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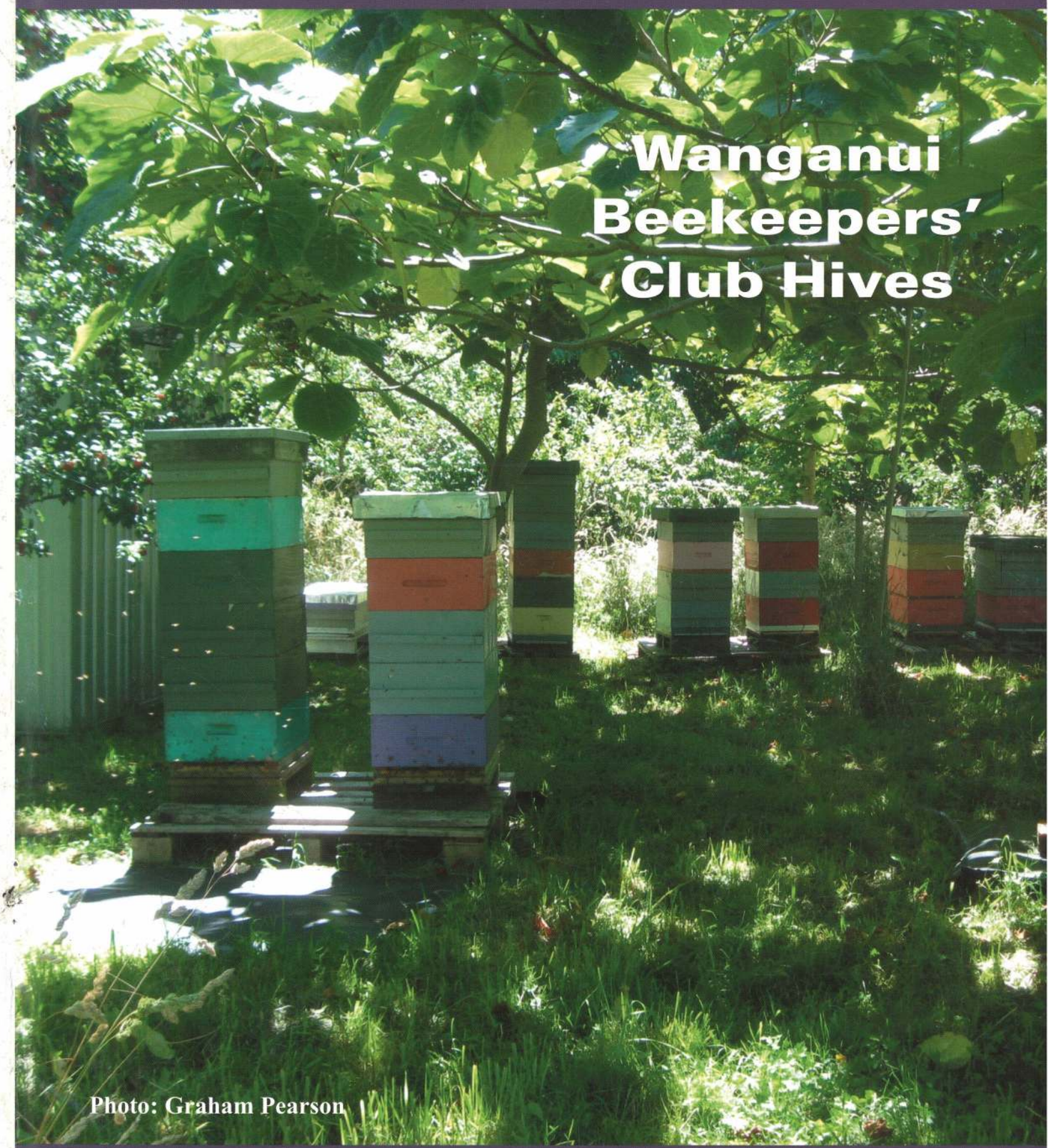

Wanganui Beekeepers' Club Hives

Photo: Graham Pearson

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Deadline for articles and advertising

April issue: 15 March

May issue: 10 April

(NB: April issue goes to all registered beekeepers in NZ)

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

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

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President's report

Incursion response

Some of you may be aware that a swarm of bees was recently found on the Dunedin Harbour waterfront. While it was probably a local out-of-season swarm, it was felt that it was a potential incursion as it was close to the water's edge. The beekeeper who was asked to deal with the swarm contacted me, and we decided to kill the swarm and send it to MAF for testing because of the locality of the swarm. As he was catching it another beekeeper came to collect it as well. The frightening thing is that this swarm would have been removed from the area and installed into a hive many kilometres away. If it turns out to be a swarm from a foreign source, there could be some dire consequences.

If a swarm of bees is found very close to a waterfront then it should be deemed a high-risk organism and should not be collected. It should be contained and killed off and sent to MAF as a possible incursion.

MAF must be congratulated on their response to the suspected incursion by informing the NBA about it. The bees have been sent to two laboratories to undergo tests for various pathogens, including *Nosema ceranae*. We await the results with interest.

At our most recent Executive Council meeting Katie Owen (our new liaison from MAF) visited us for a short time, and we had an informal discussion about where we were at with our relationship.

Manuka Honey Steering Group

The Manuka Honey Steering Group was established to resolve the debate over labelling and testing standards in the manuka honey industry. At the recent Executive Council meeting we discussed the progress the group had made in resolving these issues. It became clear there were widespread concerns amongst NBA members about the group's proposal to bring manuka honey under the control of the Horticulture Export Authority Act 1987 and the consultation process.

Up until now the NBA has kept out of the process and has been happy to allow the steering group to get on with its work. However, given the amount of concern expressed by NBA members regarding the process, the Executive Council felt the NBA had to act quickly to resolve the issue.

As a result, we have sent a letter—jointly signed with Federated Farmers Bees—to the Minister of Agriculture expressing the concerns of our members. We will keep members advised of our progress.

Hive vandalism/theft

Theft and vandalism of beehives has been an ongoing problem in every country. I am not sure how many beekeepers report vandalism incidents to the police, but I suspect it is not a common practice. Hive thefts are usually reported if the beekeeper knows about it. At the moment we don't really have a good picture about the breadth of these offences in New Zealand, but I imagine that the problem is bigger than we appreciate.

In our area recently a beekeeper suffered considerable financial loss because vandals had driven over the hives and also damaged the vehicle, which did not belong to them. These individuals are now having an in-depth discussion with the police. [Editor's note: see page 6 for more info and photos.]

During the spring we had a series of thefts of beehives in the Otago area involving the theft of 11 hives. Two lots were taken from behind a locked gate. In one of the incidents, only the bees and comb were taken and transferred into other boxes and the combs were replaced. The boxes were all labelled with the owner's registration number, so that may have caused the transfer to the thieves' gear.

If you are buying hives from the South Island, please check the credentials of

the vendor as the perpetrators are beekeepers themselves and probably well skilled.

We suggest that members to not only to report incidents of vandalism and theft to the police but also to the NBA office, so we can get a better handle on the scope of the problem.

Code of ethics and code of practice

Every industry generally has a code of ethics and a code of practice based on those established ethical principles. The joint chief executive officers of the NBA are currently drafting a code of ethics for the industry, which will be sent out to the members for discussion after the Executive Council members have reviewed it thoroughly.

Recently there have been some issues with the hive-shifting practices of some beekeepers. The police were surprised that the beekeeping industry has not adopted a formal code of practice to deal with the correct means of shifting hives by vehicle. While any good professional beekeeper knows the correct way to shift hives, some new entrants into the industry who are not members of an industry organisation, and they seem to cause most of the problems.

Commercial beekeepers can be a fiercely independent lot and do not take kindly to being told how to go about their business. However, the reality of the world requires that industry participants must collectively decide on how things are done so that there is a mutually acceptable code of conduct. This must also be acceptable to those parties outside the industry who may be affected by their actions.

The industry organisations need to get a code of practice sorted out before some adverse event stimulates regulatory authorities to do it for us.

Resignation of Glenn Kelly from Executive Council

Recently I received a note from Glenn Kelly, the Upper South Island ward representative, indicating his resignation from all his positions within the Executive Council and as Nelson Branch President.

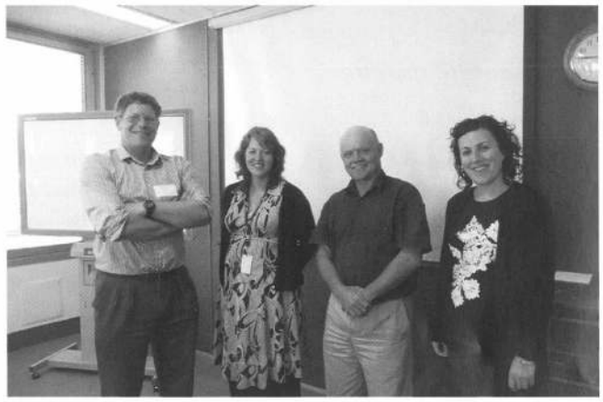
Glenn was a valuable member of the Executive Council and the AFB NPMS Board. His departure will be a great loss and I thank him for his efforts and dedication while on the EC.

Glenn's resignation brings to the fore the issue of the tremendous commitment required for members of the Executive Council, especially the President, Vice President and Treasurer. Glenn resigned for business reasons and as his commitment to the industry has resulted in a financial loss to his business, he made the decision to resign. The joint chief executive officers and executive secretary still undertake the bulk of the day-to-day running of the Association. However, the political and policy aspects of the running of the Association still need to be dealt with by the Council members. It can be a real nuisance to be rung on my cellphone to deal with urgent Association business when I have a hive open during the robbing season. While anyone who is on Council must be prepared sacrifice some of their time, it should not be to the detriment of their personal lives or business.

Resignation of Fiona O'Brien from the Publications Committee

Although this is a rather belated response to her retirement, I would like to thank Fiona for her years of service to the Publications Committee. Getting the journal out every month is quite a commitment in time and energy and her efforts, and that of the rest of the group, are always much appreciated.

- Frans Laas



NBA President Frans Laas, Katie Owen from MAF, NBA Vice President Barry Foster and NBA joint CEO Gemma Collier.

Apology

South City Print would like to apologise for the delay in mailing the February issue of the journal, due to an unanticipated delay in post-production. We hope no one was inconvenienced by this delay.

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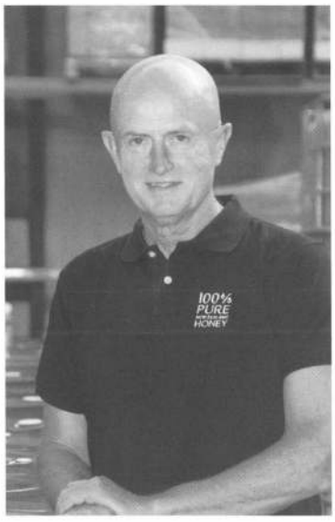


Many of you have said you wished you knew more about the interesting and innovative things other members are getting up to. Well, welcome to our first NBA member profile. From now on every issue of the journal will profile a NBA member. If you think you know someone who is doing something interesting, from a hobbyist in Northland to a large-scale commercial operator in Canterbury, please let us know by emailing secretary@nba.org.nz. This month we have kicked off the profiles with well-known South-Canterbury member, Steve Lyttle.

His dad was a member. His brother is a member. And according to Steve Lyttle he's been a member of the National Beekeepers' Association (NBA) "all his life"—and his record backs him up.

The co-owner with his wife, Carolyn Ball, of 100% Pure New Zealand Honey has served on the National Beekeepers' Association's executive for two terms as well as putting in time on other 'bee bodies' such as the Bee Products Standards Council, the Comb Honey Producers Association, the Honey Packers & Exporters Association, and the Active Manuka Honey Association.

"Contact with other beekeepers and building solidarity within the beekeeping industry is the key to its long-term success," he says by way of explanation of his many hats.

"I have worked for 20 years as a commercial beekeeper and the last 17 as a honey marketer and exporter. I am excited about our industry and want to see it continuing to thrive. Groups, such as the NBA, will help to keep the beekeeping industry growing."

But it takes more than bees to keep this Timaru-based exporter occupied.

In his spare time he takes to the skies in a glider or to the water on skis, alongside chairing the South Canterbury Chamber of Commerce. Hold your 'busy bee' puns please.

He's definitely a joiner—and says it's important to belong to community clubs and to network at a local level.

"But it is also vital to belong to nation-wide groups such as the National Beekeepers' Association so the industry can present a united front at a national level, and beekeepers get the opportunity to interact—that's a real benefit."

Vandals strike in Otago

An apiary site belonging to Otago Branch secretary Peter Sales was vandalised in February. Fourteen hives were knocked over and the crop was robbed out, and seven hives were completely destroyed. Peter estimates that 30 boxes were lost in the yard. The vandals struck at the worst possible time as the bees in this yard had gathered a good crop. The story featured on the front page of the Otago Daily Times on 22 February 2010: see http://www.odt.co.nz/news/dunedin/94555/10000-damage-attack-hives for details.

Peter Sales, Frans and Marten Laas look on at seven demolished hives having been robbed out and rained on over the previous week.

Photo: Peter Sales.

Peter Sales and Frans Laas starting the clean up. In the background are palletised two-queen hives with good crop that escaped the carnage.

Photo: Marten Laas.

Obituary: Richard Beeby

22 May 1933 to 27 January 2010

After an early life in Balclutha, Richard entered the workforce in the early 1950s as a survey cadet with the Lands and Survey Department. City life didn't suit him, so being eager to experience other cultures he left New Zealand on a tramp steamer. He spent some 18 months backpacking around Europe, and working in Canada with survey gangs servicing the oil fields.

On his return to New Zealand he worked locally as a shearer, fencer and freezing worker. In 1960 Richard married Valmai. They had two children when Richard decided to buy into a beekeeping business in Lumsden, about halfway between Queenstown and Invercargill. Prior to this, the closest he came to beekeeping was assembling supers and frames for Bill Ogilvy at Romahapa.

The seller was Alf Coombes, and for the first two years it was a partnership. Richard then bought out Alf and enjoyed (suffered) everything that goes with working bees and the weather. Fortunately, by returning to teaching, Valmai was able to supplement their income.

Richard had an inquiring mind, and tried to improve on existing ways of doing things. He developed the shifting of hives on pallets so that he could quickly move to a nectar source, and for this he modified a tractor into a forklift. He imported equipment from Czechoslovakia for artificially inseminating queens and demonstrated this technique on the television programme *Country Calendar*.

Initially the business packed its honey for the retail market, and 20 tons a year was sold in the Southland area, but Richard decided to concentrate on producing honey and selling bulk honey to packers. In conjunction with some other Southland beekeepers, a market for comb honey was developed in Lebanon and Saudi Arabia. The square plastic container with its distinctive labelling designed to suit this market was developed, and became the forerunner of the one still used today by comb honey packers.

Richard perfected double queening of hives, and as a result was producing up to three supers of comb honey per hive where other members of the group with standard single queen hives were only getting one super per hive. In the queen rearing department, for a number of years Richard had the expertise of Jack Glynn, a retired (?) beekeeper who was very well known in Southland. Richard looked at everything with an inquisitive mind, thinking how what was being done could be done quicker or easier, and as a result he would offer unsolicited opinions and advice. As a recipient of his opinions I put on my honey house wall a poster saying, "Those of you who think they know everything are annoying to those of us who do".

For all that, Richard was a great friend and a knowledgeable beekeeper. He was very much a community man and did a lot for the district. He worked for the advancement of the Kingston Flyer steam train, and was interested in hot air balloons to the point of making one after the style of the French inventors, the Montgolfier brothers, and encouraging the establishment of a Montgolfier Day in Lumsden. Many schoolchildren made and flew balloons that day.

Another hobby was making and flying kites and helping children to make, fly and enjoy their kites rising, falling and sometimes crashing. Richard carried on this activity in a number of communities until very recently.

- Russell Poole
Alexandra

Honey shows in France, Chile and Nelson

Help wanted for Conference honey competition

The second annual Quintessential Honey Competition will be held at the NBA Conference in Nelson, June 2010. The Auckland Branch is overseeing this project: watch this space over the next couple of months for competition entry forms and other information.

If you are interested in helping to judge the honey competition or to assist in other ways, please contact NBA Executive Council Northern Ward member Maureen Maxwell: tel: 09 411 7065, mob: 021 956 349 or email: maureen@beesonline.co.nz

Apimondia, France

This show was run quite differently and was very interesting. Honeys from many different countries were displayed with a photo of the countryside surrounding the apiary sites.

I was involved with judging the photo competition here at Apimondia and a magnificent collection was on display. My favourite category: "Bees, the sentinel of our environment".

Chile honey competition

NBA Executive Council member Maureen Maxwell (and the managing director of BeesOnline Ltd) in action at the Honey Gastronomy Workshop for professional chefs. This was televised as part of the IX Congreso Iberolatino Americano De Apicultura, Chile.

Maureen participating in the final of the honey competition at the same event. This also featured on national television and in the newspapers.

An unusual occurrence of European foulbrood and disease control without antibiotics

P. Parvanov, N. Rusenova
Faculty of Veterinary Medicine,
Trakia University, Stara Zagora, Bulgaria

Summary

During 2006–2008, manifestations of a severe European foulbrood were observed in four bee hives in the middle and end of summertime, unusual for the occurrence of this disease in the Republic of Bulgaria.

The causes for disease outbreak, the etiology, and the measures of European foulbrood control without utilisation of antibiotics and sulfonamides were investigated.

The microbiological examination was performed according to the requirements of the *Manual of Diagnostic Tests and Vaccines for Terrestrial Animals,* 5th edition, 2004, OIE and via Vita diagnostic kit, for the early detection of European foulbrood/Vita Europe limited.

A total of 116 diseased bee families with a clearly manifested clinical signs were established. As predisposing causes to the atypical time of appearance of the disease, pesticide intoxications, *Nosema* infection as well as sudden starvation and stress have been outlined. *Mellisococcus pluton* in association with *Enterococcus spp.* (*E. faecalis, E. faecium, E. durans* or *Paenibacillus alvei*) were detected in all studied brood samples.

The healing of affected hives was achieved by quarantine and differentiated approach to bee families according to the severity of disease. The quarantine of affected hives was removed one month after healing or after the eradication of the last affected or destroyed bee family.

Key words: European foulbrood, Melissococcus pluton, Paenibacillus alvei, Enterococcus spp., bees

Introduction

The European foulbrood is an infectious disease affecting most commonly the open, uncapped brood at the age of 3–4 days. The disease is not observed in pupae and adult bees (1). Affected larvae are twisted and their colour changes from pearl white into yellow-brown to greyish-black putrid mass (2).

Compared to the American foulbrood, the course of the disease is less severe (3) but due to its wide prevalence, it causes considerable economical losses to apiculture. The latter are due rather to weakening, stunted development of colonies and reduction in honey bee products than to the death of affected bee families (4, 5).

The European foulbrood is encountered on all continents but is economically most important in North and South America, Europe, Japan, Australia, India and South Africa (6).

In contemporary literature, *Melissococcus pluton* is outlined as the leading etiological agent of European foulbrood (7, 8, 9). The spore- and nonspore-forming microorganisms *Paenibacillus alvei, Bacillus laterosporus, Achromobacter euridice, Enterococcus spp.* isolated from clinical specimens (1, 10, 11, 12) replicate secondarily in already infected larvae, enhance their lethal issue and have an effect on disease symptoms.

The microorganisms involved in the aetiology of European foulbrood are widespread in nature. Often, they are detected in healthy bee colonies where they could reside for years without clinical manifestation of the disease. The disease is triggered when the resistance of the bee colony and more precisely, of bee larvae, is reduced. Various factors predispose this event: technological mistakes during honey bee rearing, climatic conditions, infectious or parasitic diseases in adult bees, intoxication of bees with pesticides, etc,. (5, 11).

In Bulgaria, European foulbrood appears mainly in spring and the beginning of the summer; time, related to the extensive development of bee families (12).

With regard to the improved requirements of the EU to the quality and safety of bee products, the use of antibiotics and chemotherapeutics for treatment and prevention of bacterial bee diseases was recently prohibited in the Republic of Bulgaria (13). This necessitates the development of implementation of rapid and efficient antibiotic-free methods for diagnostics of control of European foulbrood.

Materials and methods

An epizootic and microbiological survey was carried out in four apiaries with clinically manifested European foulbrood disease during the second half of the summer in north-eastern Bulgaria. A technology for sanitation of affected apiaries without using antibiotics was tested.

The diagnosis was made on the basis of clinical signs and bacteriological examination of 10 brood samples from each apiary.

The detection of *Melissococcus pluton* was performed via Vita EFB Diagnostic Kit (UK) as per manufacturer's instructions. The microflora accompanying EFB was identified according to he *Manual of Diagnostic Tests and Vaccines for Terrestrial Animals,* 5th edition, 2004 OIE (8).

From larvae with signs, characteristic for European foulbrood, suspensions in saline were prepared that were then inoculated on Columbia CNA blood agar [Becton Dickinson (BD)], on folic acid-azide growth medium for enterocci detection [National Center Infectious Parasitic Diseases (NCIPD), Sofia] and on McConkey agar (NCIPD, Sofia) for Gram-negative microorganisms detection. The inocula were incubated aerobically at 37°C for 24–48 hours.

Enterococcus spp. was identified on the basis of: growth on the aforementioned three media, Gram staining, catalase test, growth on medium with 6.5% NaCl and pH 9.6. The species of *Enterococcus* isolates were further identified by semi-automated BBL Crystal Gram-positive ID kit (BD).

The sanitation of affected apiaries was achieved by quarantine and a differentiated approach to bee colonies according to the affection rate, without using antibiotics.

Results and discussion

In the period 2006–2008, we observed severe manifestations of European foulbrood disease in four apiaries in northeast Bulgaria (Table 1).

All cases occurred in the middle and by the end of the summer (July–August), a period atypical for appearance of European foulbrood in the Republic of Bulgaria.

A total of 340 bee families were clinically examined and 116 of them were found to exhibit a clear clinical picture of the disease (Figures 1, 2). Diseased bee families in apiaries 1, 2 and 3 were very weak, with reduced number of adult bees, incapable to care for larvae.

The performed epidemiologic investigations demonstrated that some days ago, intoxications of bees with anticholinesterase preparations have occurred in apiaries 1 and 2; whereas as far back as the spring, apiary 3 was nosemosis-positive. In specimens from adult bees from affected families of this apiary, investigated by us, a moderate rate of *Nosema* infection was established (n > 100).

In apiary 4, starvation and stress have been observed. The bee families were deprived of reserves and during the two weeks that followed, bees have imported neither pollen nor nectar due to worsened meteorological conditions. Consequently, the carbohydrate and protein reserves of bee families were rapidly depleted.

The serological test with the Vita EFB Diagnostic Kit (UK) (Figure 3) showed presence of *M. pluton* in all studied samples. The consequent bacteriological screening exhibited that the *M. pluton* infection was associated with representative of *Enterococcus spp.* (*E. faecalis, E. faecium* and *E. durans*), as well as with *P. alvei* in apiary 3.

The occurrence of a considerable number of enterococci in dead bodies could be interpreted as an indirect sign for the occurrence of *M. pluton* infection.

According to some authors, *Enterococcus spp.* reproduce in the gut of bee larvae only in the presence of *M. pluton* (8)

Having in mind the later reproduction of *P. alvei* in putrid remnants of bee larvae (9), the occurrence of this microorganism in associated microflora only in specimens from apiary 3 was probably due to the more prolonged development of European foulbrood in *Nosema*-infected bee colonies.

The sanitation of apiaries was performed by quarantine of apiaries and a differentiated approach to bee families according to the extent of the disease:

A. The severely affected bee families were destroyed.
B. The less severely affected families were cured as follows:
   - removing and melting the combs with affected brood;
   - moving bee families into new hives or used hives, disinfected with 4% sodium hydroxide;
   - narrowing of nests until all combs were crowded with bees;
   - restriction of queens until sealing healthy brood and sanitation of the hive by bees;
   - replacement of older queens with younger ones;
   - supplementing bee families with carbohydrate and protein food.

The quarantine in affected apiaries was cancelled one month after the sanitation or the destruction of the last affected bee colony.

These measures resulted in efficient sanitation of apiaries and normal development of bee families throughout the next active season.

Conclusion

The present investigations demonstrated that a number of preconditions, such as pesticide intoxication, *Nosema* infection, sudden starvation and stress in bee families could cause in appearance and severe course of European foulbrood disease even in periods unusual for disease occurrence (the middle and the end of the active season).

The utilization of Vita EFB Diagnostic Kit (UK) is a rapid and accurate method for early detection of *Melissococcus pluton,* permitting a timely and effective control of the disease.

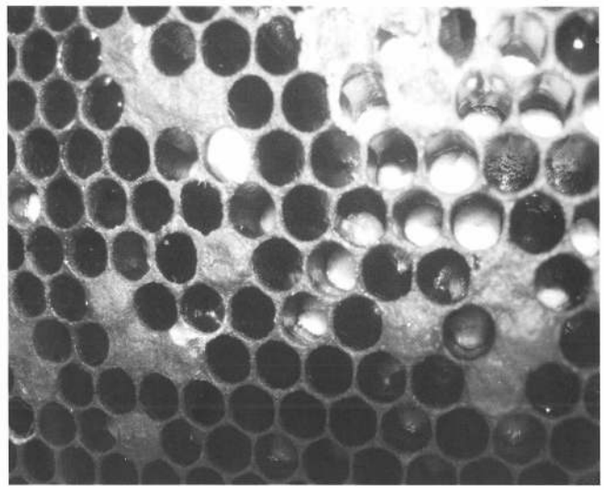
Among the secondary microflora in dead larvae bodies, representatives of *Enterococcus spp.—E. faecalis, E. faecium,* and *E. durans*—were most commonly encountered.

The method for control of European foulbrood consisting in a differentiated approach to bee families without use of antibiotics, tested by us, could be successfully implemented in apicultural practices.

References

1. Grobov, O. F., Lihotin, A. K . *Honey bee Diseases and Pests,* 2nd ed., Mir, pp. 87–92, 2003.
2. Ritter, W. *Diagnostik und Bekampfung der Bienenkrankheiten.* Gustav Fischer, Jena. 1996.
3. Otten, C. A. General overview on AFB and EFB Pathogen, Way of infection, Multiplication, Clinical symptoms and Outbreak, Apiacta, 38, 106–113, 2003.
4. Neramitmansook, W., Worarach, A., Vongpakom, M., and Tohmee, N. Bacterial disease of honey bees in Thailand, *Journal of the Thai Veterinary Medical Association,* 54 (3), 9–17, 2003.

5. Rusenova, N., Parvanov, P. European Foulbrood Disease—aetiology, diagnostics and control. *Trakia Journal of Sciences,* 3: 10–16, 2005.
6. Matheson, A. World bee health report. *Bee World,* 74, 176–212, 1993.
7. Cai, J. and Collins, M. D. Evidence for a close phylogenetic relationship between Melissococcus pluton, the causative agent of European foulbrood disease, and the genus Enterococcus, *International Journal of Systematic Bacteriology,* 44: 365–7, 1994.
8. *Manual of Diagnostic Tests and Vaccines for Terrestrial Animals,* 5th edition, 2004.
9. Sanjivan, B., Rana, B. S. Incidence of the European foulbrood disease in Apis mellifera L. colonies at Solan, Himachal Pradesh, *Pest Management and Economic Zoology,* 10: 87–91, 2002.
10. Gechev, I. D. *Diagnostics of Bee Diseases,* 1st ed., Sofia, Bulgaria, pp. 21–22, 105–107, 2001.
11. Kamburov, G., Parvanov, P. European foulbrood, *Apiculture,* 4:26–28, 1987.
12. Kanchev, K. *Bee Diseases,* Sofia, Bulgaria, pp. 60–77, 2001.
13. Order of the Minister of Health Care No 0913/14.01.2003.



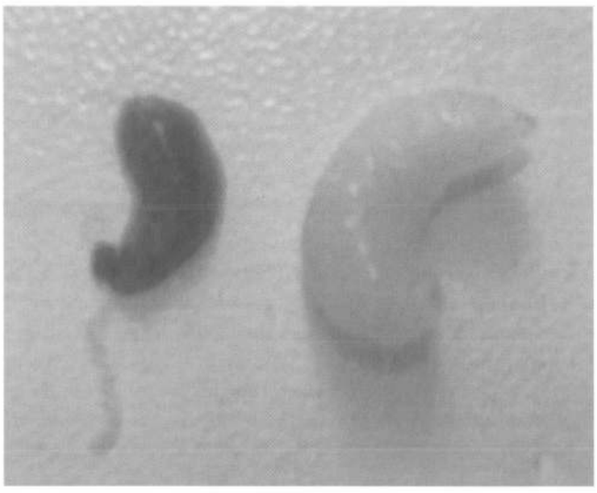
Above: Figure 1. EFB (original)—Affected brood. The position in cells of diseased larvae is unnatural and the bodies of dead ones have turned into a yellow-brown putrid mass.

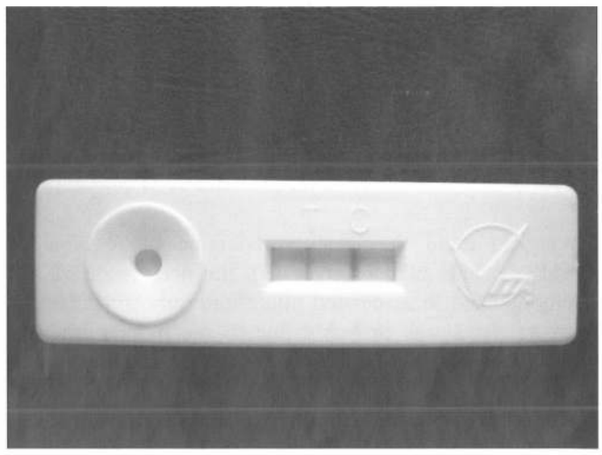
Bottom left: Figure 2. EFB (original)—Comparative appearance of a healthy larva (at right) and a dead larva having turned into a brown putrid mass.

Bottom right: Figure 3. Vita EFB Diagnostic Kit (UK)—positive result.

Table 1

Apiaries	*Number of bee colonies*	*Diseased bee colonies*	*Predisposing factors*	*Isolated disease agents*
1	*82*	*30*	*Pesticide intoxication*	*M. pluton* *E. faecalis*
2	*86*	*28*	*Pesticide intoxication*	*M. pluton* *E. faecalis* *E. faecium*
3	*60*	*24*	*Nosema infection*	*M. pluton* *P.alvei* *E. faecalis*
4	*112*	*34*	*Starvation and stress*	*M. pluton* *E. faecalis* *E. durans*
Total number	340	116		





Taming your Technofear: part 3

Many of you out there have computers and connections to the Internet, but apart from the sign at your gate or the label on your honey products, does your business have a global presence? I am talking about the World Wide Web (in case you didn't know, that's what the www in a web address means).

There are many ways to get yourself out there and noticed and all it takes is a bit of shameless self promotion. Now I know that most beekeepers are shy, retiring people who like to stay mostly in the background, working hard and enjoying the fruits of their labour. But for those who have something to say, something to sell or something to promote, why not create yourself a website and tell the world about it?

Among the ways to 'put yourself out there' are the social networking sites such as Facebook, My Space, Twitter and Wordpress. These are known as 'micro-blogging sites'.

A *blog* (a contraction of the term 'web log') is a type of website, usually maintained by an individual with regular entries of commentary, descriptions of events, or other material such as graphics or video. You could also create a standard format website with individual pages and graphics like a normal business presence on the web. There are as many types of websites as ways to create them and host them. You could pay someone to create something for you, but you tend to lose creative control. If you can use a computer to type an email or a document, then you can create your own website using the tools that are available for free, as part of a software suite or even just a standard text editor.

Websites

The easiest websites to make use a 'wysiwyg' (an acronym for What You See Is What You Get) approach to design, allowing you to drag and drop information and pictures and put them on a page exactly as the rest of the world will see it in the finished product. For those who want total control and have lots of time, you can write the entire page as text in one of the web languages HTML or PHP. Personally after doing both several times and being of the lazier ilk, I prefer the ease of use of a design program interface.

If you have a spare computer and a connection to the Internet with no excess use policy you could always "host" your own site: this was available back on Windows 95 and 98 but has come a long way since. Or you can buy access on someone else's system and have them host your site.

The next part is having a name that people can remember: your Domain Name. You will have to pay if you want a .co.nz or .org.nz extension but there are 'free' options (and we like free, don't we?). If we are hosting our own sites, the easiest is from https://www.dyndns.com. This group provides free name translation from the IP address provided by your service provider to a name that you have decided to call your website, with restrictions on the extensions you can use. However, if you have purchased a .nz name for approximately $30 a year, the name provider allows you to 'forward' or point users to the IP address or name where your actual website is located.

Then you need to announce your presence: this is done in the standard way by adding your website address to the bottom of your business cards, signage and product stickers along with your email address. This in itself won't do a lot to your ranking on Google or Yahoo! when you search for your name. It does, however, allow people who have seen your signs to find out more about you, where to buy your products from and what services you provide.

One very important thing to remember is that the Internet is classed as a publication just like a newspaper or magazine, so if you are going to badmouth someone or something the libel and slander laws do apply. It is always better to say that in your opinion that something is a stupid idea or someone did a stupid thing rather than 'X idea is stupid' or 'Y is an idiot'. This is a subtle difference but it will stop you from ending up in court.

As always, remember that anything you write may only be of interest to you and a select few. But if you don't tell someone else your ideas and needs, how will anyone find out about new things and what you are passionate about? After all, even cavemen painted on the walls of caves: it wasn't just art.

- Andrew Lindsay
Computer geek and all-around IT support person

Abstracts from Apimondia 2009, France

Over the course of this year we will be reproducing some abstracts of the approximately 500 papers and other presentations to the 41st Apimondia Congress in Montpellier, France, 15–20 September 2009. Here are the abstracts for papers 90 and 91, respectively.

Approaches to successful integration of bees into the urban environment as part of local food initiatives

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There is currently a growing movement in high density urban centres to localise food production to promote food sovereignty, reduce CO_2 emissions and introduce the population to the general health benefits of local organic food growing and consumption. An obvious cornerstone of such initiatives is the presence of bees to ensure high levels of pollination of urban food crops. Although there are significant benefits for bees in an urban environment—such as lack of pesticide spraying, plentiful elemental shelter, absence of GM crops and a wide array of plant and tree varieties—there are also significant problems in successfully integrating bees into areas where high density human populations exist. Very obvious barriers to successful integration—such as vandalism, human fear and a wide scale negative perception of bees by the young—require innovative solutions if local food production is to be successful in cities. This paper details several methods that have tackled these problems successfully using social approaches and technical innovations that have helped millions of bees to be safely integrated into urban centres and resulted in productive urban food schemes. Several common threads run through each scheme and the concluding findings will provide a template for others to follow who have the same objectives with regards to local food sovereignty.

To treat or not to treat, that is the question

Francisco Rey, John Kefuss, Jacques Vanpoucke, France
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Beekeepers should ask themselves two questions before beginning a program of selection for resistance to varroa mites. The first is what are the different reasons why you don't wish to stop chemical treatments against varroa mites? The second is under what conditions would you stop these treatments in all your hives? Answers to these questions are not that evident but once you have them (or try to get them) you will be able to decide if under your specific conditions a selection program is possible. Selection for varroa resistance is a long term solution but the beekeepers short-term problem is economic survival. Business survival is the first reality that your breeding program must take into account if it is to succeed. This means that you must be able to calculate how much it will cost you to produce the genetic material for breeder queens and if these efforts are justified. Pacific Queens in Chile runs over 4000+ hives for avocado pollination and queen rearing. Chemicals are still used to treat for varroa but we are in the process of phasing them out. Since 1994 we have tested from time to time groups of 400 to 900 colonies for pollen production, hygienic behavior and varroa resistance. We measured how much time it took to run each test to select breeder queens. To select 20 breeders queens from 430 hives only for high pollen production costs us 3:44 hours of labor per queen. After the pollen test is finished we test the best 100 hives for hygienic behaviour and varroa infestations. It takes 10 minutes per hive to count the frames of bees, brood and honey, collect a bee and brood sample plus insert frozen brood for the hygienic test. This includes driving and lunch times. On the second and third days of the hygienic test it also takes 10 minutes per hive because we must count at the same time of day that the frozen brood sample was put in to maintain a 24-hour interval between counts.

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Australian SHB study trip report—Part 6

I was fortunate to be nominated and accepted to go on the National Beekeepers' Association's Small Hive Beetle study tour to Australia in May 2009. The trip was instigated by the Auckland Branch and used industry funds to sponsor eight (including myself) of our group of 14. We spent nine days travelling between Brisbane and Sydney, visiting beekeepers, universities, research institutes, a sterilisation plant, honey packers and meeting with biosecurity officers and apiary inspectors en route. We exchanged knowledge on many evenings at branch or beekeeper meetings. It was a very hectic time, but also very satisfying, interesting and we learned a lot.

All the people we met were extremely welcoming and gave us lots of information very freely. Morning and afternoon teas and meals were often provided and I was amazed that all the people we met made so much time available for a bunch of New Zealand beekeepers. Thank you to all the Aussies we met.

I would also like to thank the organising team of Aucklanders who made this all possible; it must have been quite a job.

This tour will benefit all New Zealand beekeepers tremendously because the team will spread their acquired knowledge by writing articles and giving presentations at bee meetings and field days, and they will be available should an incursion occur in the future.

Overview of honey bee species

Before writing about the Asian honey bee (*Apis cerana*) incursion in Australia, I would like to say something about the different honey bee species, some of which comes from personal experience of living in Thailand for five years and being involved with beekeeping of *Apis mellifera* and *A. cerana.* I saw the other two *Apis* species regularly and read a lot about tropical bee species while there.

There are four recognised species of honey bee (*Apis*), which can be divided in two groups of two. The first group, *A. dorsata* and *A. florea* (giant and dwarf honey bee, respectively), are the biggest and the smallest of the *Apis* species. These build a single comb and make open-air exposed nests, and therefore are not suitable for hiving in man-made containers and cannot be manipulated. They also live in tropical and sub-tropical areas only.

The second group, *A. mellifera* (our New Zealand honey bee) and *A. cerana,* are very similar in many ways and are both kept by humans.

Like *A. mellifera, A. cerana* builds multiple combs in dark cavities and has the same social behaviour and labour division. It is a smaller bee than *A. mellifera* and produces less honey and wax. However, it is particularly good for pollination of certain crops (e.g., coconut) and the honey it does produce is very sought after.

The tropical subspecies of *A. cerana* readily abscond and don't produce much honey. However, in Sri Lanka, by selection, quite good honey production strains have been developed.

Non-tropical subspecies of *A. cerana*, such as the Chinese (*A. cerana sinenses*), Korean and Japanese (*A. c. japonica*) strains, produce more honey then their tropical cousins, an adaptation to their colder environments.

A. cerana javanica, the Indonesian subspecies, was the one found in Australia. This is apparently more aggressive, therefore not wanted in urban areas, and, as a tropical bee, is not renowned for honey production.

All *Apis* species can carry pests and diseases that can jump species. *A. cerana* is the natural host of the varroa mite and *Nosema cerana.* It is a lot smaller than *A. mellifera* and has more prominent abdominal stripes. Less easy to detect are the hindwing differences and the difference in cubital index of the forewing: see the next section for more information.

I hope that this overview is of interest and helps to show why Australia and New Zealand don't want incursions of other bee species.

Asian honey bee (AHB) incursion in Cairns

The most recent recorded incursion of AHB was in May 2007 in a hollow yacht mast stored ashore in Cairns. It is the latest in a long line of incursions of AHB in Australia, we learned at a meeting at the Animal Research Institute, Yeerongpilly, Brisbane.

Speaking on AHB were Ian Rodger, Senior Policy Officer Biosecurity, Cairns Office; Karen Skelton, Principal Veterinary Officer, Biosecurity; and Patricia Swift, Apiary Inspector involved in varroa surveillance in Queensland.

After the May 2007 discovery the decision was made to eradicate. Movement controls were put in place and existing hives were, and still are, monitored for varroa using strips and sticky boards. Bees, bee products and equipment could be moved only by permit. The movement control restricted area was expanded in 2008.

Once the alarm had been raised, surveillance found more AHB infestations, the first in a cable reel inside a hollow concrete block, only 50 metres from the yacht mast. Others were found in a refrigeration unit of a ship on land, in a building and in the tree trunks of mangrove trees on two properties in a difficult to access tidal area. All of these were close to the first find, but the eighth infestation was an 11-kilometre leap away!

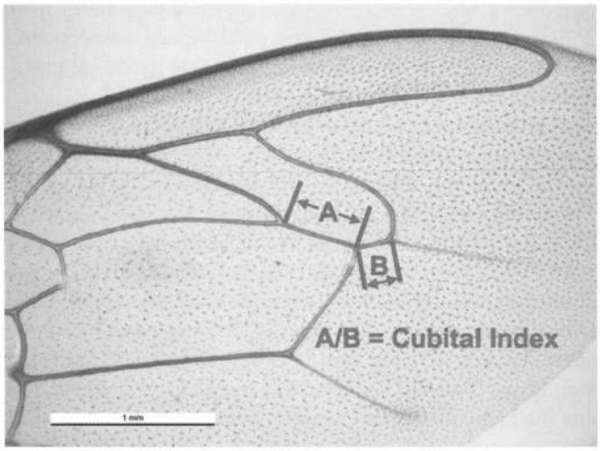
By involving the public to report bee swarms, smaller bees foraging, etc., and by surveillance work, 23 infested properties (IPs) had been found by May 2009, all in the Cairns urban area.

Surveillance was done by sticky Delta pheromone traps, flower inspection, sweep netting of flowering areas and scenting by melting beeswax to attract bees. Feeding stations with 1:1 sugar syrup with added lavender oil/essence worked well as a means of estimating distance to nests. Three or four bees were marked while feeding and the time it took for them to

return from their nest(s) for a second feed monitored, hence the distance to the nest estimated.

Swarm traps, logs and empty hives with sticky combs and sticky boards (great robbing response) were also used but with no results.

The surveillance of bee eaters (an insect-eating bird) is ingenious. Sheets are put on the ground under the bee eaters' nesting or roosting trees and in the morning the regurgitated pellets containing indigestable parts of insects are collected. Of special interest are the wings of bees. As long as the cubital index (see picture) can be determined the species of honey bee that was eaten by the birds can be identified. Even a part wing can be enough. The cubital index is 1.65–2.95 for *A. mellifera* and 3.1–5.1 for *A. cerana.*



Cubital index. Photo supplied by Jan van Hoof.

Once *A. cerana* is detected, feeding stations are set up and when the bees are feeding "bee-lining" is used to plot a line on a map in the direction of the nest. A pole with a long cross stick pointing in the direction of flight determines the line to be plotted. Doing this from two feeding stations creates an intersect on a map (triangulation) indicating where the nest is likely to be. This has proved to be a very effective way of locating nests.

As mentioned before, 23 *A. cerana* nests have been found and destroyed in the past two years—all in the Cairns urban area—therefore they are presumed to have stemmed from the same incursion. Let's hope they've got the lot. Thankfully for Australia, this latest incursion appears to have been varroa free: no trace has been found. *[Editor's note: 64 nests have been destroyed so far from the same single incursion.]*

Good luck to Biosecurity officials and beekeepers in Queensland. From what we heard and saw you are doing a great and difficult job and have enough on your plate with the Small Hive Beetle, let alone Asian impostors.

- Jan van Hoof,
Lower South Island Ward study group representative

If you have a digital refractometer, change the battery every year. An old battery can give a +5 degree reading.

From the colonies

Bay of Plenty Branch

The summer started off with a fantastic time during the Christmas/New Year period: sun, warmth and good fishing every day except one. After that the weather has really gone to pack. Mid January was a mixed bag; however, the last few weeks have been overcast, warm and wet—not much chop for bees.

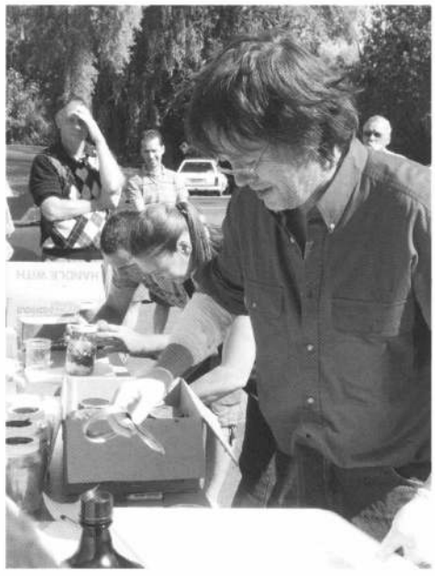
Honey crop? It's been patchy: some very good, some very bad and some in-between, depending on the local weather. The flowers have been there but the weather has not always played its part and the flows have been very short. Now there's plenty of pasture flower around but not enough sun to get the nectar flowing. Hives which had plenty of stores on board when we took the honey are now on the border of needing a sugar feed—in February! At this point this is the case only in the Eastern Bays. The West seems to have fared a little better with a good pasture (and particularly pennyroyal) flow.

Bee numbers are still high and varroa is starting to appear in the hives in low numbers so we need to be vigilant as usual. To date there are no reports of varroa resistance in the Bay. All in all not a brilliant season, but that's beekeeping.

Our next meeting is on Wednesday, 31 March at Buretta Park, 7 pm. We hope to have a discussion on hive auditing with guests from Zespri and packhouses to offer their points of view. It should be a good discussion, so come along and offer your wisdom.

- Barbara Pimm, Branch Secretary

Waikato Branch



We recently held our Waikato Branch Field Day with the subject of varroa resistance to our current treatment. This topic generated lots of different discussions and opinions among the many beekeepers who attended.

Dr Mark Goodwin and Michelle Taylor spent the morning testing samples of bees that beekeepers had supplied for signs of resistance. The volunteer beekeepers were supplied with a jar fitted with a gauze lid containing a piece of cardboard with a small piece of varroa treatment: the type supplied depended on the individual beekeeper's previous treatment plan.

The bees were to be collected on Friday morning so they were exposed for 24 hours to the treatment. On the day the jars were shaken to remove any dead mites, which were then counted. The sample of bees was then subjected to an ether wash to kill and remove any remaining varroa on the bees. The varroa were shaken from the bees and counted. The ratio of live and dead mites was calculated to determine any resistance. From all the samples taken, Dr Mark Goodwin recommended that approximately three or four beekeepers go back and retest their hives. This did not mean that resistance was found, just that the hives should be looked at in more detail.

Russell Berry, Michelle Taylor, John Dobson, Sarah Peacey and Aurel Braguta spoke briefly about their queen-raising operations and experiences. It was interesting to hear the different problems and solutions that people have found to suit their particular situations.

Melanie Gengos from Becker Underwood, who are developing the Metarizium delivery system, was unable to attend and supplied a brief statement that was read out. It told us that we might get something in spring.

Thank you to all the workers and drones who made cups of tea and cooked on the BBQ and made the day very enjoyable. It was also good to speak to the beekeeping equipment suppliers who made the journey to join us.

On the honey front, a number of beekeepers reported a poor start to the season but that seems to have been made up for in the later stages.

- Stephen Black

Hawke's Bay Branch

Hot and wet, cold and wet, windy and wet—and just plain wet. It has been a long time since Hawke's Bay has been this wet in February and many hives in the high country have done nothing for the past six weeks. Some of the drier areas have been doing quite well lately on squash and thistles but there has been so much rain there are almost no clover flowers. It will be interesting to see if they have a late flowering.

I did my organic trial hives the other day and some of them have gone 10 months without treatment but are starting to show PMS symptoms now: still it shows how low varroa numbers can be when hives are treated properly in the autumn. I have not yet got the results from the thymol-treated hives: I hope it works this year.

Honey crops are expected to be average or slightly below average but with it being so green, there is the chance for some of the drier country to have a late crop.

Don't forget to save some samples of your nicest (or most unusual) honeys for the honey competition at conference. The competition entry rules will be published in a forthcoming issue of the journal. If anyone has some ragwort honey, please bring it along. I would love to know if anyone in the world likes this one.

- John Berry, Branch President

Southern North Island Branch

The branch had not held a meeting since the post-Conference meeting, allowing members to concentrate on keeping their hives alive through a very wet and very challenging spring.

At the February meeting, members caught up with each other and discussed current issues. We have a number of small exporters in the group and all are for establishing standards. However, they felt the proposal made by the Manuka Honey Steering Group to change the Horticulture Export Authority Act 1987 would impose another added cost that could make exporting in small batches uneconomical. One member suggested we band together and market our honey under one brand to give us greater recognition and greater returns—something the late Ted Roberts (ex-MAF, then AgriQuality Advisory Officer) tried to organise some 20 years ago.

Over our branch area, which covers most of the southern half of the North Island, the crop is average to below average.

Taranaki had a late clover crop which started in late January and finished three weeks later. The bees filled up the hives quite quickly. Strong, well-supered hives have produced, but overall it will be an average crop.

Beekeepers inland in the high country suffered a nail-biting spring that went on and on into late December. No early crop, no rewarewa and no early manuka: result—lots of feeding. The weather finally warmed in January and the bees have brought in some late manuka and clover. Production is down 25% on their usual yearly average.

Wanganui and Manawatu missed some of the wet and windy weather. Clover on the sand country flowered early and produced well. A little further north, it started flowering after Christmas and "rolled in" with hives producing well.

Wellington had a good kamahi flow (well, that's what I hope it is) between the showers and wind. Early manuka on the coast failed to flower yet kanuka flowered well, but not many bee visits were observed. Higher inland, manuka flowered well but again was affected by the weather, judging from the plastic frames that weren't fully drawn. Pohutukawa, on the other hand, flowered for at least eight weeks. Instead of the trees all coming on together and the flow being over in a couple of weeks, individual trees flowered in sequence, giving a long sustained flow.

The Wairarapa has had very mixed results: south and north produced less well than the middle, which should turn out to be an average crop. Instead of the grass being burnt off by the dry hot winds, it's green—the result of rain, rain, rain and more rain, accompanied by weeks of 130-kilometre winds right through to the end of December. During breaks in the

weather the bees managed to secure a crop from on-again, off-again flows, which also stimulated a lot of swarming. Beekeepers are hoping for a good late clover crop.

There was a massive honey factory fire just out of Wanganui in February, where some of this year's and last year's manuka crop was being readied for export. Although it's not known how the fire started, it's a reminder to beekeepers that a lot of fires at this time of the year are started in hot rooms where domestic heaters are used. These have no internal protection and once honey gets into the circuitry, it will smoulder. I had two 230-volt wall switches fail during last year's extracting season and took them apart during the spring. One was the result of a wax moth getting between the contacts; the other was caused by sticky dust. I was amazed by just how much honey vapour got into the wall fittings over the years—a potential risk. If you have standard 230-volt switches, get an electrician to check them in the off-season.

Finally, congratulations to the Rainer family on a new baby son, Max, born 25 February. Poppy Peter Ferris is stoked.

- Frank Lindsay,
Branch Secretary and NBA Life Member

Update on NBA Conference, Nelson

Conference is fast approaching: make sure that 27–30 June is in your diaries. Keep an eye out for the conference registration form in the April issue.

Canterbury Branch

Hoping this finds you all well and that everyone got a few days off to enjoy Christmas. It's been a busy/eventful season so far.

Reports coming in so far indicate that Canterbury, although patchy, will probably end up with a slightly better than average year. Once again the amount of irrigated land that is in flying range is a determining factor in the equation. We had a lot of honey come in before Christmas, then a 2–3 week break, and then the final nectar flow finished in the first couple of weeks in February. All in all, a most unusual season. A lot of crops that rely on being pollinated in the first few weeks of January have had poor seed set due to the poor flying conditions because of the wet and cold weather during this time.

- Brian Lancaster, Branch President

Otago Branch

Many beekeepers in Otago will be thankful and perhaps a bit surprised to get a crop at all this year. After an El Niño spring and early summer that went from bad to worse, the season finally kicked in for most in late January. Good rain in some dry areas, and some settled weather and heat in others, managed to get those hives still ready and able into production. Winter stores suddenly became a box and sometimes several, so we may average a fair crop in the province after all.

On the Otago eastern coast the bush crops have been fairly disappointing. A few managed to harvest a bit of kamahi in South Otago. The fresh snow on the hills at New Year helped send the fuchsia solid, but the hives then ate most of it anyway. Manuka and kanuka have finally had a late run and hives that were still up to it have done quite well very late in the season.

This late season has also seen some very late swarms. I was called out to one on the Dunedin wharves on Friday night making a nuisance of itself between a restaurant and a pub. Actually the bees were well behaved—it was the onlookers that were the nuisance.

A high-risk area and a very small swarm had me suspicious, so I bagged it all and popped it into the freezer. It's off to AsureQuality Limited for a range of tests. (I have been told since of an occasion when a nuc was put in a freezer and generated enough heat for a while to melt most of the contents. I haven't checked the ice cream yet.) I just beat a beekeeper who was about to hive the swarm and take it home and I was left wondering if this is how we will get the next nasty?

We are still blessed with no varroa in Otago; no one has found it yet anyway. However, I discovered 50 hives over the fence from one of my yards this summer that had come from 150 kilometres further north, so I guess it won't be long!

I hope you too have managed a crop.

- Peter Sales, Branch Secretary

Waikato field day captions (in order of appearance):

Dr Mark Goodwin testing the samples.
Crowd looking at testing.
Michelle Taylor talking about the samples.
Tucking into the food and beverages.
Michelle Taylor, Sarah Peacey, Russell Berry, Aurel Braguta and John Dobson.

Photos supplied by Fiona O'Brien.

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About the Apiary

It's March and the season is drawing to a close, yet we still have a lot to do. Gorse has just started to flower and is producing high-quality pollen. Koromiko, fennel, red-flowering eucalyptus, and pennyroyal are producing only a dribble of nectar, which is stimulating late brood production. In the wetter areas, catsear and lotus major have started to flower again.

Some of us have experienced a lot of rain recently, causing the honey in some districts to take on 1–2% more moisture and putting it slightly over 18.5%, the highest moisture content allowed for exporting. Beekeepers with this problem are using commercial dehumidifiers in their hot rooms to reduce the moisture while the honey is still in the frames. Hobbyists can do the same in a small room with a domestic dehumidifier and a fan blowing air through a stack of supers, but without a refractometer it's very hard to judge the water content of the honey. An inexpensive solution is to go into the supermarket and select a pot of runny honey and turn it over, end to end. Watch and count how long it takes for the air bubble to slowly rise to the top. Then go home and compare times, that is, provided your honey is cool like it is in the supermarket. Generally if it rises slowly, it's OK.

From my observations, the outside frames in each super generally have 2% more moisture in them than the frames in the middle of the super. If you think that your honey is higher in moisture this year, leave the outside frames to be extracted last (use the honey first), or simply return them to the hive(s) as winter food. This is especially important for manuka honey. Because of its jelly-like properties, it tends to trap air bubbles that can elevate the moisture content slightly, so it has a tendency to ferment once the moisture levels reaches 20%. For most of us this will not be a problem and you won't experience the disappointment of finding a bulging drum in the spring.

Varroa treatments

As soon as the honey is off, get the varroa treatment into your hives. I still have large populations of bees in my hives so not much varroa is showing up, but once the field bees start to die off and brood rearing is reduced, the mites will have a greater effect on the developing brood. Don't muck around—get the treatments in as soon as possible so that you get at least two generations of bees that have not been infected by varroa to winter over with.

Put in a different treatment from your spring treatment. While night-time temperatures remain above 15°C the thymol treatments should work well (two treatments), but you will have to check the efficacy. If you are going to use these treatments it is recommended that you close off the bottom of the hive if you have mesh floorboards and restrict the entrance down to three to four centimetres. Treatments may also work better by sloping the hive backwards (raise the entrance a couple of centimetres) to create a pool of gas in the bottom of the hive to kill the mites that drop from the bees. We should

all be experimenting with alternative treatments in a few hives, as mites could be starting to become resistant to our tried and true strip treatments.

Check your queens

At the same time as you are treating for varroa, observe the conditions of your queens. Look at a patch of young brood and check whether the majority of the cells are filled with larvae of the same size and that hardly a cell has been missed. If there are 15 cells missing in a 75-mm square, or if a frame has spotted larvae of different ages, the queen is getting past it and should be replaced. If you persist in keep her for another season, 15% of the eggs she lays will not develop; hence you get 15% less honey from the hive. Also, the hive is likely to swarm in the spring.

Those who mark their queens will know whether the marked queen or one of her daughters now heads the hive. About 30% of hives will naturally supersede the old queen going into the autumn. Some beekeepers do not like supersedure queens as they have the same genetics as their mother, but if the original queen was a good producer, why not let the new queen head the colony?

If you need new queens, better get in quick as most breeders are winding down their queen-rearing activities. The first frost sees the drones thrown out and then it's too late to produce queens. Larger-scale beekeepers and those in the warmer areas will still have time to put in protected queen cells. This will cause a brood break, which will give a better and quicker varroa mite kill. Whatever treatment you use, coordinate the timing of your treatments with your neighbouring beekeepers so you clean up an area in one go, thus reducing the risk of mites reinvading the apiary.

It's also a good idea to make up a nuc or two to carry over through the winter. Ken Ring said at the 2009 NBA Conference that this past spring and the next will be wet. Queen breeders in some districts will have difficulties supplying your needs, so perhaps it might be prudent to overwinter some nucs.

Extracting

Most of us are taking off honey and extracting it as fast as we can. The supers are put back on the hives for the bees to clean out and in some places the bees will continue to store honey. We want them to put all the nectar coming in and the wet honey in the supers down into the brood nest. We can encourage the bees to do this by placing the escape board (minus the escape) between the honey supers and the hive supers. The bees will come up and clean out the supers. I leave my dry supers on the hives until it gets cool, as the bees will stop any wax moth developing in the honey supers. I then remove these dry supers from the hives and store them in an old airy milking shed that is cool and has a good airflow through it, to prevent wax moth from developing.

Some commercial beekeepers move the wet (just-extracted) supers directly into storage and then put them out in the spring to stimulate the bees into laying. This method has advantages and disadvantages: if you have a history of disease (one or two AFB hives each year), this practice could spread the disease. It's best if the bees rob out the honey supers in one or two apiaries first, then you can check these hives again for disease after robbing season has finished. If no disease is found, it will indicate that you have AFB under control.

Another disadvantage of storing wet supers is that if you have an early flow, the bees will store nectar on top of the slightly fermented overwintered honey in these supers, which could result in all the honey stored in the supers fermenting once it's extracted next season. However, the predictions of a wet spring to come will make this scenario less likely.

Hive update

Those two hives I reported on in last month's article toppled over a week after that photo was taken. They were situated on a little flat area held in place by a sheet of corrugated iron. The weight of the hives caused the bank to subside slightly and the hives toppled over. We don't always give due consideration to the weight of a hive, so a good foundation is essential.

I also noticed that the last super placed on in these hives (a full-depth one with wooden frames and natural foundation) was completely capped, whereas a super containing newly waxed plastic frames that had been put on much earlier was only three-quarters drawn out. Bees prefer natural wax to plastic but once the plastic frames are drawn out, the bees will fill them. The rainy season we've had has caused stop–start flows, which has not been conducive to drawing out plastic frames.

Things to do this month

Extract honey, requeen and winter down hives. Check for wasps (our wet season has led to low numbers this year). Remove all comb honey—this should come off first as it gets travel stained if left on too long (bees have dirty feet). Check for AFB every time you open a hive. Once you complete a full brood inspection, look at just one or two frames of emerging brood. Treat for varroa mites and check to see that the treatment has been successful—obey the recommendations from the manufacturer and in the *Control of Varroa* manual.

- Frank Lindsay, NBA Life Member

RMP reminder

All beekeepers with a RMP who transport their own honey, beeswax, propolis or pollen should register a vehicle before 10 March with NZFSA so they comply with the new EU regulations. Go to the NZFSA website to download the form.

News from the Wanganui Beekeepers' Club

Wanganui Beekeepers' Club has a large membership of hobbyist beekeepers. Many of them have just two or three hives, with some in the city and suburbs and a few on lifestyle blocks. We have four active members who are commercial or semi-commercial beekeepers.

The club has up to 10 hives in its apiary, which are used for teaching purposes and for supplying bees to new members. We have 12 new beekeepers this season. They attend 'hands-on' tuition for about two hours once a month in the busy season, where they can practise the hive work such as making nucs, splitting hives, requeening, feeding, hive manipulation, varroa control and supering up. Later on they will extract their own honey with the club's extractor.

This year we have two scholarship students. They started by making their own nucleus hives with a queen cell in September that have now expanded to full hives. They expect to get at least one super of honey each, at the end of February and then will be able to split them to make two hives each. Their hives stay in the club apiary for about eight months until they feel competent enough to move them to their own properties.

Meanwhile the hobbyist's town apiaries are coming along well due to the abundance of trees, shrubs and flowers being a readily available food source. We have had a fantastic honey season during January and February, with hot sunny weather and rain at the right times. Here in Wanganui city there are no water restrictions, and no water meters either, so gardeners can water lawns and gardens anytime with hand-held hoses or with sprinklers after 6 pm. That is good news for our bees.

The club hives have an abundance of food in the undergrowth in their organic orchard and all the hives are carrying from two to five honey supers. Luckily Chris Valentine donated the timber and the use of his machinery to make 22 new supers at a working bee in October, because this season we have needed them all. By the time you read this we will have extracted our honey at Canaan Apiaries, and will be in the process of requeening with splits and nucs.

We don't have a problem with varroa in the club hives because we treat two or three times a year and monitor the mite numbers with bottom varroa screens and sticky boards. Monitoring is very time consuming but the new beekeepers are keen to learn and do the work under supervision.

Many of the hobbyists practise organic methods of control very successfully, and some use FGMO cords and fogging right through the year, so we don't anticipate getting mite resistance here in the near future. However, our fingers are crossed!

Photo above: The youngest member (at right in yellow) is Joshua Valentine.

Photo: Graham Pearson.