inc.)
When:	**13 November 2010 (Saturday)**
Venue:	St Mary's Church 130 Seddon Street Raetihi
Cost:	Course Fee $30.00 Test Fee $30.00 Refresher $25.00
Catering:	BYO Lunch (coffee and tea provided)
Registration:	**Deadline 29 October 2010**
Contacts:	Neil Farrer (06) 343 6248 Mary Allen (06) 385 4138 Alan Richards (06) 343 5039

Nelson

Host:	Nelson Branch of the National Beekeepers' Association (Inc)
When:	**4 December 2010 (Saturday)**
Venue:	Nelson/Marlborough Institute of Technology Queens Street West Richmond – Nelson
Start:	10.00am
Cost:	TBA
Catering:	TBA
Registration:	**Deadline TBA**
Contacts:	Nigel Costley (03) 548 3101 Frazer Wilson (03) 525 7571

Marlborough

Host:	Marlborough Beekeepers' Association (Inc)
When:	**(TBA) November 2010**
Venue:	To be advised
Cost:	$30.00 Course plus $30.00 for the Test
Catering:	BYO Lunch (coffee and tea provided)
Registration:	**Deadline 15 October 2010**
Contacts:	Will Trollope (03) 570 5633 (027) 802 034 Nigel Cost (03) 548 3101 Frazer Wilson (03) 525 7571

South Canterbury

Host:	Agribusiness Training
When:	**14 November 2010 (Sunday)**
Venue:	Old Washdyke School Washdyke Timaru
Cost:	To be advised
Catering:	BYO Lunch (coffee and tea provided)
Registration:	**Deadline 29 October 2010**
Contact:	Phil Sutton (03) 686 1513 Email: Sutton@maxnet.co.nz

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South Canterbury

Host: Management Agency AFB NPMS
When: 19 February 2011 (Saturday)
Venue: To be confirmed
Cost: To be advised
Catering: BYO Lunch (coffee and tea provided)
Registration: Deadline TBA
Contact: Phil Sutton (03) 686 1513
Email: Sutton@maxnet.co.nz

Canterbury

Host: Christchurch Hobbyist Club (Inc)
When: (TBA) February 2011
Venue: To be confirmed Christchurch
Cost: $30.00 Attendance
$30 Cost of Test
Catering: BYO Lunch (coffee and tea provided)
Registration: Deadline to be confirmed
Contact: Jeff Chandler
(03) 385 5375
Email: jchandler38@hotmail.com

Otago

Host: Otago Branch of the National Beekeepers' Association (Inc)
When: 11 December 2010 (Saturday)
Venue: Galleon Complex
500 Thames Highway
Oamaru
Start: 9.30 am
Cost: $45.00 course and test
$25.00 Refresher
Catering: Full Lunch/Morning Tea and refreshments supplied
Registration: Deadline 24 November 2010
Contact: Gavin McKenzie (03) 689 8418
Email: jgdamckenzie@xtra.co.nz
Note: Allow 6 hours for course and test.

Southland

Host: Agribusiness Training
When: 10, 11 and 12 December 2010
Venue: To be confirmed
Cost: To be advised
Catering: BYO Lunch (coffee and tea provided)
Registration: Deadline 26 November 2010
Contact: Brice Horner (03) 486 2299
(027) 441 0344

AFB NPMS statistics

By Rex Baynes, AFB NPMS Manager

As at 7 September 2010 there is a 89% Annual Disease Return (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 0.25%. 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	2010
Percentage of beekeepers with a Disease Elimination Conformity Agreement (DECA)	60%	62%	69%	72%	72%	75%	79%	79%	79%	59%	64%
Percentage of DECA approved beekeepers who have completed the competency exam	##	##	##	##	##	43%	45%	49%	62%	100%	100%
Annual Disease Return (ADR) compliance (by 30 June 2010)	##	##	##	##	##	41%	65%	61%	73%	71%	70%
Annual Disease Return (ADR) compliance (best for year)	85%	70%	75%	70%	79%	82%	84%	83%	91%	88%	89%
Certificate of Inspection (COI) compliance	##	34%	47%	8%	##	14%	18%	22%	30%	64%	##
AFB percentage levels	0.43%	0.46%	0.48%	0.34%	0.30%	0.26%	0.32%	0.30%	0.32%	0.27%	0.25%

Statistics courtesy of AsureQuality Limited. Note: ## indicates statistics not available.

Management Agency gets tough on COI

By Rex Baynes, AFB NPMS Manager

This article sets out the obligations of beekeepers with regard to certificates of inspection (COI), and discusses measures to be taken to improve compliance rates.

The AFB NPMS states that every beekeeper who does not have a Certificate of Inspection (COI) Exemption must ensure that every honey bee colony in every beehive owned by that beekeeper, is inspected for American foulbrood by an Authorised Person on or after 1 August and on or before 30 November of each year.

While acknowledging the COI is an important tool, our compliance rates over recent years do not make for good reading, as evidenced below.

Year	Compliance Rate
2003	8%
2004	##
2005	14%
2006	18%
2007	22%
2008	30%
2009	29%
2010	##

Note: ## indicates statistics not available.

On instructions from the Management Agency I have implemented, with the assistance of AsureQuality Limited, a number of provisions that will improve compliance rates. Contained in the COI mailing this year is a schedule detailing the names and contact details of those DECA holders (Approved Beekeepers) who are willing to make time available to inspect the hives as above. These DECA holders have agreed to have their names and contact details made available, thus making the task of locating a suitably qualified inspector that much easier.

In addition, a schedule detailing AFB Recognition Courses from North Cape to the Bluff has also been included in the mailing to encourage COI holders to progress towards becoming DECA holders.

In mid October a reminder notice will be sent to beekeepers who have not had their hives inspected as above, advising they will be subject to default inspections at their cost if by 1 December if their hives have not been inspected.

IMPORTANT NOTICE

TO CERTAIN BEEKEEPERS

If you do not hold a Disease Elimination Conformity Agreement (DECA) this notice applies to you.

You are required by law to have your hives inspected by an approved beekeeper by on or before 30 November 2010 (Tuesday).

Clause 32
Biosecurity (National American Foulbrood Pest Management Strategy) Order 1998

Failure to comply will result in:

- The Management Agency arranging for your hives to be inspected at your cost.
- Your details will be forwarded to MAF Biosecurity.
- The Management Agency considering undertaking a prosecution under section 154 (q) of the Biosecurity Act 1993.

Why dogs don't rule the world

A labrador that ate a beehive containing pesticides and thousands of dead bees won an award that recognised the most unusual pet health insurance claim in the United States. Ellie, who fully recovered from her encounter with the beehive in southern California, beat a border collie that ran through a window to get at a postman, and a terrier that bit a chainsaw. She won a bronze trophy in the shape of a ham, and a basket of toys and doggie treats. All three hungry dogs have recovered after receiving veterinary care.

Reminder about suspect sample submissions

By Frans Laas, AFB NPMS Chairman

Beekeepers who send in unsolicited bee and larval samples for AFB testing to Plant and Food Research often complain to the Management Agency (MA) that nothing seems to happen.

The MA has a fixed budget in each year for diagnostic work to test for the presence of AFB spores in bees, larvae and honey samples as part of our auditing process. However, many beekeepers who have suspect samples send them directly to the laboratory, bypassing AsureQuality Limited. Then they wonder why they get no response. Our contractors (Plant and Food Research) are not obliged to process these samples and it is up to them what happens: you might get lucky.

The Management Agency needs to remind beekeepers that any suspect samples should be processed through the Apicultural Officers at AsureQuality Limited. Depending on the nature of the submission they may forward the samples on to the laboratory for testing. We have a limited amount of discretion in the budget to deal with submissions that are not part of our auditing programme.

If you wish to get samples tested that don't fit into our testing programme, you will need to deal directly with Plant and Food Research and negotiate a contract with them for testing. I have had to do this myself in the past for testing of adult bees.

Bee posters available!

The NBA has produced this poster for the second annual Bee Week, 26–30 July 2010. Each branch was sent 10 copies, and posters can be purchased from head office.

If you are interested in purchasing a poster, please contact Jessica Williams at secretary@nba.org.nz or ring 04 471 6254.

Deadlines for advertising and articles

Advertisers and contributors to *The New Zealand BeeKeeper* are advised that new deadlines are now in place for advertising and articles.

These changes will allow us to ensure that the journal hits beekeepers' hands at the same date each month. If you have any questions, please email ceo@nba.org.nz

Advertising deadlines

Advertising is now due on the 6th of the month prior to publication. Material received after the 15th of the month and prior to publication may not be published.

In order to be fair to all advertisers who occasionally offer deals for a limited time period in their ads, there will be no exception to these rules.

Article deadlines

Articles are now due on the 6th of the month prior to publication. Material received after the 15th of the month and prior to publication may not be published.

Year (as at June)	Beekeepers	Apiaries	Hives	Compliance Rate
2004	845	1650	14776	----
2005	741	1476	14916	14%
2006	577	1188	11465	18%
2007	534	1187	12027	22%
2008	537	1092	11062	30%
2009	1090	2559	32081	29%
2010 (March)	1298	2400	23186	64%

the upward trend a decision was made some months ago to contact all DECA holders inviting them to make themselves available to undertake inspections. Those who agreed also were happy to have their details published via the *The New Zealand BeeKeeper* journal and the web site.

The October 2010 issue of *The New Zealand BeeKeeper* journal (all registered beekeepers receive a copy) will carry a front-page promotion as well as including a list of approved beekeepers.

Annual Disease Returns (ADR)

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 70% of registered beekeepers had lodged their ADR by the required date of 1 June 2010.

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 (December)	96%
2010 (June)	70%

It is important to note that the 70% compliance rate does not include reminder notices: these are being mailed shortly.

There are currently 950 ADR defaulters (30%) and is an increase on the figure reported last year. This is due mainly to the statistics being taken some 10 days earlier than last year. AsureQuality Limited reports they are receiving 20–25 ADR returns per day, suggesting the defaulter rate is running at about the same rate as last year.

Both the Management Agency and NZFSA (Jim Sim) have received a spreadsheet detailing those defaulters.

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 Limited staff in attaining this excellent result.

AFB Surveillance Programme 2009–2010

There were 382 apiaries selected to be part of the AFB surveillance programme this season. Of these 228 (60%) have been inspected and the remaining 154 were not inspected for a variety of reasons. The number of completed apiaries continues to improve with 51 more apiaries inspected than last year (31% increase) but at just over 1% of registered apiaries. This is still well short of the target of 2–4%.

MAF review of AFB NPMS

Submissions closed in January 2009.

The Management Agency met with Biosecurity (Paul Bolger) subsequently, and it is anticipated that a Discussion Document will be available during conference 2010.

Helicopter surveillance

In 2009 a helicopter surveillance operation was conducted on the Coromandel. We are pleased to report that a moderate level of non-compliance was detected.

AFB NPMS website (www.afb.org.nz)

The website has been reviewed by both Neil Farrer and Rex Baynes as recently as last week *[Editor's note: meaning in late June]*, with several updates and enhancements planned.

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.

Proposed AFB NPMS budget

The input of beekeepers is sought on the proposed AFB NPMS 2011/2012 Operational Budget, running from 1 June 2011 through 31 May 2012.

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 2011–2012 operational period, from 1 June 2011 to 31 May 2012.

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 $12.00 per apiary.

Important: if you wish to make a submission on the proposed budget, then please do so in writing by 1 December 2010 to:

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

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 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.

Proposed AFB NPMS Operational Budget 2011–2012

Income:	Levies (Beekeepers)	60,000.00	
	Levies (Apiaries)	269,000.00	
	Interest Received	8,900.00	
	Defaults & Other income	10,000.00	
			$347,900.00
Expenditure:			
	Management Agency admin	60,000.00	
	AsureQuality Limited contract	90,000.00	
	Hive Inspections	70,000.00	
	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	
			$303,000.00

Did you know?

By Rex Baynes, AFB NPMS Manager

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009 (22 June)	2010 (7 September)
Registered beekeepers	4,864	4,550	3,973	3,649	3,211	2,911	2,694	2,602	2,589	2,663	2,944
Number of apiaries	21,633	20,993	20,258	20,228	19,592	19,281	18,954	19,228	20,439	21,593	22,432
Number of beehives	299,712	320,113	305,152	300,729	292,530	294,886	300,728	313,399	343,155	365,709	377,574

Do's and don'ts of AFB control

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.

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

Beekeeping and the law

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.

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

AFB recruitment update

By Rex Baynes, AFB NPMS Manager

The call to boost the numbers of AFB trainers nationwide has exceeded all expectations with 44 trainers, including both current and new, now in place.

Train the Trainers courses in Timaru, Palmerston North, Hamilton and Nelson during July and early August were very well supported, with those participating enjoying the opportunity to contribute and learn.

I would like to thank all 44 trainers most sincerely for helping to promote AFB education.

Special thanks also to Byron Taylor of AsureQuality Limited who led the Train the Trainers courses.

AFB NPMS report, 1 July 2009–30 June 2010

By Rex Baynes, AFB NPMS Manager

The following report was presented on 30 June 2010 to the Annual General Meeting of the National Beekeepers' Association (Inc.) of New Zealand at its annual conference in Nelson.

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 Barry Foster	Poverty Bay
Mr Neil Mossop	Bay of Plenty
Mr John Hartnell	Christchurch

Glenn Kelly resigned from the Management Agency part way through the reporting year. The Management Agency is currently in the process of looking for an NBA member to fill the vacancy.

Beekeeper, apiary and hive numbers

As at 11 June 2010 there were 2957 registered beekeepers operating 376672 hives on 22440 registered apiaries. By comparison, the June 2009 statistics quoted 2663 beekeepers, 21,593 apiaries and 365709 hives.

65% of the new beekeeper registrations were in the North Island, while 35% were in the South Island.

	2000	2002	2004	2006	2008	2010 (30 June)
Registered Beekeepers	4,864	3,973	3,211	2,694	2,589	2,957
Number of Apiaries	21,633	20,258	19,592	18,954	20,439	22,440
Number of Beehives	299,712	305,152	292,530	300,728	343,155	376,672

Disease reports

Between 1 June 2009 and 31 May 2010, 779 cases of AFB were found by beekeepers and/or AsureQuality staff in 450 apiaries. This is an average disease rate of 0.21% of hives. Of these AFB reports, 73 cases were found and reported in hives on 45 apiaries owned by beekeepers who are not DECA holders. This represents 0.28% of the total number of hives held by non-DECA holders.

Disease Elimination Conformity Agreements (DECA)

As at 11 June 2010 there were 1650 beekeepers with DECAs and a Certificate of Inspection Exemption (56% of beekeepers). These beekeepers are able to inspect their own hives for AFB and make reports to AsureQuality on the authorised forms.

170 new DECAs were approved in the reporting period and 49 existing DECAs were reviewed. There were no DECAs revoked during the reporting period. Since September 2008 beekeepers have been required to sit and pass the AFB competency exam prior to applying for a DECA.

Certificate of Inspection (COI)

There were 1298 beekeepers who owned 25791 hives on 2454 apiaries that required a COI on 11 June 2010. The number of beekeepers in this category is up by 208 (19%) on the previous year, largely due to the large number of new beekeepers registered in the reporting period (468).

From the following table it is noted the Management Agency has made significant inroads in regards improving the COI compliance rate. The figure of 64% is still not acceptable and in order to maintain →

It is illegal in New Zealand to use a chemical substance to control varroa that has not been registered and approved by the New Zealand government.

Source: Control of Varroa: A guide for New Zealand beekeepers *(revised edition), by Mark Goodwin & Michelle Taylor, located in the front matter under the heading 'Information on Varroa Control Products'.*

Members of the Waikato Branch of the NBA appeal for funds to keep new bee diseases out of New Zealand

Accepting the 'fait accompli' is the easy route and is often based on a decision that we don't agree with but we lack the knowledge or strength to combat it. Some such decisions may have serious consequences but Waikato Branch members are ready to fight where we feel there are significant risks to our bees' wellbeing.

Five years ago, we came together to fight the proposed import of Australian honey to New Zealand. We weren't willing to accept the risk of new bee diseases entering the country and threatening the health of our colonies. The Waikato Branch employed Dr Mark Goodwin to complete the necessary science and Mr David Boldt succeeded in the courts to keep Australian honey, and any potential new bee diseases, off these shores.

Despite that success, we are now being told to expect honey imports as early as the end of this year and are expected to accept the risks associated with it. In our opinion, the importation of Australian honey significantly increases the risk of bringing in new diseases and creating a widespread issue that would affect the whole of NZ.

The Waikato Branch is determined to fight this once again and is trying to raise money to assist the NBA to mount a case backed by good science and good legal representation. However, we are aware that the NBA lacks the necessary funds to re-engage Dr Goodwin and Mr Boldt, who were instrumental in our earlier success.

We are concerned that free trade is being placed ahead of the safety and wellbeing of our industry. Australia has many bee diseases that New Zealand doesn't, and many of those diseases are being linked to CCD. While no direct connection has been established, scientists are clear that multiple diseases lower the immune system of the bees and how they cope with CCD. Therefore the health risks associated with allowing the importation of Australian honey and the potential effect on our own colonies could have a devastating effect on our industry and the NZ economy as a whole.

It is imperative that we do our best to prevent these new bee diseases from entering the country. The NBA can't fight this alone. Neither can the Federated Farmers Bee Industry Group. We must join together as an industry to support the fight. The Waikato Branch members therefore chose to pick up the challenge once again by approaching all beekeepers directly to pledge money to fund further research by Dr Goodwin and legal assistance from Mr Boldt.

We have raised over $65,000 so far and thank people for their support. The pledges will only be drawn upon as money is required and will be held in a lawyer's trust account. Please support our cause by making a pledge on the enclosed form to keep NZ one of the most bee disease-free countries in the world.

Russell Berry
Waikato Branch Member

Pledge Form

To Waikato Branch NBA for funding Mr David Boldt and Dr Mark Goodwin (Plant And Food Research)

NAME: _____

ADDRESS: _____

_____

Contact Name and Phone No.: _____

_____

I PLEDGE A MAXIMUM AMOUNT OF $..... TO PLANT AND FOOD RESEARCH (DR MARK GOODWIN) AND MR DAVID BOLDT, TO BE USED FOR SCIENTIFIC AND LEGAL WORK ASSOCIATED WITH KEEPING NEW ZEALAND FREE OF NEW BEE DISEASES.

Signed: _____

PLEASE FORWARD THIS PLEDGE (NO MONEY AT THIS STAGE) TO:

Russell Berry, Waikato Branch NBA
RD 3
Rotorua
Email: Russell@arataki-honey-rotorua.co.nz
Ph: 07 366 6111

FOR FURTHER INFORMATION DON'T HESITATE TO CONTACT RUSSELL

THANK YOU FOR YOUR SUPPORT.
Russell Berry

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

BEE PRODUCTS STANDARDS COUNCIL

Report of BPSC meeting

By Dr Jim Edwards, Chairman

This report presents an account of the Bee Products Standards Council meeting in Wellington, August 2010.

The meeting was also attended by policy analysts from the New Zealand Food Safety Authority (NZFSA) and Food Standards Australia New Zealand (FSANZ), and invited scientists from GNS Science and the Cawthron Institute.

Standards

The Council has agreed to implement standards on a voluntary basis from October 2010, and that further work is still required before they can be fully implemented.

It was agreed that the standards were well advanced for all except manuka honey. The standards are now available as guidelines on the BPSC website http://www.bpsc.org.nz under "Standards".

The Council is working to get more laboratories involved in testing to give a good choice for this work. The laboratories will be listed on the BPSC website following the final BPSC meeting for the year.

It has become clear that a wide range of testing methodology is being used by the laboratories and this will need to be refined so that the same range of tests are used.

The standard for bioactive manuka honey will be subject to ongoing review by the BPSC. A technical advisory group of active scientists has been established to provide advice on the known science and identify the scientific knowledge still required.

Tutin review

The Council discussed the review of the tutin standard which was currently subject to consultation. It noted that the NZFSA planned to report on the consultation in the October issue of *The New Zealand BeeKeeper.*

Singapore transit

The Council discussed the EU requirements for certification of products transiting through Singapore. Certificates from Customs should not be a problem, while shipping company certificates would be of concern.

Animal products to the EU

The Council noted that when a consignment is held up because of an issue with documentation, the resolution of the problem should start with a discussion with the certifying officer.

EDUCATION

Move from Telford to Agribusiness Training

By Dr David Woodward

On 9 August 2010, I moved from a position as Head of Apiculture at Telford Rural Polytechnic to a new position as Apiculture Technical Advisor for Agribusiness Training Ltd.

Agribusiness Training has their head office in Invercargill and has branches from Invercargill to Hamilton. Agribusiness Training is a Private Training Provider of training in agriculture, horticulture, apiculture and equine studies. Apiculture training started in 2006 with seven students enrolled in the National Certificate in Apiculture Level 2 course in Mosgiel. During 2007, courses were run in Invercargill and Mosgiel and in 2008, Invercargill, Mosgiel, Springston and Rangiora, with an additional course starting in Timaru in 2009. During this four-year period 76 students have successfully completed the qualification. In 2010 there are seven courses being run, with new courses starting in Cromwell and Nelson and a total of 91 students enrolled overall.

My contact details are:
31 Lewin Street, Balclutha 9230,
Ph: 03 418 2892,
Cellphone: 027 418 2385
Email: davidw@agribusiness.ac.nz
Website: www.agribusiness.ac.nz

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email: info@ceracell.co.nz

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- Will not give sub-lethal dose during 8 week period - controlled release combined with therapeutic dosage, used correctly will not promote resistance in mites.
- Proven efficiency from beginning to end of treatment period
- Apistan is that effective that it will resurrect hives that are collapsing from parasitic mite syndrome
- Economic to use only two strips per brood nest required
- Long shelf life, current stock 01/ 2013 expiry
- Apistan is not affected by removal from its packaging and can be repacked for use if necessary.
- Packed 10 to sealed foil pouch, 10 pouches per carton=100

For more information ask for a brochure or refer to Vita Europe website http://www.vita-europe.com

A rather unusual honey harvest

By 'Honae Bee of Marlborough'

When was the last time you were invited to step out of your comfort zone? I certainly was on my recent wander through British Columbia this 'winter'.

A lawyer–beekeeper friend needed some help to harvest the crop. Just a few boxes, "no worries, a piece of cake", compared with what Alex and I had pulled off our hives in February back home. However, the only protective clothing we could muster was one suspect veil.

As I gazed up onto the rooftop, the thought foremost in my mind was, "I wonder where they source their queens? Am I likely to get my butt stung off up there?"

I've had to resort to some pretty dicey protective gear at times during the past 30-odd years of beekeeping but this ranked right up there for Mickey Mouse outfits. That old pain tolerance that I'm usually calmly

confident about suddenly came under solid scrutiny also. What if the Africanised drones were first off the block during the queen's nuptial romp? Would there be an alternative escape route, other than scuttling down the ladder at full tilt?

> "I became aware of the growing number of 'gazers' gathering at a safe distance below."

So as I gingerly climbed up on the roof, stepping into the complete unknown, I became aware of the growing number of 'gazers' gathering at a safe distance below. Like spectators at a kickboxing match, all were preparing themselves to witness someone else's pain. Stage fright is nothing new to this man; neither is covering it up.

At first I wafted a little smoke, then took a deep breath and a sideways glance at the ladder, and thought, "hey, are there any bees in this hive?" A few unruffled guard bees came to check out what was going down (ah, it's just some displaced Kiwi poking his big nose in).

Cutting a long story short, in the end I never managed to score one single sting. What an anticlimax for the 'Romans' waiting below, but what a stroke of good fortune for me. I did manage, however, to stage a 'sting on the butt' performance that I usually reserve to entertain dazed tourists passing our roadside apiaries at home (Merve Elwood knows full well of these antics).

My grateful friend reminded me that I had managed to pull off a stunt that has eluded even the most clever black bear: I'd ripped the honey off without totally wrecking the apiary.

Later, while extracting the crop, I was full of suggestions about alternative apiary sites. All of these, surprisingly enough, were at ground level, surrounded by a grunty Gallagher Electric fence unit! I used to know someone who could give a graphically detailed account of her experience with these deterrents.

Now, back on home turf, I'm quite looking forward to harvesting honey in the conventional manner to which we're accustomed. That's it from me, 'Honae Bee' of Marlborough, who would never dream of taking such risks here in New Zealand.

Rooftop harvesting in the Canadian Rockies. Photos supplied by 'Honae Bee'.

Queens are unlikely to transmit AFB but package bees can.

Source: Elimination of American Foulbrood Disease without the use of Drugs: A practical manual for beekeepers (revised edition), *by Mark Goodwin, page 32.*

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Packets contain 20 strips, cartons contain 800 strips. For orders of up to 100 strips please add $6 incl. GST for freight. Orders of 100 strips or more are despatched freight free to anywhere in New Zealand. Payment is required prior to despatch by Visa, M/Card, Cheque or Electronic Banking.

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Selling honey at the farmers' market

By Anne Hulme

There are many rules and regulations to consider if you want to sell your small amount of spare honey to the public.

Sometimes you might think that it isn't worth the cost. Selling honey at the market has more regulations to comply with than selling homemade jams and pickles.

I can only tell you about the rules for our comparatively small local market because I don't have any experience elsewhere, but I do know that all the farmers' markets in New Zealand have set regulations that every market organiser should be following.

First of all, consider the honey regulations. Your honey must be extracted in registered premises, or a commercial honey house, or you do it yourself in a rented registered kitchen. It is not good enough to pay a commercial beekeeper to extract it for you so that you can take it home to pack it into containers in an unregistered place. It must be packed in registered premises also. Gone are the days when we used to extract in the garage and pack it into jars in our own kitchen, to give away to our family or barter with neighbours.

The Wanganui District Council is authorised to inspect small honey houses for hobbyists. There are many points for you to consider when building new or altering an existing room or shed, so it would be best to talk to your local Environmental Health Officer before you start planning. We didn't do that when we built my new premises in town, and so we had to make two changes before I could gain an A grade. I had to change the hot water to make it come directly from the hot water cylinder, and put a water-repellent silicone sealer around the floor of the cupboard under the tub. There is an annual registration and inspection fee to pay, and the council inspector can come at any time without warning.

Selling honey at the market. Photo: Graham Pearson.

Now that we have the new tutin regulations, the inspector is very thorough. He or she is well versed in the tutin laws and will ask to see your traceability records, checking the batch numbers on the labels of the containers of honey. (I label my buckets with a batch number as soon as the honey comes out of the extractor and use that same number on the jar label.) It is important to keep your written records up to date.

The inspector will check your cleaning schedule (that should be displayed on the wall) and that you have recorded and dated when you did certain jobs. He/she will ask to see the cleaning materials you use, and look at the drain and will check the rubbish bin. The inspector is even interested in the dates you laid ant bait outside and set rodent traps if the area has a problem.

At our market there are more food safety requirements. It is compulsory for you to gain and have on display a current NZQA food safety certificate (e.g., number 167), or else you could attend a different food safety course that is specially designed for honey producers and sellers, run by AsureQuality Limited. Hobbyists would find this particular course more useful, as it is more pertinent to a beekeeper and doesn't include the whole meal preparation and practical kitchen work that is required for the NZQA food safety certificate number 167.

Another market regulation requires the stallholder to prepare a Food Risk Assessment document and submit it for approval. It is filled in and dated every time you go to the market. If someone else is selling your honey for you, that person has to complete the Food Risk Assessment document and keep it up to date. The district council health inspector or the market organiser can ask to see it at any time, so you must have it with you. All of these requirements are necessary to ensure that the honey you prepare is safe for the customers.

FROM THE COLONIES

Auckland Branch

Conference 2011 Reminder:

Please start preparing your photos and your comb honey for the competitions at conference! Categories to come.

- Maureen Maxwell, Northern Ward Representative

Northland Branch

The drought didn't really break until May for us and the winter has been relatively dry through June and July. After a cold snap in June, the rest of winter has been relatively warm. August and what remains of September have been wet, but the tracks have been wet rather than axle deep in mud.

The kowhai is flowering prolifically and that is a wonderful sign for Northland beekeepers that there are good pollen sources pretty much everywhere. Nectar sources have been patchy but better than last year when record amounts of sugar were required.

A lot of hives have gone onto manuka sites in the warmer areas and beekeepers will be hoping for a better season than last year. It doesn't matter how prolifically the manuka is flowering; the bees still need the fine weather to work them.

Spring has come earlier than normal and it's likely that pollination of avocados will start a week or two earlier.

Hives are building rapidly and the next problem will be stopping the strong hives in pollination and elsewhere from swarming.

AFB problems

We are having significant problems with AFB around the Maungatapere/Whatatiri Mountain area. For anyone with hives going into the area for pollination, please be vigilant and report any AFB found. Check your hives when they come out of the area before you have to condemn boxes of honey to the fire.

- Simon Peacey, Branch Secretary

Bay of Plenty Branch

Bee needs her umbrella when venturing out in the Bay this spring. Having a fresh set of mud grips helps the beekeeper to contend with the constant wet-but-mild weather. Asking around, the general view is that hives in the region have fared well over winter and are now rapidly rising. Add a bit more sunshine and the season will be off to a great start.

Bay of Plenty Branch meeting and discussion group

The September branch meeting was hosted by Leon Guy at Kintail Honey's Paengaroa yard on 7 September. Over 35 beekeepers took time out from hive checks to find out what's happening around the Bay and share views on topical issues. The chocolate biscuits were a nice touch; thanks Leon. Some are concerned with instances of high varroa levels and there was discussion about treatment methods. Common practice has been to alternate varroa treatments and treat hives early this spring. It is suspected that commonly used treatments may be less effective and more vigilance is needed in monitoring hives.Queen grafting had started and Neil Mossop reported that he has already had successfully mated queens.

Shane Max from Zespri briefed the group on the current kiwifruit crop protection programme; in particular, the need for growers to control sooty mould. Spraying orchard hedgerows and bordering bush/waste land is one tool available to growers to control the vine hopper that causes the sooty mould. Good communication between industries and the individual grower and beekeeper is critical to ensure acceptable outcomes to control this pest with minimal impact on bees.

Pollination seminar

Zespri is conducting a series of pollination seminars this October throughout the growing regions, titled "Lifting Productivity through Improved Pollination". This seminar will discuss best practice pollination with Dr Mark Goodwin of Plant and Food Research, who will also present Zespri Innovation-funded research which focuses on dry pollen application techniques. The Zespri Tech Transfer Team will discuss industry hive auditing and best practice chemical use in relation to bee safety. All orchardists and industry representatives, including beekeepers, are welcome to attend. The dates for the Bay of Plenty seminars are given below:

As everyone is now getting busy, the next branch meeting will be next year. The date will be advised.

Another successful DECA course

This course took place on 12 August at the Te Puna hall with 40 people attending. Over 30 were first timers and the remainder were doing a refresher. Ross Carroll provided the instruction in his usual professional and expert way. Thanks to Ross for his time and enthusiasm.

Introduction to Beekeeping course

The Katikati Resource Centre has identified a number of local people wanting assistance to get started in beekeeping. As their initiative is something to be encouraged, the Resource Centre has approached long-time beekeeper and advisor, Gerrit Hyink, to provide the instruction. A total of three days of instruction is planned, starting with the basics and some theory on 16 October. This will be followed by hands-on practical

Continued on page 49

Date	Time	Region	Venue
Tuesday 5 Oct	2:30pm	Opotiki	Opotiki Golf Club
Wednesday 6 Oct	9:00am	Edgecumbe	Awakeri Events Centre
Wednesday 6 Oct	2:00pm	Te Puke	The Orchard, 20 MacLoughlin Dr
Thursday 7 Oct	9:00am	Tauranga	Tauranga RSA, 1237 Cameron Road
Thursday 7 Oct	2:00pm	Katikati	Katikati War Memorial Hall

Continued from page 47
instruction with smaller groups over a period of time. Nineteen people have registered for this course already, so if you would like to attend, or you know of someone who might be interested in attending, you need to act fast. Contact the Katikati Resource Centre, Lynne Mathews on 07 549 0399 or email ace@katikatiresource.co.nz.

- Greg Wagstaff

Waikato Branch

The season seems to be starting out a bit unusually. I have been receiving reports from beekeepers around the region with larger than normal colony failures ranging from drone layers, varroa and other unexplained causes. Some apiaries seem to be racing away and are on the verge of swarming, while others are suffering from losses and generally not doing very well.
We all need to continue to support the efforts to keep Australian honey out and hope the good weather returns so we can get back out to the paddocks.

- Stephen Black, Ward Representative

Hawke's Bay Branch

Some of the old hands in the Bay tell me that when we have a spring as wet as this we're in for a major drought. Time will tell but it is certainly not dry at the moment.

Unfortunately there has been a major outbreak of American foulbrood in the Hastings/Havelock North area. Anyone with hives within this area needs to be extremely vigilant over the next season. At least five apiaries have been found with robbed-out, diseased hives. Hopefully strong action will be taken under the PMS to ensure the situation does not arise again with the same person. Because it is an area that has large numbers of hives used for pollination, potentially thousands of hives are involved. We will certainly have our work cut out for our annual diseaseathon.

Hives are generally a bit behind what they would normally be at this time of year because of the weather, but it looks like the pollination season is also at least a week later than average so this will help.

It's now officially spring. As I write this I'm looking at the weather forecast: all rain and snow. That doesn't surprise me; still, the sun is supposed to come out later in the week and that will cheer us all up.

- John Berry, Branch President

Nelson Branch

With pig hunting and a winter break behind us, it's all go as we crank into another season. After a mild winter the hives have come into spring very strong. With a lot of bees and brood in the hive they are using up their winter stores earlier than usual, which has meant a round or two of supplementary feeding so the sugar companies will do well out of us this year.

There seems to have been a real renaissance in hobbyist beekeeping in Nelson, with a new club about to start up. At this stage the group will be meeting at the Waimea Lounge, Richmond A&P Park. For further details and point of contact you can phone the lovely Rae on 027 430 1106 or 544 6095.

I'm sure that every now and again something is added to the water here that makes some beekeepers lose the plot. This season we have the unsavoury practice of beekeepers offering discounts on any new pollination contracts they can get hold of, meaning that the original holders either lose the contract or have to drop prices to match. With costs and labour inputs rising, it's ridiculous to be charging the same price for a pollination unit that was being charged 15 years ago. It's a downward spiral of substandard hives and subsidised beekeeping that will only do the industry harm.

With the threat of resistance looming it's good to see commercial beekeepers switching treatments this spring: mostly Apivar® with the usual autumn treatment of Bayvarol® to follow later.

Hopefully the weather will improve from all the rain we've been having so we can get some good early queens mated and into hives.

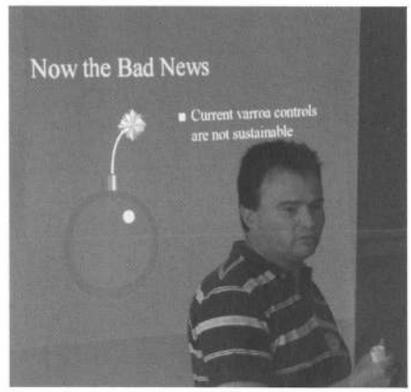
- Gareth Ayers

Canterbury Branch

See report by Brian Lancaster on page 6.

Otago Branch

In September the Otago Branch hosted field days focusing on varroa. The two meetings attracted 150 beekeepers, which represents about half the growing number of registered beekeepers in Otago and Southland.



David McMillan warns of the dangers of chemical-resistant mites.

Speakers covered the full range of issues from detection to control and the Branch thanks all those involved for two fantastic days of information sharing.

Special thanks go to Colin Woods and family, our wonderful hosts at Cromwell, and to Ross McCusker, who came down from Canterbury to freely share his experiences.

Ross and Bruce McCusker and their sons operate 1200 hives organically and he explained that while not impossible, organic control is very difficult. The devil is in the detail, critically so with organic controls, and it is definitely not for the amateur or the faint-hearted.

It does mean that for at least during the invasion period the production of organic honey is under real threat. This will affect quite a few beekeepers in the lower South Island who have established good local and export markets fetching a price premium. Somewhat surprisingly the test hives failed to find any varroa even though the Central site had a few last autumn. 'Crisis! What crisis?'

Failing to detect any mites fooled no one but there is a chance some will still have →

Marco Gonzalez and Frans Laas check for mites as keen eyes look on. Both photos were taken at the Outram field day, Sunday, 12 September. Photos: Neil Andrews.

one or more seasons without treatments. Something to savour.

In another positive note for the season ahead, Central Otago is actually WET for a change, which may bode well for a better crop.

- Peter Sales, Branch Secretary

Chatham Islands

During the last two years my partner Mana and I have been busy doing myriad other non-beekeeping work. However, recently we resettled and now are enjoying the milder climate up at Kaingaroa, a small fishing village located on the northern end of the island. That is where we plan to base and conduct our beekeeping activities (mostly queen and nuc production and beekeeping training) in the years ahead.

Although the number of beekeepers on the island is small, the number of hives has increased significantly. I noted when I returned the AFB report earlier this year that the number of hives had increased from 2 in 2008 to 70 in 2010. As far as we can ascertain, Chatham bees are a hybrid mix of British bee (introduced in 1890), Buckfast, Italian and Carniolan. The hybrid queens and hives are very strong and are able to handle the conditions associated with weather patterns at the roaring 44s.

At this time of year Chatham bees rely on native tree flowers like Hokotaka, Tarahinau, Akeake, Matipo, Lancewood and Karamu. In October the Karaka or Kopi tree flowers and we are particularly careful not to let the bees get hungry enough to attend those flowers. Some beekeepers move their hives away but older retired beekeepers from the island have said, "do not worry." The jury is still out as to whether there really is a problem with Kopi flowers or not.

In the next few weeks we will be uniting any weak hives and feeding the bees up with sugar syrup to build up bee numbers.

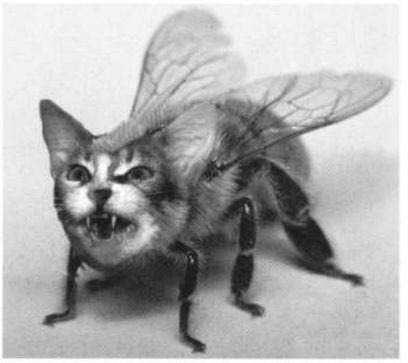
Our queen-rearing programme will then start and we should have plenty of queens to supply both the local beekeepers and apiaries in New Zealand. We check and test regularly for diseases to ensure we continue to maintain an AFB-free and varroa-free beekeeping environment for Noah and others.

Our contact details are PO Box 203, Chatham Islands, 8942. Phone: 03 305 0618, email: mandersen@xtra.co.nz

- Michele Andersen

HUMOUR

Varroa-resistant bee?



Source: wwwfunnnn.blogspot.com. Thanks to Stuart Ecroyd for sending this along.

AMERICAN FOULBROOD NATIONAL PEST MANAGEMENT STRATEGY

New Zealand beekeeper, apiary and hive statistics by apiary district as at 10 September 2010

Apiary Register Location	Category 0-5 Hives		
	Beekeepers	Apiaries	Hives
Blenheim	164	194	379
Canterbury	355	397	716
Hamilton	111	116	226
Otago/Southland	218	239	565
Palmerston North	411	464	782
Tauranga	109	127	238
Whangarei	370	406	790
New Zealand	1738	1943	3696

Apiary Register Location	Category 6-10 Hives		
	Beekeepers	Apiaries	Hives
Blenheim	27	43	228
Canterbury	56	104	421
Hamilton	17	27	128
Otago/Southland	49	71	388
Palmerston North	73	119	564
Tauranga	43	64	337
Whangarei	98	153	756
New Zealand	363	581	2822

Apiary Register Location	Category 11-50 Hives		
	Beekeepers	Apiaries	Hives
Blenheim	28	72	641
Canterbury	48	164	1179
Hamilton	21	59	567
Otago/Southland	47	129	1088
Palmerston North	66	213	1759
Tauranga	35	96	950
Whangarei	82	202	1885
New Zealand	327	935	8069

Apiary Register Location	Category 51-250 Hives		
	Beekeepers	Apiaries	Hives
Blenheim	13	173	2052
Canterbury	26	285	2732
Hamilton	18	140	2262
Otago/Southland	27	237	3198
Palmerston North	35	307	3736
Tauranga	40	261	4564
Whangarei	42	350	4971
New Zealand	201	1753	23,515

Apiary Register Location	Category 251-500 Hives		
	Beekeepers	Apiaries	Hives
Blenheim	11	274	4175
Canterbury	26	727	9917
Hamilton	7	236	3906
Otago/Southland	13	325	4754
Palmerston North	17	278	5861
Tauranga	31	465	9863
Whangarei	14	267	5417
New Zealand	119	2572	43,893

Apiary Register Location	Category 501-1000 Hives		
	Beekeepers	Apiaries	Hives
Blenheim	8	343	5382
Canterbury	17	737	11,248
Hamilton	11	420	9624
Otago/Southland	20	920	13,566
Palmerston North	12	524	9065
Tauranga	20	484	12,149
Whangarei	12	350	7358
New Zealand	100	3778	68,392

Apiary Register Location	Category 1000+ Hives		
	Beekeepers	Apiaries	Hives
Blenheim	10	804	14,670
Canterbury	14	1340	28,922
Hamilton	12	1356	31,131
Otago/Southland	13	1342	25,024
Palmerston North	14	2312	47,731
Tauranga	24	2046	45,717
Whangarei	13	1658	34,594
New Zealand	100	10,858	227,789

Apiary Register Location	Total		
	Beekeepers	Apiaries	Hives
Blenheim	261	1903	27,527
Canterbury	542	3754	55,135
Hamilton	197	2350	47,728
Otago/Southland	387	3263	48,583
Palmerston North	628	4217	69,498
Tauranga	301	3519	73,434
Whangarei	631	3386	55,771
New Zealand	2947	22,392	377,676

Meet the new Executive members

This month we focus on the two newest ward representatives to NBA's Executive Council. We asked them to introduce themselves.

Stephen Black, Waikato

Photo: Sue O'Dowd, Taranaki Daily News.

I'm originally from Taranaki and later Huntly, followed by 13 years living in Aberdeen, Scotland.

After using my electrical engineering skills working worldwide in the oil and gas industry as a remotely operated vehicle supervisor, it became clear that a lifestyle change was in order to allow me to spend more time with my family.

Beekeeping started as a hobby in 2001, when my family returned from Scotland. After a short period the hobby became semi-commercial. The business grew and is currently fully commercial with my wife Fiona and three children, Eila, Calum and Ishbel.

I am based in Uruti, north Taranaki, just south of Mokau and only two and a half hours' drive to Hamilton, where I attend the NBA branch meetings as Vice President of the Waikato Branch and newly appointed Waikato Ward Representative.

The major problems facing the beekeeping industry are getting all beekeepers working together and showing a united front, as this will enable the beekeeping industry to overcome problems much easier than being fragmented.

Being on the Executive Council is a new challenge, although with my seven years of participating in school boards of trustees I feel that I have a lot to offer. I look forward to participating fully after settling in to my new role.

Kerry Gentleman, Upper South Island

Hello! I live in beautiful Golden Bay, on the northwest tip of the South Island.

My husband Frazer and I run 500 beehives, two children and very busy lives! We are primarily bulk honey producers, although we pack a small amount for the local/tourist market and contract extract for others.

We were certified organic beekeepers until varroa got the better of us. This may be something that we pursue again in the future.

We have been beekeeping for approximately 10 years. Easy to remember the anniversary as varroa was found in Auckland shortly after we bought the bees. At this point we questioned our business decision!

Having been involved with farming previously (50:50 sharemilking, dry stock/shepherding), we decided that beekeeping was just another form of livestock farming and that we could do it. We jumped in the deep end—bypassed any form of previous experience and bought 400 beehives. Somehow it all worked out all right—although it was a very steep learning curve!

When I am not running around after bees, kids and husband I like to get into the great outdoors. I am a keen tramper, cyclist, runner and gardener. At present I am training for the Women's Spring Challenge Adventure race.

I worry for the future of beekeeping in New Zealand. We need to be encouraging more young people into the industry and helping hobby groups to flourish.

We need to safeguard our image of quality in overseas markets. If we can't sell our product for a good return then beekeepers struggle, hive numbers drop and New Zealand suffers with fewer bees for pollination. This is especially important now with bees relying on humans for survival.

I want to see New Zealand beekeepers get better at integrated pest management as we become faced with more problem pests and diseases.

I also look forward to seeing more unity in the bee industry in the near future. United we stand, etc.

So far I have enjoyed my time on the NBA Executive Council. Another steep learning curve! See you around...

Success in fighting varroa will depend on how well beekeepers are able to adapt to changes required in their beekeeping management.

Source: Control of Varroa: A guide for New Zealand beekeepers *(revised edition), by Mark Goodwin & Michelle Taylor, page 9.*

Managing hive expansion

By Frank Lindsay, NBA Life Member

October means different things to beekeepers depending upon where you live.

In the Far North the season is already under way with nectar coming into hives. In the central North Island and coastal regions of the North Island the bees are well under way, which could lead to swarming if you don't do anything about it. Beekeepers in the deep south are monitoring the progress in their hives, their main honey flow being about two months away.

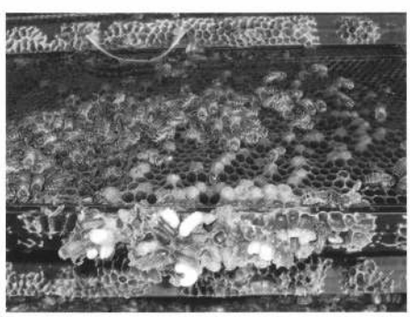
Here in the bottom of the North Island, leading up to October, when it's not been raining, the bees have been flying well. Gorse is in flower, and tree lucerne, five finger and Spanish heath are tailing off. Kowhai and plum trees are in bloom along with many ornamentals, especially grevillea, a bush I have seen covered in bees at this time of the year. Pussy willow is in full flower, while the willows are in leaf with catkins just developing. In some areas, this will give the bees their first real honey flow. In other areas, it will be the cabbage tree or hawthorn. These real flows usually stimulate the bees into swarming if you allow the bees to get slightly honey bound; that is, if you allow them to put a layer of nectar across the top of the brood frames, stopping the expansion of the brood nest upwards.

Leading up to October, the hives are expanding like mad. A month ago the hive in my garden had brood in seven frames, which would make about 3.5 full frames of brood. Bees were covering nearly two full-depth supers. Pollen was fairly scarce due to all the rain but the bees were still increasing, bringing in just enough to keep brood rearing going. Along the bottom edges of some of the outer brood nest frames and in places where the bees haven't drawn comb on plastic frames, the bees have constructed half a dozen or more queen cell buds. At that time, there wasn't a lot of drone brood in the hives, another indication of a poor pollen supply; however, it only takes a week of fine weather when the bees collect ample nectar and pollen and drone production will be under way in earnest.

A couple of weeks later after a heavy lunchtime downpour, the sky cleared, the sun came out and so did thousands of bees. They came pouring out just like they were going to swarm, only they weren't. These bees were orienting themselves to the position of the hive, gradually making wider circles as they climbed away from the hive. Half an hour later and it was all over. The young bees had returned and only the field bees were flying: another sign that spring is creeping up on us.

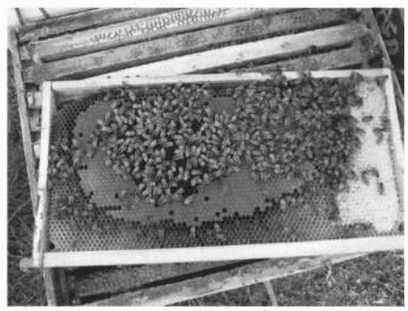
> "... it's very important that a complete brood check is undertaken of all frames before any frame swapping is undertaken."

Most beekeepers in the north have completed their first inspection while I have only just started. Most of the hives I have inspected are in beautiful condition but the odd one has problems. One I came across was a drone layer, as there was patchy raised brood in worker bee cells.



A picture looking down the frame showing raised cappings: this is from a drone layer.

I couldn't see a queen bee so I suspect that there are several drone-laying worker bees. It's useless to try and save this type of hive: a new queen introduced will just be killed. Although it seems heartless, it's best to carry the hive 30–50 metres away and shake all the bees on to the ground. Put a nucleus colony back in the queenless hive's place to collect the field bees and add the brood frame to another hive to clean out. The drone layers generally won't fly so will die of exposure.



A good frame of brood, wet nectar and pollen to the top of the frame, sealed honey on the side away from the sun.

Most hives have brood expanding into the second super. To keep the bees expanding, a lot of beekeepers reverse the first and second super during the first week of October. This immediately puts the majority of the brood in the bottom super so the colony can expand upwards again. It's also a good idea to add one or two foundation frames on either side of the brood nest, depending upon the beehive's population. This will give those bees that aren't fully engaged in brood rearing something to do. Some beekeepers go through their hives and instead of just reversing the bottom supers, they equalise the number of frames of brood in all hives (putting most of them in the bottom super) so they all will have the same population in a few weeks' time. However, it's very important that a complete brood check is undertaken of all frames before any frame swapping is undertaken. A few missed AFB cells could mean two or three hives come down with AFB instead of just the one.

Those that use a single brood nest can lift a couple of frames with capped brood (no eggs) above the queen excluder, replacing

them with either foundation or drawn frames on the outside of the brood nest to keep the queen in the bottom super laying. If there are very young larvae present in these frames, the hives will have to be inspected again in a week to see that the bees haven't produced any queen cells on the frames that were moved away from the queen.

Several hives I inspected had pollen combs well towards the centre of the super, which had restricted the development of the hive. Instead of expanding out in the form of an ellipse, the brood nest was being channelled up through the centre four frames of two supers. I stripped these hives and put all the brood frames together in the bottom super with the pollen frames to the outside. Sometimes I come across a hive with a pollen frame near the middle of the brood nest with brood on the other side. In these cases I just turned the frame around and moved the frame near to the outside of the brood nest. On a subsequent visit I will move the frame outwards a bit further, so eventually the pollen frames will be on the outside of the supers.

Drone brood removal

Those of you who attended the hobbyist forum at the Nelson conference would have heard the Traynors (our overseas guest speakers) suggest that we should also add an empty frame about three frames in from the side of the super, so the bees can draw it out and use it to produce drones. Fourteen to 18 days after being put in, when half the frame has been capped, the frame is removed, the brood cut out and the empty frames put back into position, thus removing a good percentage of the varroa mites. The capped brood can be given to someone with chickens as they are an excellent protein source which will bring on egg laying. Or if you are adventurous, you can remove the larvae and deep fry them for 30 seconds. Apparently they have a nutty taste and are something the Japanese are rather partial to.

The Traynors told us that the way the bees draw out this frame also can provide an early clue as to whether the hive is going to swarm or not. Apparently if the bees draw the frame out in a regular convex shape evenly hanging down in the middle of the frame, the hive isn't planning to swarm. If, however, they draw it out irregularly—some parts up and down like an electrical sign wave—this is an indication it's going to swarm. The bees apparently do this long before the queen lays an egg in queen cells, so we can take advantage of this warning and reduce the hive's population to prevent it from swarming.

I am going to do some drone brood removal myself this year but I would like to hear from other beekeepers as to whether this technique works. Generally, very early drone development in a hive tells me it's going to swarm some time in the next month at the first honey flow, so I make a split to reduce its population. If, however, you have already equalised all your hives you may not see this phenomenon.

Whenever I come across a very strong hive, I find the queen and then either remove two or three frames with emerging brood to be added to a weak hive to strengthen it, or I make a nucleus hive if I have a spare queen or developing queen cell. Replace the frames with frames of foundation but scatter them between the outer brood frames so the bees are encouraged to draw them out.

Another alternative, if you have more than one hive, is to swap the positions of the strong hive with a weak hive during the day. The field bees will come back to the original position and strengthen the weak hive without fighting. If you are going to change brood between hives, don't forget to do a full brood inspection first to make sure both hives are disease free, and try and determine why the weak hive hasn't developed to the same extent as the other hives. Generally this is due to a queen failing, indicated by a spotty or patchy appearance of the brood (that is, many missed cells in the brood frames of brood or larvae of different ages within the same area of brood). To determine this you may have to flick off the cappings of 20–30 capped cells to determine the age of the larvae underneath. (This is something I encourage you to do all the time, just like checking in a patch of emerging brood for disease whenever you open a hive to work on it.) If you uncover the cappings carefully, the larvae will continue to pupate and develop into normal healthy bees.

Things to do this month

Check food, sugar feed when there are only three frames of honey left (a week's supply for a strong hive). Check pollen. Check that hive stands are sound—they will carry a lot of weight when the hives are full of honey. Do an AFB check and check all frames! Raise queen cells. Requeen hives with mated queens or introduce a nuc to a weak hive after removing the old queen. Undertake swarm control measures: reverse supers and remove frames of emerging brood. Cull out old frames on the edge of the brood nest and replace with one or two frames of foundation. Replace any supers that are starting to rot away in the corners. Check for mites. Verify your treatments are working by removing 50–100 drone brood at the pinkeye stage with a cappings fork. Check your stored honey supers for wax moth. Have all your new gear ready for the honey flow.

Who do you call?

Recently the Secretariat has been receiving a lot of calls regarding hive registration and pest management issues, most of which we are unable to answer as those issues are dealt with by other entities. So, to make it easier for you to know who to call for what, we thought we would give you an easy reference guide.

AFB RECOGNITION COURSES

Rex Baynes – Manager, AFB NPMS
PO Box 44282
Lower Hutt 5040
www.afb.org.nz

Email: rbaynes@ihug.co.nz
or info@afb.org.nz

ASUREQUALITY LIMITED

- Annual Disease Returns (ADR)
- Certificate of Inspections (COI)
- Disease Elimination Conformity Agreements (DECAs)
- AFB Destruction
- AFB Finds

North Island – Bob Derry, Registrar
Ph: (07) 850 2837
Fax: (07) 850 2801
Email: derryb@asurequality.com

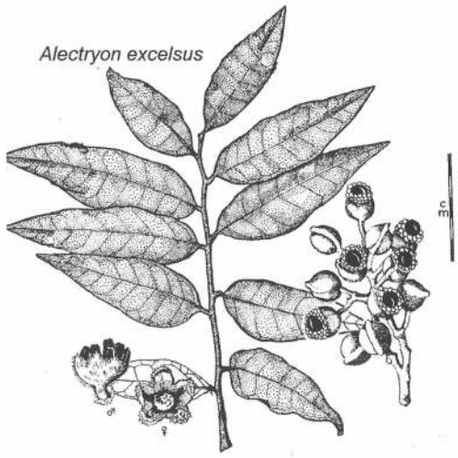
South Island – Margaret Roper, Registrar
Ph: (03) 358 1717
Fax: (03) 358 6222
Email: roperm@asurequality.com

Alectryon excelsus – Titoki

By Tony Lorimer, NBA Life Member

The Tikoki is a handsome tree reaching 20 metres high. The flowers, fruit and branches are covered in a rusty-coloured down.

The whole of the flowering panicles appear to be reddish brown from the deep colour of the anthers. The seed is black and shining, enclosed in a bright scarlet capsule. The leaves are alternate and are 10 to 30 centimetres long.



The Titoki provides a brownish pollen and light amber honey from October to December. The tree is found in the North Island and as far as Banks Peninsula in the South Island.

The Maori obtained a greenish-coloured oil from the seeds (it was much finer than linseed oil). The oil was used to kill vermin on the body and garments, treat pain in the ears, weak eyes, sore breasts or babies with sores under their arms and on their thighs.

The Takitumu people used to dry a body after death, and then anointed it with Titoki oil to prevent decay.

The leaves, when bruised and boiled, became a good insecticide: rubbing the liquid on the skin kept sandflies at bay and eased pain.

WEATHER

La Niña intensifies; warm late spring likely

The current La Niña has recently strengthened, says the NIWA National Climate Centre.

A moderate to strong La Niña event is presently underway, with further intensification possible this year. La Niña conditions are likely to continue through to at least autumn of 2011.

Late spring (October–December) temperatures are likely to be above average, in all regions. Rainfall is likely to be near normal or below normal in the east of both islands and the southwest of the South Island, and near normal elsewhere, averaged over the three month period October–December.

Soil moisture levels and stream flows are likely to be near normal or below normal in most regions, except the southwest of the North Island and northern South Island where near normal levels are likely.

The National Climate Centre's seasonal outlook states that mean sea level pressures are likely to be above normal over and south of New Zealand, for October–December as a whole, with weaker than normal westerly winds.

Overall picture

Temperature: Temperatures are likely to be above average in the east of both islands and in the north of the South Island, and very likely to be above average in other districts. Sea surface temperatures are presently near normal around New Zealand, but are expected to become warmer than normal around the North Island as the season progresses.

Rainfall, soil moisture, and stream flows: Seasonal rainfall is likely to be near normal or below normal in the east of both islands and the southwest of the South Island, and near normal elsewhere. Soil moisture levels and stream flows are likely to be near normal or below normal in most regions, except in the southwest of the North Island and north of the South Island, where they are likely to be near normal.

Handmade honey skincare

By Maureen Maxwell, Executive Council member, Northern Ward

Natural skincare and honey products are experiencing a global revival.

We have some fine examples of ranges from some of our NBA members e.g. Comvita, Honey & Herbs or maybe Mossops' range, which we were lucky to sample at last year's conference in Rotorua.

Famous international ranges like the French L'Occitane en Provence or the recently introduced Bert's Bees Range have captured people's imagination. Bert's Bees recently sold for zillions and has built up a legion of fans worldwide since its humble beginnings 25 years ago. A Burt's Bees product is sold somewhere in the world every 1.36 seconds! All products are made with a kitchen-chemistry approach (whipped, heated and cooled). Everything is 100% sulphate, paraben, phthalate and petrochemical-free.

But as beekeepers we have these amazing ingredients in abundance at our disposal and it seems criminal not to use them.

Last year whilst in Europe to judge honey, I found myself in Morocco without my usual face cleanser. I had a tube of honey that had been given to me in France, so I just used a small amount (about half a teaspoon), blended with a few drops of warm water to massage and cleanse my face. It worked a treat and left my skin fresh, clear and soft. I started to wonder just why I had spent so much on commercial cleansers over the years. I am also becoming increasing concerned with the ingredients in our food and skincare products. Reading labels has become scary! If we make our own, we have complete control over our choice of ingredients.

We have a family thing that home made gifts are preferred. Skincare products are a wonderful way to ensure health and happiness of our loved ones. I can't think of a better gift…

Honey soaps, creams and potions have long been recognised for their moisturising and healing properties. Both honey and beeswax add emollient qualities to cosmetics and toiletries and have been used for centuries in beauty treatments.

A spoonful of honey can be used in a bath, or as a mask to soften or heal skin problems. Honey can be rubbed into cracks for dry and split skin or for fungal problems or burns. Crystallised honey makes a great exfoliant, and a spoonful taken internally does much to promote health and inner beauty.

We will briefly look at some simple recipes that can be made fresh in your kitchens or honey houses. Even the addition of a little honey into commercial products can improve them: the milk and honey shower gel has probably seen little if any of the real thing. Mix in a small amount of warmed honey to improve the texture. Look out for hand soaps, shampoos or bubble baths.

From simple beginnings I hope you will be inspired.

Honey lip balm

Lip balms are quick and easy to make and can be flavoured to suit all tastes from peppermint and eucalyptus to rose, vanilla or mandarin.

You can recycle all sorts of small jars or in expensive containers can be purchased from plastic stores or suppliers like Arthur Holmes. This is a great party favour for children but is also appreciated by skiers, beach babes or yachties. For general use I use my favourite honey, but you may wish to use UMF honey for cracked or sore lips.

1 teaspoon (5 g) beeswax, chopped or grated into small pieces
½ teaspoon cocoa butter
2 teaspoons (10 mls) sweet oil (like almond or macadamia)
1 teaspoon (5 mls) honey
2 or 3 drops essential oil as preferred.

In a small jar or Pyrex jug over gently simmering water in a saucepan, melt beeswax, cocoa butter and oil together. When all the wax is melted, add honey. Stir till smooth. Remove from heat and add essential oils. Stir to mix, then pour into small lip balm containers. Cover when cool. In cold weather it may be necessary to warm slightly in hand before application.

Optional extra: For increased richness, the contents of 1 capsule of Vitamin E oil could be added along with the essential oils.

[Editor's note: this is a slightly edited version of the introduction to Maureen Maxwell's 'Simple handmade honey skincare' workshop at the NBA Conference in Nelson, June 2010. We will run more of Maureen's recipes in the coming months.]

Honeymade skincare finished lip balms. Photo supplied by Maureen Maxwell.

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Email: info@beeswax.co.nz; Web: www.beeswax.co.nz

The Beeswax Specialists

CLUB CONTACTS AND BEEKEEPING SPECIALTY GROUPS

WHANGAREI BEE CLUB
Meets first Saturday each month (except January)
Time: 10.15 am, wet or fine (we are keen)

Contact: Mike Maunder, Phone: 09 437 5847
Arthur Tucker, Phone: 09 436 1631
Kevin & Melissa Wallace
Phone: 09 423 8642 (Wellsford)
Email: whangareibeeclub@xtra.co.nz

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: Lydia Pascoe, Secretary
Phone: 09 232 0280

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: Maryanne Partridge, Secretary
Phone: 07 825 2691
Email: partridge4@xtra.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 every second Wednesday each month (except January), at 7.30 pm at Canaan Apiaries, Mosston Rd., Wanganui.

Contact: Neil Farrer, Secretary/Treasurer
Phone 06 343 6248

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

Contact: Paul Jenkin, Chairman
Phone 0800 534 466
Email: Paul@legiontv.co.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) at 7.30 pm in the Trust Room, Johnsonville Community Association Building. All welcome.

Contact: Andrew Beach, Chairman
7 Teoti St., Paraparaumu.
Email: andrewbeach@hotmail.com

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

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
Email: alpinebee@gmail.com

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

Contact: Mrs Noeline Hobson
4/76 Tennyson St., Sydenham, Christchurch 8023
Phone/fax: 03 337 3587
Mobile: 021 2112 655
Email: n.hobson@slingshot.co.nz

SOUTH CANTERBURY REGION

Contact: Peter Lyttle
Phone: 03 693 9189

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.

Contact: Margaret Storer, Secretary
Phone: 03 415 7256
Email: flour-mill@xtra.co.nz

ACTIVE MANUKA HONEY ASSOCIATION (INC)

P O Box 19348, Hamilton
Website: www.umf.org.nz

Contact: Moira Haddrell, Chairperson
P O Box 862, Cambridge 3450
Phone: 64 7 827 3286
Email: info@haddrells.co.nz
or
John Rawcliffe, General Manager
St Heliers, Auckland
Phone: 09 575 3127
Cellphone: 027 441 8508
Email: rawcliffe@actrix.co.nz

NZ COMB PRODUCERS ASSOCIATION

Contact: John Wright
Phone: 09 236 0628

NZ HONEY BEE POLLINATION ASSOCIATION

Contact: Russell Berry
Phone: 07 366 6111

NZ HONEY PACKERS AND EXPORTERS ASSOCIATION INC
Contact: Allen McCaw
Phone: 03 417 7198
Email: amccaw@clear.net.nz
or
Mary-Anne Thomason, Phone: 06 855 8038

NZ QUEEN PRODUCERS ASSOCIATION

Contact: Russell Berry
Phone: 07 366 6111

BEE PRODUCTS STANDARDS COUNCIL

Contact: Dr Jim Edwards, Chairman
Phone: 06 362 6301

Is your group or Branch missing from here? Or have your details changed? Please contact secretary@nba.org.nz
Please also send any changes or additions to: editor@nba.org.nz

NATIONAL BEEKEEPERS' ASSN OF NZ (Inc.) EXECUTIVE COUNCIL

Lower South Island Ward

Frans Laas (President)
Wildlife Solutions Ltd
102 Gladstone Road
Mosgiel 9007
Ph: 03 489 4597
Email: f-laas@xtra.co.nz

East Coast Ward

Barry Foster (Vice President)
Tawari Apiaries Ltd
695 Aberdeen Road
Gisborne 4041
Ph: 06 867 4591
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If your details have changed, please email editor@nba.org.nz and secretary@nba.org.nz so that we can update your details in the journal and the NBA website.

Hive Doctor generates a buzz

By Katie Farman

Stu and Jan Ferguson won the 2010 NBA Roy Paterson Trophy for innovation with the Hive Doctor bottom board, a mechanical system that promotes hive productivity and optimal health. Here, we share their story.

Stu and Jan Ferguson share a common belief that what they do can make a positive difference in the lives of fellow beekeepers.

"As beekeepers ourselves, we understand how dynamic our industry is largely because of the rate of change with disease-related issues," says Stu. "So we're designing products that keep bees healthier, decrease hive management and make life easier for beekeepers. Happy bees … happy beekeepers!"

The couple and their four children live in an old farmer's cottage in south Wairarapa—an area that boasts the Tararuas to the west, dramatic coastlines to the east and pastoral plains, grapevines and olive groves in between. They currently own 270 hives that produce export-grade honey and plan to increase to 400 hives.

Dissatisfied with current beekeeping products and observing that varroa was becoming the "HIV of bees", Stu spent three years researching and designing a range of beekeeping hive hardware to make life easier for everyone. His philosophy always came back to basic engineering principles such as thermodynamics.

"A cold damp home is always less healthy and harder to heat and will use more energy than a dry home—the same applies with a hive," he says.

The Hive Doctor concept was created to enable beekeepers quick access to assess their hives' health without taking the lid off and without disturbing the hive.

"Once a hive is weakened by varroa any resident diseases, which a hive can normally live with, will have an opportunity to cause serious harm to the colony," says Stu.

"This is particularly critical for beekeepers beginning to cope with varroa infestation and also for beekeepers at the other end of the scale that are beginning to see resistance to certain chemicals."

Jan and Stu's passion for beekeeping goes way back. Jan is a fifth-generation beekeeper.

"I think it would have been a surprise if we didn't keep bees," she enthuses. "My grandfather Pop Simmonds was a beekeeper and my dad Alan learned the trade off him. Dad got his own hives at 14 and he's had them ever since, in conjunction with other business."

Even though their careers initially took precedence—Jan is a qualified occupational therapist and Stu works with Leap Australasia, which designs fully integrated in home eco-systems, they returned to the Wairarapa in 2004 to achieve a greater work/lifestyle balance. Jan's father Alan sold them 25 hives to learn the basics with, while Jan's mother Kay babysat for them. "But simultaneously Stu and I realised just how much we enjoyed beekeeping. We loved the physical aspect of beekeeping, of working on the land and having that time together."

Hive Doctor is also proudly New Zealand designed and manufactured in Lower Hutt and owes its life to the generosity and assistance of Fred Waiker, of Agmar Tooling. Stu and Jan are genuinely delighted with the response they've received from New Zealand beekeepers and interest has come from as far afield as Canada, America and England.

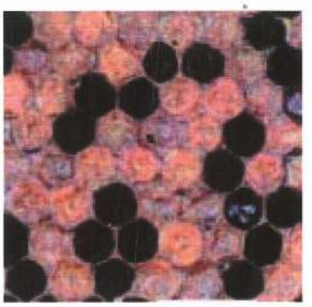
Stu and Jan are currently researching and developing more products in the Hive Doctor range and hope the success of their business will further improve their work/lifestyle balance so they can spend more time with Margot 7, Annie 5, Ruby 2 and Gus, 1.

"I guess we're living that cliché of thinking global, acting local," says Stu. "And that's great—we're thrilled we can do that."

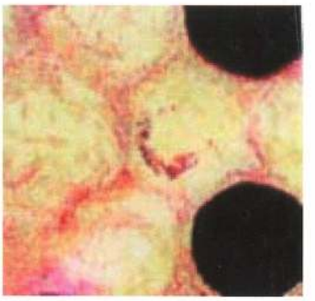
The Ferguson family during a visit to Wellington Zoo. Photo supplied by Jan Ferguson.

AFB RECOGNITION & COMPETENCY TEST PHOTOS

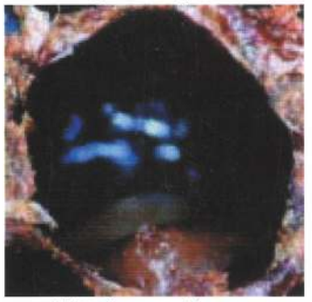
Unfinished cappings of healthy brood (yellowed)



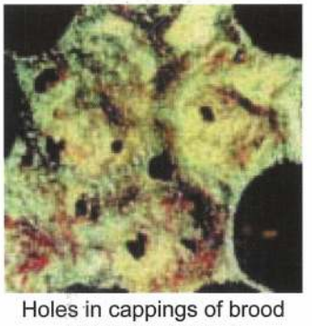
Cappings of brood infected with AFB



Bee chewing apart prior to emerging

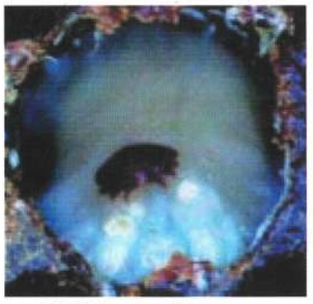


AFB diseased larvae



Holes in cappings of brood infected with AFB

AFB "ropiness" test



PMS larva with varroa

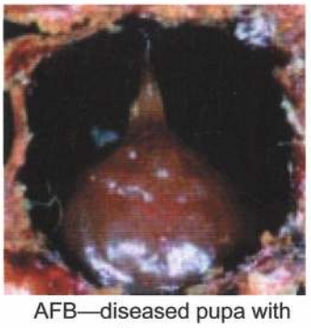
AFB—older, darker, diseased pupa

Removing PMS larva

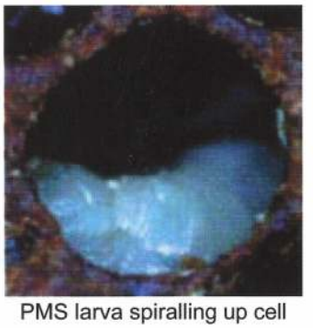
Chalkbrood—white mummy

Healthy prepupa

Sacbrood—coffee-coloured larva



AFB—diseased pupa with tongue



PMS larva spiralling up cell

Sacbrood—swollen larva

Photos taken by Dr Mark Goodwin for the AFB NPMS. First printed in 1994.