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Winning photo (people's choice) in the 'Working with Bees' category, inaugural NBA photo competition. Photo: Jody Mitchell.

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Deadline for articles and advertising

October issue: 23 August
(goes to all registered beekeepers in New Zealand)

November issue: 23 September

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

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President's Report

New Secretariat

Most of you will now be aware that the Executive Council has now appointed a new Chief Executive Officer and Executive Secretary to replace Jim and Pam Edwards.

Daniel Paul and Gemma Collier from Four Winds Communications (FWC) will share the position of Chief Executive Officer. This might seem unusual; however, there are significant synergies resulting from this combination. The new Executive Secretary is Jessica Williams, who is employed by FWC and will be the first point of contact for the members and public. Having the two positions located in Wellington and under the same roof has significant logistical and cost advantages.

A large number of applications were received from a wide variety of individuals and organisations. Thankfully there were quite a good number of outstanding candidates for both positions. As expected, the number of candidates for both positions who have had significant experience in the apicultural sector was extremely limited. One withdrew their application, as they felt that after further analysis the position was outside their core business model.

Daniel and Gemma will provide a new style of management for the NBA. With their extensive contacts and involvement with politicians, government officials and other industries, they will be able to continue to maintain and improve on the gains we have made in dealing with industry issues.

Jim and Pam Edwards

It is with a great deal of sadness that we farewell Jim and Pam. Their contribution to improving the functioning of the organisation has been extremely valuable. Jim was also involved with the restructuring process that has modernised the NBA and has made it a more relevant and more visible industry organisation. As our first CEO, Jim has certainly added a new dimension to the way the Executive Council (EC) has operated and has provided valuable strategic guidance and operational advice to the members of the EC.

Pam has run the secretarial services very efficiently and the EC and Branches are kept well informed. She has contributed quite a number of ideas to improve membership identity.

The parting comments by Jim and Pam should be considered carefully. The industry is no longer what it was. Unfortunately, far too many members still fail to understand the fundamental changes in the way the NBA is required to operate in the present political and regulatory climate.

Thankfully, Jim and Pam will not be lost from the industry completely as Jim will still be involved as the independent chairman of the BPSC and may need to be contracted on occasion for specialist projects. They will also maintain their individual NBA membership.

Honey imports

This matter has gone completely quiet at the time of writing. MAF had indicated that they would take a month to re-evaluate their position after the report from the Independent Panel. At the time of writing it was well past the expected time. Government officials can move with extraordinary speed to deal with issues when required. This suggests that either they have a complicated situation to sort out, or it is not of sufficient importance to act quickly.

Red dwarf honey bee incursion in Auckland

In early August a colony of red dwarf honey bees (*Apis florea*) was discovered by container repair staff and reported to MAF Biosecurity staff, who promptly destroyed the colony. While MAF officials are patting themselves on the back for doing a good job, this should be tempered by the fact that their staff did not actually find the incursion.

The dwarf bee is considered to be a bit of a nuisance in Asia because of its propensity to rob mellifera and cerana colonies. Another serious issue is that this bee is known to be infested with both *Euvarroa sinhai* and *Tropilaelaps clareae,* which also parasitise *A. mellifera.* Depending on how long the container was sitting in Auckland, it is quite feasible for the bees to check out local hives. It is highly likely that if they were infested a transfer of mites to our bees may have occurred. *Tropilaelaps* is potentially a far more devastating parasite than varroa because of its more rapid build up. I believe Chinese beekeepers have more problems with *Tropilaelaps* than with varroa. MAF have not indicated whether they checked for the presence of parasitic mites in the brood comb or the dead bees. If they didn't, this is of some concern, as the establishment of another parasitic mite in New Zealand will complicate hive management even further.

Common border with Australia

Recently, politicians on both sides of the Tasman have resurrected the concept of a common border between Australia and New Zealand. While there appear to be some clear advantages for Australians and New Zealanders travelling to each country, the issue of biosecurity still isn't adequately addressed.

On 7 August I attended a meeting in Wellington called by Biosecurity New Zealand to discuss issues relating to the management of the border. Industry participants were asked to articulate their views of how well they felt Biosecurity New Zealand was doing its job. There was a consensus that the 100% screening of all passengers was effective. However there was also a consensus that the cargo and mail-handling component was not managed as well as it should be.

MAF indicated that they spent more money on passenger screening than cargo. They also felt that the process of 100% screening was not cost effective! They also considered that by profiling passengers they would be far more effective as only "high risk" travellers would be targeted. They would then be able to divert their energies to focus on our "porous seaports".

It was also interesting to note that other industry groups held similar views to a lot of our members that Biosecurity New Zealand should be split off from MAF, as they felt there was a conflict of interest between the two arms of the department. MAF indicated that they would strenuously fight to keep BNZ within MAF control.

Having a common border with Australia will be problematic in biosecurity terms as we have quite different issues to deal with. We need to maintain a separate system to ensure that the pests and diseases found in one country are not transmitted to the other. We don't want their EFB, Nosema ceranae and small hive beetle and they don't want our varroa.

President away

I will be out of the country for business and attending Apimondia and will be returning at the end of September.

Barry Foster will be acting as President in my absence. I hope to still be able to have my report in for the October issue.

- Frans Laas

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Appointment of new Chief Executive Officer and Executive Secretary

We have been appointed to fill the roles as the new Chief Executive Officer and Executive Secretary. The new Chief Executive Officer role will be jointly shared by Daniel Paul and Gemma Collier of Four Winds Communications (FWC) who are based in Wellington. The Executive Secretary will be Jessica Williams, who is also employed by FWC.

As our first priority Gemma, Jessica and I look forward to getting out and meeting as many of you, the members, as we can. We look forward to building on the good work Jim and Pam have done and developing with you strong working relationships that allow us to best meet your needs.

We are excited about the opportunity of tackling some of the industry's key issues, two of which are biosecurity and ensuring the industry is well recognised as being fundamental to New Zealand's agribusiness.

Addressing these issues with your help, and that of a variety of stakeholders within related sectors and officialdom, will be one of our first priorities.

I will be the public face of the NBA in the same way that Jim Edwards has been. Gemma will be responsible for dealing with a lot of the background work as well as contributing to issues such as strategic planning, preparing submissions etc. Jessica will be your first point of contact, and our replacement 'Pam'.

I have over 25 years' experience in public relations roles and advocacy in both the public and private sectors. I have worked at senior management levels within government and prior to joining Four Winds, co-owned and directed a nationwide public relations consultancy. In 2007, I became a joint owner and managing partner of Four Winds Communications.

While I live just out of Wellington city, I grew up in the Hawke's Bay and spend a lot of time in the central North Island.

FWC has a long history of working with the rural sector including current work for clients Awapuni Nurseries, New Zealand Flower Growers Association and the New Zealand Veterinary Association.

Other members of FWC have worked for organisations such as the Federated Farmers, Ministry of Agriculture and Fisheries, Ministry of Forestry, Deer Farmers, Dairy Board, and the Meat and Wool Board.

Gemma Collier comes from a sheep, beef and cropping farm near Sanson in the Manawatu and has over five years of extensive experience as a senior account manager, administrator, and project manager. She is an experienced communications specialist who has worked in these roles for consulting firms in Wellington, Auckland and Singapore. Gemma has worked with clients in a variety of industries, including agriculture, health, energy, technology, telecommunications and fast moving consumer goods (FMCG).

Jessica Williams was born and grew up in the South Island. She's worked in a variety of administration and secretarial roles for various organisations including South Canterbury Finance and Compass Health Wellington.

We have worked closely with Jim and Pam to ensure a smooth transition from 1 September. We look forward to meeting and working with you.

- Daniel Paul, co-Chief Executive Officer

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

Now to the future

As we depart and welcome a new administrative service from Four Winds Communications, it is timely to look at the future of the NBA.

The industry should consider itself mature with many long-standing beekeeping and honey packing and exporting businesses. While new entrants will and should be encouraged to continue to be attracted, the industry as a whole has reached a plateau in its life cycle. It now needs to build on that base with professionalism and enterprise based on sound research, marketing and cooperation.

A number of industry members have made significant capital investments that involve millions of dollars. Every beekeeping business that provides full employment for one beekeeper will be based on an investment that represents a very significant investment for its owner(s). Every beekeeper that sells any product is regarded as a commercial operator by officials.

These investments represent a professionalism that needs to be matched by a professional approach to the industry. There is an obligation to provide consumers with the products that they think they are buying. Pollination services include an obligation to the horticulture and agriculture sectors on which the recipients are reliant. That contribution to the regional and national economies is significant.

All of this is undermined when industry members fail to meet the expectations of their customers and when they squabble amongst each other, especially when that spills out into the public arena. Healthy competition can be managed within an industry that takes a professional approach to its work. It is a totally different situation when we see continued infighting. I am obliged to Sir Wira Gardiner who taught me and other industry members the meaning of the word "internecine", which is defined as "mutually destructive" in *The Concise Oxford Dictionary.*

We have lifted the NBA to a new professional high. Members receive NBA cards when they renew their subscription. We have promoted an Association identity with logos on polo shirts, vests and hats. The Life Members, Executive Council and Publications Committee members now have identification badges. The conference sponsors have been presented with NBA plaques in recognition of their support. Trophies have been designed for competitions.

The first national Bee Week was very successful because it created a huge public and political awareness of the value of honey bees to the economy. It was successful because we worked cooperatively with other related sectors to promote the honey bee. That cooperation continues with the NBA currently supporting the New Zealand Association for Animal Health and Crop Protection (AGCARM) as it widens its Bee Smart, Spray Safe education campaign with advertisements in a series of relevant publications.

NBA members wanted to see their Association and their industry receive media attention. We have done that with good news. All that good work is easily undone when unprofessional behaviour and unreliable products become news in the media.

To be well regarded politically, the industry has to demonstrate that it can work constructively alongside officials who are charged with the implementation of policy and standards designed to protect the country and consumers. The professional approach required needs to be managed with the exercise of good governance from the elected officers of the Association. Those elected industry leaders must know how to project themselves in a professional manner. They must interact professionally with other organisations, officials and politicians.

Professional resources are expensive, but worth the cost when used expeditiously. It makes no sense to waste their time or tie them up so that they spend time that could be used more productively for the whole organisation. There is no time for personal agendas in this business. Good governance means working for the common good.

Now it is our turn to watch and support the industry. We will do that with keen interest and hope to be assured that our contribution over the last four years has been of positive benefit to the industry.

- Jim and Pam Edwards
Retiring Chief Executive Officer and
Executive Secretary

Departing CEO and Executive Secretary Jim and Pam Edwards.
Photo: Gemma Collier.

Why a standard is needed for 'Active Manuka Honey': some personal opinions

Professor Peter Molan

The opinions expressed are:

- there should be two separate standards for manuka honey, one for table honey and one for active honey, with the label stating which of these two types it is
- the term 'active' should be used only to mean non-peroxide activity
- the level of non-peroxide activity should be stated on the label of active manuka honey, as the equivalent percent phenol
- ideally, honey with a non-peroxide activity rating below 10 should not be allowed to be called active manuka honey. If this is not accepted, then such honey should be labelled as 'low-activity manuka honey'.

The reasons given for these opinions are:

- people may purchase manuka honey to treat infections because they have been led to believe that it will work. They may find that it doesn't work if it has no non-peroxide activity or the level of this is too low
- failure of the honey to work will damage the reputation of manuka honey. Word of this will spread
- failure of the honey to work could cause loss of life. This would be sensationally damaging to the reputation of manuka honey.

Because of the vast amount of coverage of it in the news media, manuka honey has become a New Zealand icon. Decades ago, before the research on its antibacterial properties was started, it was pretty much a waste product because consumers did not like its strong taste. But after manuka honey being so much in the news, consumers tried it and developed a liking for the taste. Whatever passes as manuka honey now fetches a high premium in price as a table honey and is widely used as a food ingredient.

It may be that the increased acceptance of a honey with a taste that most people used to find too strong to be enjoyable is because what they are purchasing is a manuka honey blend. The research work carried out by Jon Stephens for his PhD thesis revealed that the reason why some manuka honey had undetectable or low levels of antibacterial activity was that it was a blend with other nectar sources. (See *The New Zealand BeeKeeper*, March 2008, pp. 17–21.) This is the type of manuka honey that consumers can afford to purchase for use as a table honey or in food preparation—the type with the antibacterial activity that only manuka (and maybe other *Leptospermum*) honey has is too expensive. But it does not matter that it is a blend and may contain very little manuka nectar as long as it is being purchased as a table honey—all that matters then is that it tastes right to the consumer and that it comes from New Zealand. (Its content of New Zealand pollens and the absence of pollens from other countries will serve as proof of its country of origin.)

But when consumers purchase manuka honey for its famous antibacterial activity, it is vitally important that they get the genuine article. If it is true manuka honey, i.e., produced predominantly from nectar from *Leptospermum* trees, it will have a good level of the special type of antibacterial activity. There are two very serious risks if they don't get the genuine article, and the honey fails to kill bacteria. One is that the reputation of manuka honey will be damaged. The other is that the consumer's health, possibly their life even, will be put at risk.

Various papers have been published by overseas researchers who have reported finding very mediocre results with manuka honey. This will be the result of the honey they have purchased for their research, unknowingly, not being true manuka honey. I have seen people in other countries triumphantly marketing their honeys as having been proved in published research to be better than manuka honey. Also, on several occasions, I have been contacted by researchers from overseas who have not been able to get the expected results with manuka honey. On getting the details from them of what they have purchased, I have been able to point out that what they have been using has been misrepresented as manuka honey, and have sent them some genuine manuka honey. Because they had fortunately contacted me, this prevented yet more damaging findings being published.

There is also the risk to the reputation of manuka honey that comes from individual consumers finding that manuka honey fails to work. Many companies these days are using "viral" marketing: sales messages that are passed from person to person though cellphone text messages, e-mails and social networking websites. This can work in reverse when a product fails to perform. It is not worth the long-term risk to the future market for manuka honey to let honey sellers get away with making extra money by misleading consumers.

The risk to consumers' health is an even more serious risk. The media have helped very much with making manuka honey famous by publicising spectacular cases of success. It would be publicised even more if there were a spectacular case of failure leading to a consumer's death where manuka

honey was being relied upon to clean up an infected wound. I have had many people contact me seeking help for themselves or relatives, where they have been advised to have a limb amputated because an infected skin ulcer cannot be healed. The reason for the non-healing is because the ulcer is infected with an antibiotic-resistant bacterium. The reason for advising amputation is because there is a high risk of the bacteria getting into the bloodstream, and with it being an antibiotic-resistant strain the resultant untreatable septicaemia will be fatal. In all cases, using the right honey, it has been possible to clear the infection and amputation has not been necessary. People in a similar situation may ignore the advice to have the limb amputated and instead decide to treat their ulcer with manuka honey without getting advice, going on what they have read about manuka honey. If they purchase a misleading product which does not have the necessary antibacterial activity to clear the infection, they could well die as a result.

It is for similar reasons that I have always recommended that the UMF rating not be used for honey with an activity level below 10. I am not aware of there being any clinical evidence of effectiveness of manuka honey with a non-peroxide activity that is not above 10. But I do know of many cases where slow or no progress was being achieved when low-activity manuka honey was being used. In these cases rapid healing ensued when the honey being used was changed to one with the non-peroxide activity rated above 10.

In July 2008 I was asked by the chair of AMHA for my approval of the use of the term 'UMF' on honey with a rating of UMF 5. My signed approval of this was required by a vote of AMHA members at their 2008 AGM. I replied that I would require consumers to be clearly warned that manuka honey with that level of activity is not suitable for use to treat infections, and said that I would give my signed approval only if I was confident that consumers would not be misled into using low-activity honey for treatment of infections. I heard no more about that, but I now see UMF 5 honey on sale. This I think is very unwise.

I am strongly of the view that there should be government regulation to prevent any statement that manuka honey is active unless it has a level of non-peroxide activity that is above 10. Where a product is labelled as manuka honey and there is wording that states or implies that it is "active", then there is a very high probability that consumers will believe that it has the special type of antibacterial activity that manuka honey is famous for. If there is too much resistance to this from people making money out of riding on the fame of the product that is getting the spectacular results in hospitals, then I think that they should at least have the integrity to label their product as 'low-activity manuka honey'.

My opinion is that there is an even greater lack of integrity, and greater risk of resultant harm, when manuka honey is said to be "active" where the activity is due to hydrogen peroxide just like in any other floral type of honey or in honeydew honey. Although the hydrogen peroxide activity may rate quite highly in some honeys, it must be remembered that this rating is done in laboratory testing where the hydrogen peroxide activity will be near its maximum effectiveness. The level of activity on a wound or in the gut would be nowhere near as high, whereas real manuka honey would keep its full effectiveness. I think that there should be a standard requiring that where activity is rated on manuka honey, the type of activity is unambiguously described on the label either as non-peroxide activity or as hydrogen peroxide activity, and for the meaning of the numbers in the rating to be stated. In view of the near-universal use of "% phenol equivalent" this should be the only way used to rate antibacterial activity. (Stating the content of methylgloxal is not stating the level of antibacterial activity.)

I accept that some manuka honey on sale with no detectable non-peroxide activity probably does have some of this special type of antibacterial activity, and therefore could be said to be 'active manuka honey' when it is that type of activity that is being referred to. Scientifically it cannot be said there is none of something present, only that if it is present then it is there at a level that is below the limit of measurement. But a claim that honey like this is active is in the same category as a claim that honey is radioactive. Both claims are true, but both are of no practical consequence and both are unwise with regard to the successful marketing of honey.

To prevent the risk of consumers (or clinicians or researchers) making the mistake of thinking that manuka table honey has the special type of antibacterial activity that manuka honey is famous for, and expecting it to kill bacteria like the genuine monofloral manuka honey does, I believe that it should be labelled as 'manuka table honey'.

When beekeepers buy miticide products they expect them to have the right active ingredient and an effective level of it to do the job the product was purchased for. If it didn't, then the product would lose its reputation and thus its market. Also, the beekeeper would be seeking compensation for the death of the bees that this caused. The situation is no different with the product the beekeeper sells from that with what is bought. Honey marketers may not be directly misrepresenting products if they are not making claims for their performance through advertising. But they need to remember that the advertising has been done for them generically. (This is why manuka honey gets such good prices.) Thus consumers quite reasonably have expectations of performance from manuka honey, just like beekeepers do from miticides.

It may be technically correct to sell manuka honey or so-called manuka honey the way that many are doing at present to make more money now, but this will in the longer term destroy a growing market. Hopefully there will be sensible regulations put in place before that happens.

Honey Industry Trust
Trustees' Report to the NBA AGM 9 June 2009

Personal Introduction

Director of the Chartered Accountancy firm Staples Rodway.

Charitable Trust

Established 1 June 1983 (some 25 years ago). Settled by the NZ Honey Marketing Authority (HMA).

Trustees

Ivan Dickinson and Ian Berry as Industry representatives, and myself as a non-Industry trustee.

I would like to table an apology from Ivan who is unable to attend this year's conference and AGM.

Objectives of the Trust

For the general advancement of the New Zealand honey industry through education, study, investigation and research.

The Trust is formally registered as a Charitable Entity under the Charities Act 2005 (13/3/08). Confirms our tax-free status going forward.

Grants Paid Out in the 2008 Calendar Year

Sustainable Control Varroa	15,000
Telford Bursary	3,200
Waikato University	
- To determine the potential of NZ honeys as an anti-viral medication	8,000
Neil Furness	
- Develop a better understanding of the different ways of dealing with Varroa by meeting up with experts in this field in different parts of the world	4,000
Aust. Honey Imports Matter	43,910
	$ 74,110

Grants Paid Out in the 2009 Calendar Year

NBA – Prevention of Food Safety Risk in Toxic Honey	10,000
Aust. Honey Imports	32,507
NBA – Auckland Branch (Small Hive Beetle Field Observation Group Aust.)	26,500
	$ 69,007

Grants Approved Not Yet Paid Out

Sustainable Control Varroa ($15k 09/10; $15k 10/11)	15,000
Southern Beekeepers (Queen age and management inputs compared to honey production)	4,500
Betta Bees (Honey Bee Varroa Tolerance Selection)	5,000
	$ 24,500

Net Income

31/12/08	$ 80,711
(Prior year $67,024)	

And we paid out $74,110 in grants (prior year $77,200)
Our total funding in regard to the Aust. Honey Imports matter now stands at $158,417.

Total Investment Fund

Total funds	$1,295,368
Previously $1.5m (July 2008)	

- Presented by Dave Sawers

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NZ's No 1 VARROA TREATMENT

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- it's very safe to use (very important - especially for staff)
- it has twice the contact area (4 strips per brood chamber)
- very kind to beeswax, propolis & comb honey
- very gentle on queen bees & nucs
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- strips have a 5 year expiry date from date of manufacture

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100 to 796 strips	$1.85 + GST each
800 to 8800 strips	$1.48 + GST each
9600 plus strips	$1.43 + GST each

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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Taming your techno-fear: part 2

Who's using your Internet connection?

If you have a WIFI (wireless) network at your home, do you know who's using it? Many New Zealanders and even people around the world are finding out that they don't. There are now cases of so-called hackers (although this is a gross misuse of the word) being caught and convicted of misuse of WIFI connections.

Unfortunately the law—and indeed general households—haven't quite caught up with the technology available to stop all but the most determined naughty computer user.

The main problem is with people who think that it is a good idea to throw in a wireless access point or new router with WIFI, install it into their house so they can connect to the Internet from anywhere in the house (without all those annoying wires lying around the house) and completely forget about security. There are many forms of security that you can enable on your wireless connection including WEP, WAP and filtering. Encryption can be your friend when it comes to your connection to the Internet.

Encryption

According to Wikipedia,

> *"In cryptography, encryption is the process of obscuring information to make it unreadable without special knowledge. While encryption has been used to protect communications for centuries, only organizations and individuals with an extraordinary need for secrecy had made use of it. In the mid-1970s, strong encryption emerged from the sole preserve of secretive government agencies into the public domain, and is now employed in protecting widely-used systems, such as Internet e-commerce, mobile telephone networks and bank automatic teller machines."*

The problem with all wireless connections is that any determined bad guy can hijack your connection and use your Internet to download all sorts of data. Not only could this cost you money in excess usage charges, but if the addition to the law (Section 92A of the New Zealand Copyright Law) goes through, it could also get your Internet connection revoked.

Step 1

Choose a decent password on your logon of the web configuration to your access point or router rather than '1234', 'admin' or, God forbid, 'password'. All passwords for login screens to routers/access points have default passwords written on the setup instructions, so, for goodness' sake, change them to protect yourself. Passwords can be made harder by using 'special characters' which include numbers, hashes, ampersands and brackets. If possible, use a phrase.

Step 2

Use a security mode and algorithm to provide a modicum of security to the over-the-air communications. WAP (wireless application protocol) is no longer secure enough to stop school children with a bit of knowledge. WEP (wired equivalent privacy) is far more secure and is now used in everything including mobile phones but they still rely on a passcode for security. WPA and WPA2 (Wi-Fi protected access) were intended to take the place of WEP and now includes PSK (pre-shared key) and TKIP (temporal key integrity protocol). Unfortunately, recent software advances and the use of freely available lists of manufacturer's defaults (based on common words and default algorithms) have made cracking your passcode a lot easier. This still requires some time to break in, but is still better than WAP, which takes less than five minutes to break.

Step 3

MAC (media access control) address filtering is available on nearly all wireless routers and stops all but those you enter into a list from connecting to your wireless device. Although this too can be bypassed by the determined bad guy, it requires a lot more work and most people cruising around looking for free wireless access will just bypass your connection.

Your MAC address can be found on a sticker on the bottom of your laptop, on your network card or by typing in the command to view your network address in your operating system for windows iconic /all for Linux iconic.

Step 4

Change or obscure your SSID (service set identifier), the name your wireless device broadcasts to the world, which allows your computers to find and connect to the wireless device. These are easy to change from the default (usually the name of the manufacturer) to any word or combination, but please don't use your address or house number. If you have houses on both sides of you, it just makes you easier to find and target.

Step 5

If you are not going to use your wireless connection outside your house or office, limit the transmit power of your wireless device so it does not leak through the walls and out onto the road or into the neighbour's house.

Step 6

If you live in a property close to the road, be wary of anyone sitting in a parked car for hours outside your house, although this could just be the police wondering why your honey house is so warm.

With all this said, you shouldn't be afraid to have a wireless access point or router in your home or office. The benefits of being able to move around the house or office and still have access to the Internet, or access to other computers or files on your personal network, far outweigh the disadvantages. You also have the ability to create secure wireless links between buildings for those who work in outbuildings or a shed, the only factors are: line of sight, transmitter power and aerial configuration. Unlike the $99 wireless access points you buy from your local computer store, (which have a range of 20–100 metres), with a bit of tweaking and changing out those little black aerials (known as rubber duckies) to something a little more useful (external directional aerials mounted up high), a theoretical range of 25 kilometres can be obtained.

With modern devices such as security camera systems and monitoring and control devices that can be connected to your network, with a little thought to the security requirements, the benefits of not having to run cables all over your property and drilling holes through walls may be worth the effort.

- Andrew Lindsay
Computer geek and all around IT support person

If you are going to be successful as a coach or as a manager or in business or whatever, you should get around and get a feel for your personnel.

(*Dominion Post*, Friday Night Sports section, 21 August 2009)

AFB Recognition and Competency (DECA) Course

The Franklin Beekeepers Club will be hosting an AFB Recognition Course

Date: Saturday, 3 October 2009

Time: 9:30 am sharp (allow 6 hours duration)

Venue: Ramarama Hall
(100 metres off Ramarama motorway exit)

Cost: $50
Includes exam fee, coffee, tea, biscuits, and lunch.

Limited to 60 people. First in, first accepted.

Bookings close on 20 September 2009.

All exam related information can be found in the book: *"Elimination of American Foulbrood without the use of drugs"* By Dr Mark Goodwin

For Bookings, Contact:
tunzy@clear.net.nz
Craig - 027 309 4023
Matt - 027 669 0804

From the colonies

Waikato Branch

Well, this week sees the start: it's all go from now on. Drones are running about in the hives with more on the way.

Thank you to Cameron Martin who visited and gave the Taranaki Bee Club a great talk on the Small Hive Beetle. It was particularly well timed with the article appearing on the NBA website regarding the swarm in the container bound for Port Taranaki.

Many beekeepers were concerned to see the recent item on 'Close Up' regarding manuka honey. It will be interesting to see what follows. Some of the facts and figures have certainly made many farmers show more interest in what the beekeepers are up to.

- Stephen Black

Bay of Plenty Branch

Suddenly the air seems a bit warmer and the sun has a bit of strength when it makes an appearance. There is still a bit of a chill in the wind but in sheltered places in the sun, it's beautiful. The wattles have started as has the gorse and the willows are greening nicely as I write. Bee numbers and health seem to be good for this time of year but no close inspections have been done yet. I see in the gardens flowers are also moving, perhaps a few days early. Busy times ahead, so we are making the most of the quiet time with a spot of fishing etc. amongst the chores.

Hopefully the long-range weather forecast for a wet October followed by a drought is wrong. Whatever the weather, we will just have to adapt: it's all part of the challenge. Happy beekeeping.

- Barbara Pimm, Branch Secretary

Hawke's Bay Branch

Stonefruit is flowering a little bit earlier than average this year. We have had pretty good weather for this time of year but surprisingly—considering how wet it was last month—we really could use some rain. The reports I have had so far indicate that most hives have come through the winter very well.

Our Branch has recently acquired a new data projector, which we used for the first time to run an AFB Recognition and Competency course and it's worked very well. The new generation of projectors certainly have more powerful bulbs and produce a very good picture, even in bright daylight. Frank Lindsay's photos at the end of the disk are exceptional and clearly illustrate both diseased and healthy brood.

I recently had an email from somebody trying to track down a person but all they knew was that this person was a beekeeper in Hawke's Bay and had been badly stung up at some stage. Unfortunately this applies to just about every beekeeper I know, including myself. One particularly memorable night when shifting hives everything turned to custard and I received well over 150 stings trying to put hives back together in the dark: I definitely felt a bit crook the next day.

Anyway, to show what a small world it is, it took me one phone call to track down the beekeeper concerned and help someone solve a problem which had been deeply concerning them for some time.

I just looked at the weather forecast and I doubt being dry will be much of a problem after tomorrow.

- John Berry, Branch President

Southern North Island Branch

The branch held its post-conference meeting in Palmerston North on 20 July. We discussed the outcome of the notices of motions and that Pam and Jim had resigned. Being part of our branch has meant we have had good feedback from them both and they will be missed; however, Jim still has his bees so we'll still see him from time to time.

Honey standards were discussed but with all the division within the industry it's hard to see a quick outcome.

The branch will be holding a spring field day on 17 October in Feilding: more next month.

Opening of a new honey house

31 July saw the opening of a brand new honey factory on the outskirts of Carterton. Wairarapa Manuka Limited partners Peter, Lottie, Moe and Manuka Health adapted a 400-square-metre Affordable Shed into a very comfortable office, storage, hot-room and factory. It is fitted out with a BeeQuip uncapper, deboxer and pumps supplied by Ceracell, a Boutelje auger, racking, heat exchange, semi-automatic honey loosener, spin-float and stirrer with a 54-frame JB horizontal radial extractor. The concrete floor was specially treated to make it food-safe and easy to clean.

Paul Hutchison, MP for Hunua, opened the facility with family, friends, business associates and farmers in attendance. Everyone enjoyed a hangi of wild pork, Clendon Station lamb, chicken and vegetables. We all look forward to seeing the plant in action.

The factory.

The plant.

Peter Ferris, Lottie Rayner, Paul Hutchison MP and Moe Diederich.

Photos: Frank Lindsay.

- Frank Lindsay, Branch Secretary

Canterbury Branch

We seem to have finally come out of a very long cold wet winter. Air temperatures have warmed considerably in the last few days and underfoot conditions are conducive to visiting beehives.

As much as it has warmed up, one must keep in mind that winter in this part of the country can make its presence severely felt until after the first week in September.

Beekeepers that I have talked to and hives that I have seen myself indicate that the colonies have come through the winter in better condition than most expected, albeit a little lighter than one is happy with. Beekeepers are never content, are they?

Varroa is an ever-present topic whenever beekeepers talk and some Canterbury beekeepers are entering their second season, while others are still waiting. It will be good once the playing field is level and the infestation and re-invasion period is over. Be vigilant, talk to your neighbours and learn from them. Remember there is a wealth of information available in the North Island. Flick through your contacts you have made at the conferences over the years and make the call. Most guys are willing to talk about their experiences: even though they are north of Cook Strait, they are not such a bad bunch.

- Brian Lancaster

Telford Rural Polytechnic

Hi, my name is Liam Wright. I am 17 years old and come from Upper Moutere near Nelson. I am a student at Telford Rural Polytechnic studying apiculture full-time and I have been asked to write about my Telford year so far.

I was not sure what to expect when I turned up for class on the first day: having no previous beekeeping experience, I was a little nervous. I soon got used to being around bees and have really enjoyed it. The queen bee rearing course was very interesting. I never thought I would be able to artificially inseminate a queen bee. After queen bee rearing, we started taking the honey off the hives and extracting it. After honey extraction we began preparing the hives for winter and feeding them, and now we are starting to build them up for the honey flow.

I have learnt so much already this year and I am still continuing to find out new things and enjoying it as well. I am really looking forward to starting my own beekeeping operations in the future sometime, but until then I am going to get as much knowledge and experience as I can.

From the archives

Recently Pauline Bassett delivered to the NBA Library some Minute Books relating to the earlier years of the NBA.

The earliest minutes appear to be from the 14th AGM in June 1927 held in Christchurch. Mr H Davies was the President and the meeting comprised various officials and about 50 members.

The records are handwritten minutes, presumably by the Secretary, Mr A Ecroyd, and there is evidence of the use of an old dip ink pen as there are dark and light words.

Mr Earp (Chief Apiary Instructor) spoke to the AGM about finishing touches to the Apiaries Bill being presented to Parliament. The President's report expressed disappointment that the government subsidy to the NBA of £100 was inadequate although the government had expressed the view that it should be discontinued. Note was also made that the Australian government contributed £500 to the Australian beekeepers to organise their market.

It would appear that disease (AFB) was a problem in those days and there was a view that the Department Officers were faced with controlling an area that was too large for them to do effective work.

Mr Rentoul (Chairman of the Honey Control Board) was in England investigating the markets for New Zealand honey.

Mention was made of an attempt to "*eliminate or reduce the trouble due to price-cutting on the local market*" there appears to have been an attempt to set the selling price of honey (prime light amber) in the tank at 6d per lb (i.e., 10 cents per kg). The suggestions would be sent to beekeepers via the Branch Secretaries. A remit for the association to conduct a honey advertising campaign in "*cinemas*" was not supported because it was felt that "*those who would reap the benefit of the increased sales would be unwilling to share in the cost of its application*".

There was further reference to a vote on a proposal to "*impose by statute a levy on beekeepers, the funds so collected to be used partly for inspection work and partly for organisation work of the Association*". The motion was put but an amendment by Mr Bates "*that the matter be shelved till next conference and that executive go into the matter during the coming year and if possible, draw up a scheme*" postponed a vote on the levy.

An interesting remit "*that the association is appalled at the Dept of Agriculture in failing to provide apiary instructors with cars instead allowing instructors to use pedal bicycles over large tracts of land*" was supported by the membership. (Perhaps there should have been a call for an "increase" in the 'mileage allowance' for bicycles!)

As usual at any conference there was a call for more research work to be done and a remit was passed "*that the Department be urged to bring the State Apiary at Ruakura right up to date and to establish an apiary in Canterbury for the purpose of training cadets and carrying on experimental work.*"

There were some speakers, including Mr T S Winter, who talked on grading honey and gave a demonstration of the Pfund instrument for determining colour and class of honey. Mr E Church explained the properties of the "*electrical uncapping knife*" and Mr D Robinson gave a translation of a French article in *Le Soleil* on the health-giving properties of honey.

Food Safety appeared to be an issue in 1926 with the use of shellac on galvanised iron tanks and extractors not being acceptable to the Health Department. Mr Earp said that the best solution was to have tanks "*Ducoed*" using the same process used in connection with painting car bodies. When asked if the Health Department would be agreeable to this procedure, Mr Earp replied, "*certainly; we will be very pleased if you do use it*".

The honey competition appeared to be a clean scoop for the South Island with Canterbury honey being awarded the major prizes.

In all there were 28 pages of handwritten minutes and a balance sheet showing a balance of £159.2s 8d.

I was left thinking how times have changed—or have they?

- Linda Bray, NBA Librarian

National Beekeepers' Association Conference – 2010

Rutherford Hotel, Nelson
27–30 June 2010

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

SPECIAL INVITATION:
To All Beekeepers, NZ and International
Everyone Welcome!

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The Secretary
NBA Conference 2010
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Takaka, Nelson 7182
Ph 03 5257571
Email: frazer.kerry@clear.net.nz

ADVERTORIAL

Better beehives: Hasson's Hives Australia P/L

Seamus Hasson has devoted a major part of his life to honey production and improving hive conditions for bees. Now he believes he has designed and produced the industry's best beehive.

Seamus couldn't resist taking up the challenge rather than accepting the way Dad did it.

A feasibility study confirmed that there was enormous potential and a need for a better beehive for beekeepers and pollination contractors. Seamus went to work in his shed at home in South Gippsland, combining his knowledge of beekeeping and his engineering skills.

The industry uses predominantly wooden boxes which need assembly and regular painting to prevent weathering and rotting; this can cause paint contamination. They're also heavy without providing good insulation and the bees can chill in winter and suffer heat stress in summer. High humidity causes rotting and pests chewing the wood are also a problem.

As people are becoming more conscious about food standards, Seamus knew there had to be a better way.

He tried a number of materials. One option was polystyrene, which is already used overseas, but the hives had to be painted, lined or wrapped to stop the bees from chewing the material—not the environmentally sound and low-maintenance product he wanted.

A composite box that performed well was labour-intensive and slow to produce, which would have priced it out of the market. Its flat-pack concept and variable depth size may still be of great benefit.

Toughing it out

Seamus was determined to give the industry a hive that was lightweight yet tough and hard, with good thermal properties that would limit extremes of temperature for the bees and brood inside. After six years of research and development he designed a polypropylene box with a tough plastic skin and with a foam core for effective insulation.

Because of the high cost of producing the injection mould die (it weighs around 4.5 tonnes), this limited him to one initially. He had to choose between manufacturing an eight-frame or 10-frame hive.

He says: 'We opted for the standard 10-frame because most people in the industry prefer them, and so do the bees because of the bigger brood area. It's also easier to find the queen in a 10-frame hive.'

The 'Aussie Hives™' have everything the beekeeper or pollination contractor wants: a robust, water-resistant box that won't rot and will outlast any other hive currently on the market. It is lightweight (4.5 kilograms) and has excellent thermal insulation that aids in the hive temperature control, supports brood development and reduces stress on the bees.

The hives are low-maintenance without paints or chemicals; they are moulded in one piece from 100 per cent food-grade and UV-rated material with no joins or corners to harbour bacteria. They are designed with moulded handles, or the commercial customer can choose to screw on their own handles.

Happier bees, higher honey yield

'Our field trials have shown that bees in Aussie Hives™ produce more honey than those in wooden boxes. That's because all the properties of our hives promote healthier, stronger, stress-free bees with better hygiene and less disease.'

In Queensland, Aussie Hives™ fitted with hive beetle traps have shown to be more effective at preventing slime outs.

Aussie Hives™ by Hasson's Hives Australia P/L have a patent pending and are in production with ongoing developments and improvements. As yet there is no food-grade standard for beehives in the *Australia New Zealand Food Standards Code*, and the Hassons believe they have a quality product that will set that standard. They plan to submit Aussie Hives™ to Food Standards Australia New Zealand for food-grade certification.

Already the accolades for Aussie Hives™ are coming in. Among them, beekeepers say '...they meet all my requirements...'; 'with good thermal properties, robust design...and low maintenance...[they] will be very well positioned in the market nationally'; 'We welcome this and see the potential to improve our quality, occupational health and safety, risk management and applied systems'.

Aussie Hives™ will be ready for delivery within Australia in time for spring 2009. One customer has already taken delivery of 700 new Aussie Hives™ with another order for 1000 for next season, and Seamus Hasson is confident that it's 'next stop: the rest of the world'.

Food Safety and RMP Awareness in the Honey Industry course report (Food Safety Programmes/Risk Management Programme)

All RMP holders and beekeepers in the South Island were sent a letter in mid-July 2009 advising them of this course being run by AsureQuality Limited staff from Christchurch, and to reply ASAP with dates that suited for this two-day course.

I attended the first of these courses held at the AsureQuality offices in Christchurch on 6–7 August 2009. Of the 14 attendees most worked in premises that had an RMP, some had more than one, some were working towards getting an RMP and the others were there to gain an understanding of what was required of beekeepers supplying raw bee products to RMP premises.

As with all other food industry places in New Zealand, these types of courses are mandatory. You must obtain a food hygiene certificate before you are allowed to go near any food production line.

This course will be very good for bringing the food side of beekeeping in line with all other food industries. For most of us our table honeys are what we produce and sell, so it is very important to have the knowledge that the food and food safety industries require of us.

Being the first of this type of course, a great deal of time was spent on knowing where to look in the Code of Practice: Processing of Bee Products. Having knowledge of the COP and being familiar with where to look within the COP is a must for all RMP holders, who will gain a lot from this course.

- Trevor Corbett,
Central South Island Ward representative

Australian SHB study trip report Part 2: Effects of Small Hive Beetle (SHB) on the honey shed environment

This article will explain the effects that SHB has had on Australian beekeepers' honey shed environment and the management changes that they have had to make as a result.

We visited a number of honey sheds on our tour. The consensus was that during extraction, beekeepers have to extract honey boxes within four days (one to two days being ideal) of taking them off the hives. Otherwise, the adult SHB that beekeepers will invariably bring back in the honey boxes will take advantage of the honey boxes being without bees, and will go on an egg-laying frenzy (one adult will lay between 1000–2000 eggs in its lifetime). The SHB eggs take only two to four days to move to the larval stage, which will then feed on any pollen in the honey frames and will tunnel through the comb. Their defecation in the honey promotes fermentation in the honey. This, of course, will make any honey boxes affected unable to be extracted. If you have a box at the top of a stack that is initially affected, all the boxes below that one will also be affected.

To combat this (if you're not planning to extract the honey boxes within one to four days), most of the beekeepers we visited have installed chillers. The largest we saw held 4000 boxes. The reason for using chillers is that, at temperatures between one and nine degrees Celsius, the SHB will remain dormant and will not lay any eggs. The beekeepers then move the required amount of honey boxes for a day's extracting into a hot room as and when required. If, after being extracted, the honey boxes are not needed back on the hive, they are also stored back in the chiller to protect them.

All the beekeepers we talked to used excluders above the brood chambers when on a honey flow. One reason was to stop any brood and therefore minimise pollen being taken back in the honey supers. They also kept the number of supers on a hive to a minimum at any one time, so as not to leave empty combs that the bee numbers within the hive could not cover and help to protect.

General hygiene in and around the honey shed

Once again there was a consensus that once SHB had arrived, beekeepers could not leave boxes with empty frames containing pollen stacked outside around their sheds. Also, it is not possible to leave slum gum or exposed drums containing cappings around or near the sheds, as these provide ideal breeding areas for the SHB. Most beekeepers melted their cappings straight away to combat this problem.

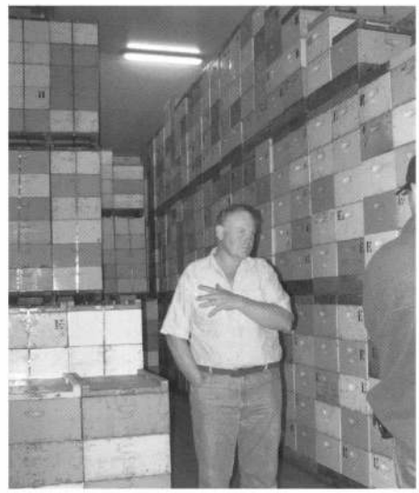
Conclusion

If SHB were to arrive and establish itself in New Zealand, beekeepers with extraction sheds who don't already extract their honey boxes within four days would have to invest in some form of cold room/chiller.

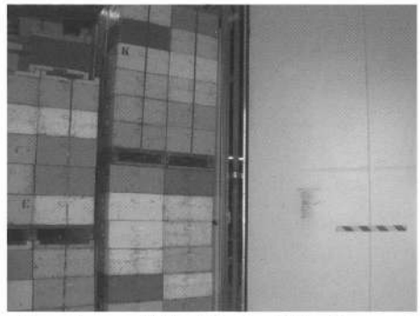
General hygiene around honey sheds to minimise SHB breeding areas would also have to be an ongoing priority.

A big thank you goes to the Australian beekeepers, scientists and apicultural officers who freely gave their time and valuable information to our group that will benefit the New Zealand beekeeping industry. Also, many thanks to the organisers of the trip and the Honey Industry Trust for sponsoring the eight NBA Ward members.

- Cameron Martin, President, Waikato Branch
Waikato Ward study group representative



Australian beekeeper Neil Bingley inside the chiller. Photo: Jody Mitchell.



From left to right: Honey boxes are stored in a large chiller. Photo: Brian Lancaster. *Part of chiller and door:* Photo: Sarah Peacey. *Gas and heavy tarpaulins sealed with a water ring prevent SHB infestation.* Photo: Barbara Pimm.

A comparison between medical grade honey and table honeys in relation to antimicrobial efficacy

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Abstract: When antimicrobial agents are being evaluated prior to their introduction into clinical practice, advance publicity may interest potential users but access to that agent will normally be limited until licensed products are released and distributed. Honey is an ancient therapy that has recently been re-introduced into modern medicine. Medical grade honey (MGH) is being incorporated into sterile devices that are applied topically to wounds. Honey is universally recognized and it is readily accessible. Patients and practitioners may, therefore, consider using table honey from supermarkets as a cheap, readily available alternative to more expensive, regulated, honey-based wound care products. This study was designed to compare the antibacterial potency and microbial flora of 18 table honeys to a representative sample of Leptospermum *honey (an MGH). Standardized tests of microbial content and in-vitro efficacy were conducted for each sample. Table honeys generally possessed lower antibacterial activity than the MGH and contained a wide range of microbial species, whereas MGH was sterile. The disadvantages of using non-sterile table honeys in medical practice were reviewed. Results suggest the need for randomized clinical trials verifying the efficacy and/or safety of any form of honey used in topical wound care.*

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Commentary

This is a very interesting paper but unfortunately the original publisher has refused us permission to reprint it for free. However, it is available on the Internet for those interested in searching for it.

Despite this setback, we can discuss some of the research findings that affect New Zealand beekeeping, and perhaps could damage our reputation for producing a pure, clean, green product.

Five New Zealand honeys were amongst the 18 purchased honeys off the supermarket shelves in the UK: two clover honeys, two manuka 10+ honeys and a medical grade 18+ manuka honey.

The manuka 10+ honeys were not packed in New Zealand and both measured less than 10 (5.5 and 6.1). Remarkably, one contained *Paenibacillus alvei*, which is not present in New Zealand (we don't have EFB) but was present in both the French and Australian honeys. This proves that at least one (I believe both) of these manuka honeys were blended before being packed overseas: something the Active Manuka Honey Association has been fighting.

Most of the honeys tested except the medical grade honey from Comvita contained bacterial spores.

One of the New Zealand clover honeys was most interesting in that it contained numerous bacterial contaminants. All the honeys except for the medical grade honey contained low levels of spores.

New Zealand honeys contained the following bacteria:

Sample No. 2: Clover—*Bacillus subtilis, Bacillus pumilus, Clostridium clostridiforme.*
Sample No. 6: Clover—*Bacillus cereus, Clostridium ramosum*, Anaerobe.
Sample No. 7: Active 10+ Manuka—*Bacillus cereus,* Anaerobe.
Sample No. 15: Active 10+ Manuka—*Paenibacillus alvei* (EFB), *Oerskovia sp., Bacteroides capillosus.*

Bacillus species

- Commonly found in honey, as they are common in the environment and survive well in honey as a resistant spore.
- **Bacillus larvae**: the cause of American foulbrood in honey bees.
- **Bacillus brevis** is a bacillus commonly found in soil, air, water, and decaying matter. It is rarely associated with infectious diseases.
- **Bacillus cereus:** a species causing food poisoning, occasional cases of septicaemia and bovine mastitis and abortion. Common in the environment. Found in food (particularly associated with cereals and vegetables), it is a common cause of food-related vomiting and diarrhoea in humans.
- **Bacillus licheniformis** is commonly found in the soil. It is found on bird feathers, especially chest and back plumage, and most often in ground dwelling birds (like sparrows) and aquatic species (like ducks). It is rarely associated with human infection. Has been reported as a cause of abortion in cattle, sheep and pigs, and also isolated from suppurative lesions of horses and cattle.
- **Bacillus coagulans** is a lactic acid-forming bacterial species within the genus Bacillus. It is sometimes used as a probiotic (helpful bacteria) in humans and animals. Found in soil and food; rarely associated with human infection.
- **Bacillus pumilus** is used for alkaline protease production, in environmental decontamination of dioxins, and in the

baking industry. *Bacillus pumilus* is used as a pesticide active ingredient. Common in the environment. Found in soil; rarely associated with human infection.

- **Bacillus capillosus** *(Bacteroides capillosus)*: found in mud, mice and pigs; isolated from the human mouth, faeces and wound specimens. Rarely associated with human infection.

How do these bacterial spores get into the honey? Bees bring some of them back on their bodies, putting a super directly on the ground, not keeping stored honey supers in a clean environment, not removing the odd squashed bee off the honey frames before they go into the uncapper: all of these sources contribute. Squashed bees were determined to be the main method that botulism got into honey and why years ago a recommendation came out that honey should not be given to infants under 12 months. (Subsequent investigations proved that the mother had given adult vitamin C tablets to her baby and these caused the botulism to grow in the baby's stomach, which killed the infant.)

It's now starting to make sense of why we have to go through rigorous cleaning procedures as part of our Risk Management Practice (RMP). Forty years ago when I first started beekeeping, we considered honey 'nature's food'. Nothing lived in it, but today with modern science, we find that things with hard outer shells do survive in honey: AFB is one example we all know about.

So before we get into another hectic summer season, look at your plant, your practices and ask yourself, am I producing the cleanest and purest honey possible?

We beekeepers are proud of the honey we produce but we may be overlooking some aspects where contaminants could be introduced. It's best that we check our own plants and operations before we cast aspersions that our honey is being contaminated by overseas blends to bulk them up.

This article is also a reminder that we should be packing all our honey before it's sent overseas. If we control the whole process, it's easy to identify the origin of any contaminants should they be found in our honey.

Thanks to Karen Nichol from AsureQuality Limited for assistance in producing this article.

- Frank Lindsay, NBA Life Member

VIP PACKAGING

In the Conference 2009 Booklet and the July Journal the BOP Branch mistakenly named VISY as a sponsor. It should have been **VIP PACKAGING.** Our profuse apologies to VIP. We would like to thank VIP for their support and encourage beekeepers to support them in business.

Contact details for VIP:
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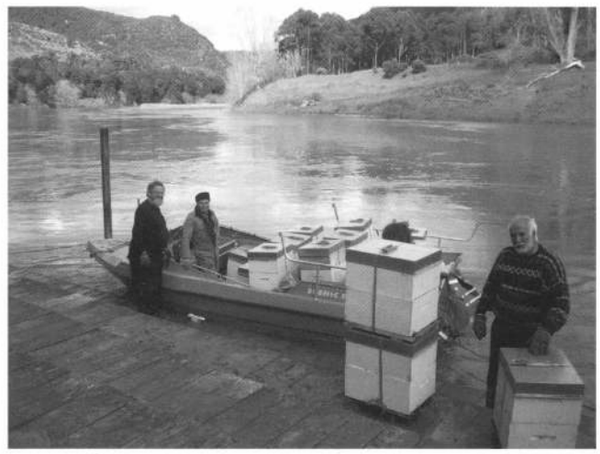
Email karen.hunt@vippackaging.com.au

Beehives on the Whanganui River

Russell Parry of Parihau, Wanganui, recently purchased 67 hives from me. As the five-kilometre dirt access track to my farm was too wet to get anything heavy out, we were required to ferry them across the Whanganui River by jet boat, care of Mark Wickham of Whanganui Scenic Experience Jet.

Mark gave me an affordable price for the mission and provided a lot of elbow grease as well. Everyone put in a big effort, but a special thank you goes to my neighbour Ken Clarke across the river in Kawhaki. Ken slaved with us from dawn to dusk getting the hives out over the farm he runs, using his vehicles as well, and refused to accept a bean for anything. My friend Grant Rippon also helped, despite limping around as he is awaiting surgery for a broken hip joint.

Fortunately the weather was perfect with the rain holding off, and as it was a cloudy, cool day the bees didn't overheat.



The wharf pictured is next to Hipango Park, a Council-run reserve with access by boat only for the public. The hives were finally unloaded at Russell's place around 10 pm. Although the bees were a little annoyed at the rough ride, only a few escaped during the shift. The hives settled down quickly and we received only a few stings during the day.

It all went surprisingly well: thank you again to everyone involved.

- Garth Tomas

Grant Rippon, jet boat operator Mark Wickham and Ken Clarke prepare hives for their trip across the Whanganui River. Photos: Garth Tomas.

Bee clubs' trip to Plant & Food Research

A great turnout for the visit to Plant & Food Research Ruakura. Photo: Michelle Taylor.

Members from Auckland Beekeepers Club, along with members from Franklin Beekeepers Club, met with Waikato Domestic Beekeepers Association at Plant & Food Research Limited, Ruakura, on 25 July. About 90 people attended the day, which started early with a departure by bus and minivan from Auckland at 8 am. An arranged programme was to start at 9.30 am; this was delayed but once under way included talks by Dr Mark Goodwin, opening with what happens at the research unit, and then later in the day about toxic honey.

Other speakers included Michelle Taylor on the breeding programme for resistance to varroa at the unit and on Mercury Island. Byron Taylor gave an overview of AsureQuality Limited, the AFB NPMS and demonstrated the possibility of online registration of apiaries with AsureQuality, and the revisions that people can make by logging online. Professor Peter Molan from the University of Waikato covered UMF product labelling, a survey of non-manuka New Zealand honeys for antibacterial and antifungal activities, an insight into healing with UMF honey, plus a look at antioxidants and anti-inflammatory activities of honey.

We had small tour groups supervised by Heather McBrydie visit the lab during a well-catered lunch break and Omar Martinez showed an example of sugar shake. Heather also followed up in the afternoon with a talk on the pests, diseases and other influences that affect our bees. The day went too quickly and part of the programme had to be dropped so we could leave near the arranged time for arrival back in Auckland about 6.30 pm. A long but absolutely interesting day.

I would like to thank the Plant & Food Research team, which also included Lisa Evans. Thanks also to Byron Taylor and Professor Peter Molan. It was interesting also to meet with other part-time beekeepers.

- Kim Kneijber
President, Auckland Beekeepers Club Inc.

Trees and Shrubs of New Zealand

Quintinia acutifolia
***Common name*: Westland Quintinia**

Quintinia serrata
***Common/Maori name*: Tawheowheo**

Quintinia acutifolia *Quintinia serrata*

The Tawheowheo is the North Island species, found from Mangonui to Taranaki, whereas the Westland Quintinia is found on Great and Little Barrier islands and the Coromandel Peninsula and from Waimarino to Taranaki. In the South Island it is found from Nelson to the Fox Glacier.

The Westland Quintinia has yellow-green foliage, which turns bronze when the tree is exposed to sunlight. The Tawheowheo has numerous leaves that are more coarsely serrated, often with reddish blotches on the surface.

Both trees are bushy and grow to 10–12 metres high. Young branches often have whitish scale on them, with either male or female flowers on separate trees.

Flowers are pale lilac in colour and are visited by bees between October to November. The nectar is often collected at the same time as Kamahi, which probably accentuates the flavour of the Kamahi.

- Tony Lorimer, NBA Life Member

About the Apiary

The warm spell in August saw the bees out visiting early sources and bringing back large quantities of pollen from gorse, and both pollen and nectar from tree lucerne, Spanish heath and pussy willow. Kowhai is also in bloom but in some areas this tree produces narcotic nectar that tends to stupefy bees for a couple of hours, causing high losses of foragers due to chilling once the heat goes out of the day. City hives have numerous sources available to them—everything seems to be starting to flower from spring bulbs to ornamental shrubs.

I have done a quick round to check on my hives: most look to be in a good condition. Quite a few apiaries have the odd dead hive in it. Some died from varroa, the odd one went queenless or the queen became a drone layer and a couple of weak hives couldn't get to the honey frames so died of starvation in the cold. An experimental apiary that I left very late to treat had five dead hives in it (a bit of a shock). Normally these hives would have recovered during a mild winter, but not this winter.

I peeked into a few hives the other day (it got to 19°C) and saw fresh nectar on the outside frames. Some hives are booming ahead and so are the four-frame nucs I made in the autumn and put into a super. Some now have enough bees to cover a three-quarter-depth super. On the other hand, others seem to be in the same condition when they were made up (despite the odd additional frame of honey to keep them going), so will need special attention with pollen supplement and syrup feeding to get them going.

In one hive I quickly checked because it had hardly any flight activity, the queen had only just started laying and had brood in an area the size of my palm, yet had bees covering three frames—a late starter? One apiary was well behind the others. It's been a good producer for the last 20 years but now has become overgrown by trees and is in a basin. Not a lot of sunlight gets on to the hives in the spring, so the ground was still covered in dew well into the afternoon and I had to use chains on the tyres to get out. Time to move this apiary to a better location as I'm not permitted to cut any of the trees.
It's in these spring boom-bust condition that beekeepers have to watch hives carefully. Early queen laying can cause the rapid consumption of stores and the bees can quickly run out of stores, especially if we have a week of inclement weather. Without artificial feeding or some raw sugar in the top feeder, a colony can be lost or severely restricted if the bees have to cannibalise brood in order to survive. *Always leave hives with plenty of feed.* You may not get back to them again as planned, especially if the weather turns bad.

At the next visit, I'll start the real bee work. Once the temperature reaches 15 degrees I can safely leave hives open for an extended period and check them for disease. I also mark the queens if I see them and equalise hives; i.e., take the odd frame of emerging bees from the very strong hives and give them to those hives that are a little behind. Those that are really small will get a spray of air freshener (to mask the colony odour and prevent fighting), and a couple of shakes of bees from a couple of brood frames to boost their numbers so I can add a frame of brood on my next visit. Another method is to just swap the position of the hive, weak for strong and this will boost bee numbers and nutrition in the weak hive. Any hives that don't respond will be marked for queen replacement.

Drone brood removal and spring varroa treatments

When all is going well within a hive; that is, there's plenty of nectar and pollen coming in, the bees will start to produce drones. Some beekeepers now use marked frames that contain drone comb and place these within the brood area. Once the cells are capped the frames are removed, trapping the majority of the varroa mites in the cells. It's a toss-up for me: should I leave the drones or not? I need lots of early drones to mate with my October queens, yet by removing the first production of drones I'm also removing a large number of varroa mites. The second generation of drones will be far healthier as fewer will have been parasitised by varroa and will be good for the queens, but will they be mature in time? (It takes another two to three weeks after emerging for the drones to be fully mature.)

For some beekeepers, September is when the first lot of treatments go into the hives. Those using strips should count back eight weeks from your first honey flow and put the strips in on that date in order to get in a full treatment before the

flow starts. Those with December honey flows have plenty of time to decide on timing and treatment options.

Assembling supers

In the meantime, when it's fine I'm out with the bees and when it's raining I'm inside making up replacement gear to get ready for the honey flow. Hive parts are generally made from untreated pine and will hardly last five years in my area (wet and windy Wellington) without some sort of preserving.

Most commercial beekeepers either have or share paraffin wax dipping equipment, but hobbyists are restricted to preserving their woodware using some sort of treatment that's non-toxic to bees (Metalex, for example). Just painting the stuff on doesn't work that well. Dipping it in a bath for 4–8 hours allows the preservative to really sink into the wood. If you leave the hive parts in a plastic bag for another three to four weeks, the mineral turps can't evaporate quickly so the preservative will go even further into the timber. After that, you should stack the woodware with fillets to stop it bowing and allow it to dry before assembling and painting. It sounds so easy but it's a lot of work: for more details see last month's column.

So now it's time to put the supers together. Supers can be nailed up once they have aired for a bit but don't have to be completely dry. I prefer to use 75 mm flat head decking nails as these nails have a screw-like end that holds into the timber, unlike regular nails that are fairly easy to pull out. These nails hold well when the super takes a tumble. Use five nails in each corner: three on the end and two skewed at a 5 degree angle so they hold into a bit of the side timber. (NB: don't go all the way through to the super's end surface.)

To put a super together, take the two ends and place the frame rebates in the same direction. Place one end flat on the floor, handle-side down, against a square wall or bench end. Then take two sides and look at the end grain. Place them on to the end so that the centre of the tree ring points to the inside of the super. Then put the other end on top to form the super. Check again that the rebates match (otherwise you won't be able to place the frames in the super) and that the top and bottom edges line up. If one piece of timber is smaller than the rest, align the tops and skim a little off the others with a planer. If it's only a smidgen, align to the centre; the bees will full the tiny gaps with propolis. Then holding the super square, nail the end closest to you. Three nails are required, the first one being a little way in from the rebate so the nail won't split the timber. Then put a nail into the middle and another close to the bottom edge. Spin the super around on the floor and then nail the other end. Holding the sides in place (pressing the sides in so the ends are held in place), spin the super end on end, check the alignment and then nail that end. All that is now required is to put another two nails through the sides into the ends to completely lock it tight.

To work out the angle to drive the nail in so it won't protrude out of the super end surface, place it on a corner along the bottom edge, the top of the nail head resting on the bottom of the super's side and the point end running along the super's end. Then move the nail head back along the side slightly (10–15 mm) so that the nail is on a slight angle and that the point of the nail will end up in the middle of the wood (super end). Once you have got the correct angle, drive in two nails into each side so they are equidistant between the nails on the other side of the joint.

As you can tell from my explanation, nailing takes time and effort for the hobbyist. Commercial beekeepers use staple guns to put supers together as it's quick and efficient. They make up a square jig into which they slot the ends and side to hold the super square, then fire away. It only takes a couple of minutes to assemble a super.

Once the super is assembled and dry, it can be painted. Use a good quality undercoat and topcoat. I use mis-tints from the paint shop or part-pots of paint that are given to me. I tend to put these together and make up a pastel colour. White supers reflect heat and are used in the hotter parts of New Zealand, but I prefer a little colour. First, it helps the bees orientate to the correct hive if the bottom supers on each hive are a different colour (this helps to prevent drifting). Second, during spring, pastel colours warm up quicker than white in the morning sun and this heat is transferred into the hive. Third, they look good.

I don't paint the inside of the supers but I noticed a lot of Australians do as this discourages the bees building brace comb. Next month we'll be assembling frames.

Things to do this month

AFB check: if you find any AFB, separate off the stored supers that came from that particular hive and destroy them, and report it. If you can't identify the individual supers but know which supers came from that apiary, put an apiary quarantine on that particular apiary for 18 months, using those supers only in that apiary.

Feed hives if necessary: hives should have a minimum of three frames of honey in them at all times.

Spray or weed whack the weeds and vegetation surrounding hives.

Check stored supers for wax moth. Cull old frames from the brood nest or work them gradually to the outside if they contain brood so they are replaced within a month.

Get the wax dipper going to dip new and reconditioned supers and hive parts to be ready for another season. Put in early mite treatments or check mite levels using a cappings fork, sugar shake or a strip in a jar for 30 minutes (or natural fall over a week with mesh bottom boards). Check your varroa manual to calculate mite numbers and treatment options. Don't forget to rotate treatments to prevent resistance developing.

- Frank Lindsay, NBA Life Member

Decline of manuka on the West Coast

Recently I was shown around the Westport district while taking an AFB Recognition and Competency Course there. Manuka areas are in decline, thanks to the Kyoto Protocol.

New Zealand has had large areas of scrubland that are our major manuka production areas, but things are about to change. Only exotic trees planted since 1990 qualify for carbon credits. The vast majority of our bush, reserves and parks do not qualify unless they were bare land in 1990. The West Coast of the South Island is typical of this situation.

Scattered amongst the old gold mining areas are vast areas of pakahai land full of gorse, manuka and scrub. These are in fact swamps, the water being held in the surface layer by a hard iron pan.

The West Coast is a marginal beekeeping area. Wet, soggy conditions are not conducive to beekeeping. Combine this with the southwesterly wind that arrives each afternoon and you can see why there aren't many beekeepers chasing the manuka. They mostly direct their resources into kamahi, rata and honeydew production, which are produced from December onwards when the coast is a lot warmer and drier.

It looks to be great beekeeping country. The bush comes right down to the coastal plain and is full of huge rata trees but you have to hit the manuka right. Rain stimulates the manuka nectar flow, but too much washes it away as it tends to flower in the middle of their 'rainy season' with rainfall between three metres in the south to a couple of metres in the north. (Five years ago, it rained every day, except for one week in January!)

Traditionally the farmers and landowners have produced an income from the wasteland in the form of sphagnum moss (which equated to dairy income). However, the expansion of coal mining has swallowed up all the seasonal labour that harvested the moss, so they are now being forced to look at other forms of income. One new form is carbon credits.

It's a close community down there where everybody knows everybody and they work together. Some farmers were looking at assisting beekeepers now that varroa has arrived by planting gullies with native trees and scrubs; but when they looked into it they found that only exotic trees such as pines qualified for carbon credits.

Pine plantations have been planted in the past on this land but they don't do all that well in the soggy conditions. So they looked at what dairy farmers were earning and have decided to convert the land for dairying.

This land can be brought into production by using one of two methods. Humping and hollowing has been traditionally used for many years, as this allows the water to get away. But now they have found that flipping the land (using big diggers that go down two to three metres to completely turn the land over, bringing good soil to the surface) breaks the iron pan. It is limed to prevent it re-forming again, then flattened and planted in grass.

Land that used to be three metres high in gorse and manuka is gone within days. A few weeks later it's showing green and two years later it's supporting a herd of cows. Is this the beginning of the demise of wasteland from which most of us secure an income to balance the cost of varroa mite control?

We need to be pressuring the government to change their policy on what qualifies for carbon credits and allow other trees and scrubs to be incorporated into the scheme. All trees and scrubs secure carbon, so they should be included. That way, we may see the return of willows to stream banks and the planting of more riparian strips to clean up the leachate that is running off our farms into our streams.

- Frank Lindsay, NBA Life Member

Hives in manuka country.

Manuka country before it's flattened and flipped.

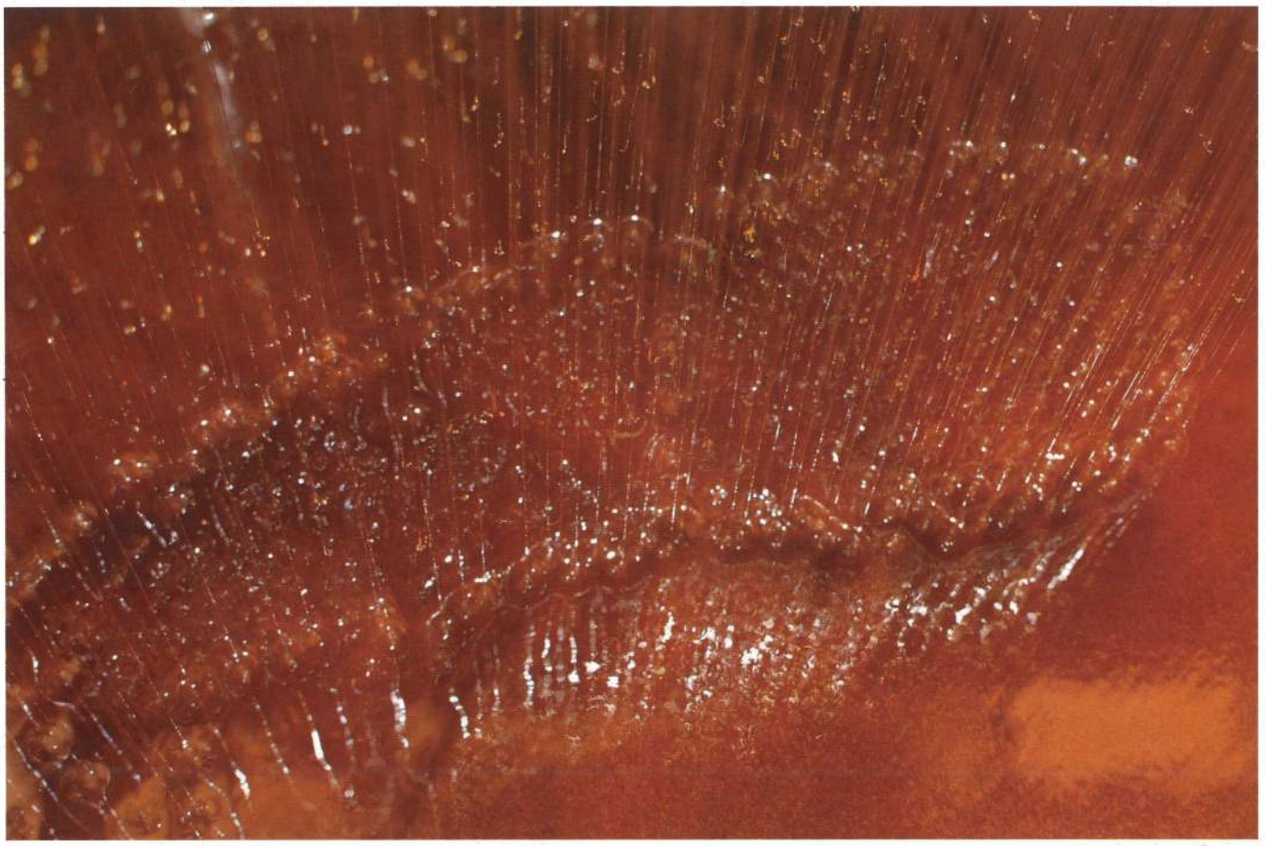
Flipping the land.

Humped and hollowed pasture.

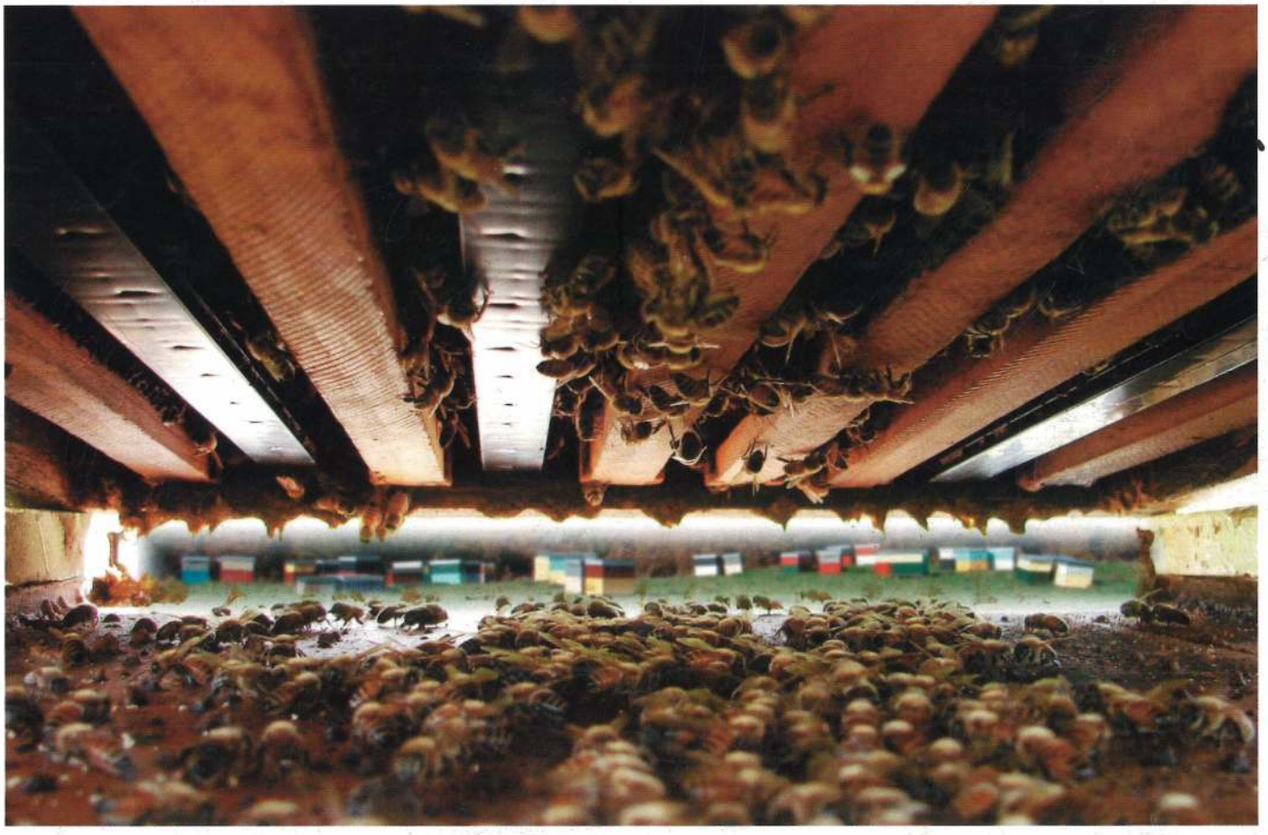
Pasture after two years.

Photos: Frank Lindsay.

NBA photo competition: people's choice category winners



'Production/Produce' category: Jane Lorimer.



'Bees at Work' category: Jody Mitchell