December 2010, Volume 18 No. 11

The NEW ZEALAND BeeKeeper

Working constructively benefits all

- Disease outbreak in kiwifruit
- Biosecurity risk pathways
- Varroa surveillance field day
- All go for the honey flow

The New Zealand BeeKeeper is the official journal of the National Beekeepers' Association of New Zealand (Inc.)

ISSN 0110-6325

Printed by South City Print, PO Box 2494, Dunedin 9013, New Zealand

CHIEF EXECUTIVE OFFICER:
Daniel Paul
PO Box 10792
Wellington 6143
Ph: 04 471 6254
Fax: 04 499 0876
Email: ceo@nba.org.nz

EXECUTIVE SECRETARY:
(including NBA Membership & Journal Subscriptions)
Jessica Williams
PO Box 10792
Wellington 6143
Ph: 04 471 6254
Fax: 04 499 0876
Email: secretary@nba.org.nz

EDITORIAL/PUBLICATION:
Nancy Fithian
8A Awa Road, Miramar
Wellington 6022
Ph: 04 380 8801 Fax: 04 380 7197
Mobile: 027 238 2915
Email: editor@nba.org.nz

PUBLICATIONS COMMITTEE:
Frank Lindsay
26 Cunliffe Street
Johnsonville
Wellington 6037
Ph/Fax: 04 478 3367
Email: lindsays.apiaries@clear.net.nz

JOURNAL SUBSCRIPTIONS:
— 11 Issues —
NZ $123.00 GST inc
Australia NZ$128.00 + TT Fees NZ$25.00 and incl P&P
Rest of the world NZ$130.00 + TT Fees NZ$25.00
and incl P&P
Subject to review if postage charges increase

DEADLINES FOR ADVERTISING AND ARTICLES:
Due on the 6th of the month prior to publication
All articles/letters/photos to be with the Editor via fax, email or post to Nancy Fithian (see details above).
Please direct advertising inquiries to:
South City Print Ltd, PO Box 2494, Dunedin 9044.
Phone: 03 455 4486, Fax: 03 455 7286
Email: sales@southcityprint.co.nz

CONTACTS TO THE NEW ZEALAND BEEKEEPING INDUSTRY:
Rex Baynes, AFB NPMS Manager
PO Box 44282, Lower Hutt 5040
Email: rbaynes@ihug.co.nz

American Foulbrood Management Strategy
www.afb.org.nz

AsureQuality Limited
Ph: 0508 00 11 22
www.asurequality.com

Exotic Disease and Pest Emergency Hotline 0800 809 966
www.biosecurity.govt.nz

Contents

Front cover: Orchardists underestimate the size of a beekeeper's truck when assessing Psa hygiene requirements. Beekeepers have found that several orchards haven't provided means for disinfection of boots or vehicle tyres. Others are brilliant, with large hand-sprayer unit and sluice bucket on a pallet at the gate or in the loading bay. Some beekeepers are carrying their own means of hygiene control (i.e., 5% sodium hypochlorite solution or other product as approved for the purpose by Zespri) as the most efficient movement around orchards for feeding doesn't always include using the main gate. Photo: Fiona O'Brien.

Working constructively benefits all

By Frans Laas, NBA President

The relationship between regulators and the industries that they are responsible for can often be difficult, due to differing views on how each party views a situation.

The beekeeping industry is no exception, and over the years our relationship with MAF has often been somewhat strained.

Recently we have endeavoured to improve this relationship so that our industry and MAF could work constructively to resolve issues of the day. MAF has appointed an account manager, Katie Owen, to act as a first port of call when issues arise. This has been a positive move and we have a good working relationship with Katie.

Some quarters of the NBA think the Executive Council is being too cosy with MAF and that we should continue to maintain a belligerent relationship with them. This is not a tenable philosophy in today's world. However, the NBA will continue to take issue with any government department if it feels that the interests of our members are being negatively impacted.

We had expected tangible benefits to the industry from working constructively with MAF under this new relationship model. This expectation has been severely tested since the discovery of *Nosema ceranae* in the Coromandel. MAF's blanket refusal to undertake preliminary survey work in the South Island annoyed the industry representatives. Their reluctance to impose movement controls because it would affect kiwifruit pollination indicated that they didn't take this apparent exotic disease incursion seriously. It was obvious which industry sector got priority. The decision to abandon any more work based on opinions and untested assumption was extremely difficult to understand and the way they communicated that to industry was the final straw.

A rather terse letter jointly signed by the NBA and BIG was sent to the Minister. The response was rather interesting—and went some way to mollifying angry industry representatives. As a result, we are to meet with a group of very senior MAF officials in December to discuss a project to carry out Nosema surveillance in the South Island.

> "... this very important meeting is a chance for industry to address some high-priority issues and to make some real progress..."

At a strategic level, this very important meeting is a chance for industry to address some high-priority issues and to make some real progress in terms of how we are positioned with the regulator.

At an operational level, the meeting also recognises industry's very real concerns about the way the Nosema issue was handled, especially when you consider MAF's response to the Psa find.

One could argue that kiwifruit is a major export earner and therefore it is only to be expected that officials will respond with alacrity when there are problems in that industry. But anyone who argues that way forgets that, without bees, our kiwifruit industry would be severely impacted. As would many other of our important agri-industries.

We may be 'just beekeepers' to many, but our industry underpins much of New Zealand's agri-exports and it is critical that we are fairly appreciated for the value we add to New Zealand's GDP! We will be making these points at the December meeting with MAF.

In the meantime, it is heartening that conversations we have been having with them in recent weeks have suggested that they are willing to listen to industry concerns and they do seem genuinely interested in building a productive working relationship. This is to be greatly encouraged.

We will certainly report to industry, and the Minister, on the outcome of the December meeting.

The project to sample the South Island for the presence of *N. ceranae* with the expectation that the industry pays for a portion of the testing, is somewhat indicative of how a GIA process may transpire. Clearly there is a strong expectation from the industry that a positive outcome will occur. MAF has also indicated that it has a positive view of the use of sentinel hives at ports of entry. This is another very positive outcome that we will discuss with them further in December.

Government Industry Agreement

The saga continues. On 10 November I attended another workshop in Wellington. As these workshops continue, it is becoming apparent how the GIA could pan out for the primary industries in this country. It is quite clear that the economic theorists and bean counters in Treasury are directing the philosophical approach to the process and MAF have been tasked with selling the idea to us. I am trying to keep an open mind on whether the beekeeping industry should sign up to the GIA, but things do not look that promising. The Treasury-inspired economic theory discussion component in the last workshop session is somewhat disquieting.

Some quite complex arguments are being presented and it is difficult to discuss them in

Continued on page 6

SEASONS GREETINGS

We would like to thank all of our customers for your business over the past year and wish you good health and a bumper honey crop.

Holiday hours – we will be closing at 5.00 p.m. on Wednesday 22 December and re-opening on Monday 10 January 2011.

Apivar®

Be prepared - book your Autumn treatments now.

10 – 90 strips	$3.83 each plus G.S.T.
100 – 990 strips	$3.50 each plus G.S.T.
1000 – 4990 strips	$3.07 each plus G.S.T.
5,000 – 9,990 strips	$2.85 each plus G.S.T.
10,000 – 19,990 strips	$2.79 each plus G.S.T.
20,000 plus strips	$2.73 each plus G.S.T.

Dosage Rate: 2 Apivar strips per brood chamber.
Price includes delivery, except for Rural Delivery, which is $4.44 plus G.S.T. for each 1000 strips or part thereof. Phone or email for an order form.
Payment is required prior to delivery by cheque or electronic banking.
Prices subject to change without notice.

New Zealand Beeswax Ltd

Postal: Private Bag 6001, GERALDINE 7956, New Zealand
Factory: 44 Gladstone St South, ORARI, South Canterbury
Phone: 64 3 693 9189; Fax: 64 3 693 9780
Email: info@apivar.co.nz; Web: www.apivar.co.nz

Apivar® is the product and the registered trademark of:

Veto-pharma S.A, Véto-pharma 14, avenue du Quebec F-91945 Courtaboeuf Cedex France

BK236

Continued from page 4

any great detail in this report. I suggest that you all go into the MAF Biosecurity website and type in GIA in the search engine box. You will be enlightened.

Some of the scary aspects of the GIA are the compensation issues; public good versus industry good ratios for contribution to the scheme and the rather odious concept of "willingness" to pay. MAF admits this Treasury-inspired view of "willingness" is quite inappropriate and should really be in terms of ability to pay (or for the cynically minded, how desperate are you).

The issue of industry-funded compensation could also be problematic for most primary industries. The costs could exceed the ability of a particular industry to pay if a major eradication programme or long-term movement controls were required. Could the bee industry fund the varroa incursion responses under the GIA out of its own pocket?

One of the philosophical aspects of the GIA is the strong premise that there should be no "freeloaders". This means that all sectors that benefit from pest management programmes should contribute. The beekeeping industry is currently in the position where it funds 100% of the costs of the AFB NPMS. The Bovine TB PMS is subsidised by taxpayers and regional council rates. A member of the horticultural industry commented that under a GIA, the AFB NPMS funding model was significantly flawed as there are "freeloaders" in the system. The beneficiaries of pollination services benefited directly from having a very low incidence of AFB, as this allowed for the availability of healthy hives for pollination. It was also recognised that the beekeeping industry is intrinsically part of the whole fabric of the horticultural industry, and what was good for the bee industry was good for the rest of the primary sector, to varying degrees. We also have a unique set of issues that made a GIA agreement more difficult to construct compared with other sectors due the "freeloader" policy. Would the horticultural sector be prepared to be levied to fund the AFB NPMS?

With the summer holiday season fast approaching, the Executive Council and Secretariat wish all members a happy Christmas and hopefully a few well-earned days off. May the flow be with you.

Special delivery

The Publications Committee (Frank and Mary-Ann Lindsay, Kushla Haenen and Trevor Cullen) and journal editor Nancy Fithian wish you all a happy Christmas and New Year, and a bumper honey season.

We hope you will be able to take some time to be with your families before resuming work.

Thanks very much to our advertisers, without whom the journal would not be published—please support them! We are also grateful to everyone who has contributed articles and photos over the past year.

Finally, our thanks to the members of the Executive Council for their unflagging efforts on behalf of all NBA members, and to South City Print for a job well done again this year.

Photo: Frank Lindsay.

NBA summer office hours

The NBA office will be closed from 23 December until 17 January.

All publication orders, subscriptions and administration enquiries will be processed on the secretary's return.

All email/mail enquiries to Daniel Paul will be answered on his return.

If you have an urgent issue please contact Daniel on 021 400 993.

Please send in your membership subscriptions as soon as possible. **If you have deposited your subs already and not completed a membership form, please do so: we cannot process without it.** Membership cards for 2011 will be mailed out mid January.

Daniel, Pauline and Jess wish you all a happy festive season.

Bee Losses Survey—a reminder

Thank you to all those who have completed the survey and returned it to the national office.

The information we are gathering as a result is of great importance and will be extremely valuable in building cases to ERMA, MAF and AGCARM for re-evaluating a range of pesticides and for raising the bar in horticultural application practices. Both ERMA and MAF have expressed their interest in the results of the survey.

We appreciate this is a very busy time for you all, but if you have experienced bee losses for whatever reason we would encourage you to take the time to complete the survey and send to us.

If you would like further copies of the survey, please email pauline@nba.org.nz

A copy is also available on www.nba.org.nz

Disease outbreak in kiwifruit

By Katie Owen, Senior Adviser, Animal Response
MAF Biosecurity New Zealand

Pseudomonas syringae pv. actinidiae (Psa, also known as kiwifruit vine canker) is a bacterial disease of kiwifruit. It causes deterioration of vines and reduces the production and quality of fruit, sometimes markedly.

The bacterium was first described in Japanese kiwifruit orchards in 1989. The disease attacks several kiwifruit species, and has been reported in Italy, France, Portugal, China, Iran, Korea and Japan. In 1992 it was first recorded in Italy; however, it had relatively limited impacts until 2008 when serious losses occurred.

Psa is thought to be spread by water, wind and insects. It could also potentially be spread by movement of infected vines and orchard activities such as pruning and artificial pollination. Its incidence is linked to certain environmental conditions and human vectors. Extremely cold and wet winters followed by cool wet springs appear to be prime conditions for the disease to manifest itself.

The detection of this disease at the start of the pollination season has caused considerable uncertainty for beekeepers.

To minimise the risk of beekeepers accidentally spreading Psa, MAF and Zespri developed guidelines to ensure pollination could still take place. Orchards were divided into two groups:

1. Orchards positive for the presence of Psa were made Restricted Places under the Biosecurity Act. Key restrictions included:
   - Entry and exit by movement permit
   - Liaison between Restricted Place managers and beekeepers about hive movements and feeding
   - Minimising movements on and off
   - Clean-down of vehicles leaving infected orchards
   - 5 day stand-down of hives used in infected orchards before they can be moved into another orchard.
2. Orchards not known to have Psa present
   - No requirements specific to beekeepers
   - General obligation to not spread plant material or debris that might contain Psa when visiting orchards.

Pollen

There has been considerable comment in the media about suspected links between imported pollen and Psa. A company involved in artificial pollination imported pollen from China and Chile in 2009 and 2010. This pollen was imported in accordance with conditions set down in MAF import permits. Pollen from China was used for viability testing in a laboratory, while pollen from Chile is believed to have been applied to orchards for the first time during the flowering of Gold kiwifruit in 2010.

As the importing company is based at one of the first orchards where Psa was detected, there appeared to be an obvious connection. This was further highlighted when there were reports that a Chilean pollen sample tested positive for Psa.

As testing has progressed, the links between imported pollen and Psa have become weaker. Key points are:

- Psa has been found in a number of regions (Waikato, Hawke's Bay, Nelson, Motueka) where imported pollen has not been applied.
- Samples of pollen collected from New Zealand orchards in 2009 have tested positive for Psa, and this pre-dates any known use of imported pollen.
- A pollen sample for 2007 also tested weakly positive for Psa, suggesting Psa was present in the Bay of Plenty two years before any pollen was imported.
- Review of the Chilean pollen testing shows a high likelihood that it has been contaminated with NZ pollen, making it impossible to determine whether the Psa came from NZ or Chile.

Further testing of pollen is continuing.

The key difficulty in designing measures to manage risks associated with pollination is the lack of scientific information on Psa spread. It is not known whether artificial pollination using pollen containing Psa will infect healthy vines, or the extent to which bees can spread Psa. MAF understands that the kiwifruit industry is providing a separate report on artificial pollination to the New Zealand beekeeper for publication, so this issue is not addressed here.

Pollen and bees

While a sample of bee-collected pollen has tested positive for Psa, the role of bees in Psa spread is unknown. As bees visit flowers in the same vicinity, they could potentially play a role in local spread, but are unlikely to spread Psa over long distances. Psa bacteria could be spread in pollen, or directly on the body of a bee.

Pollen intended for use in artificial kiwifruit pollination is not collected from bees, but is harvested directly from male flowers. Permits for imported pollen specify that the pollen must be collected from hand-harvested unopened flowers. Imported pollen is not currently screened for bee diseases.

MAF actively monitors the published literature on bee diseases. We are not aware of any reports, other than recent comments reported in the New Zealand media, that would indicate a risk of transmitting bee diseases as a result of collecting pollen from flowers for pollination purposes, or of any country that considers plant-collected pollen as likely to transmit bee diseases. MAF welcomes submission of any evidence that indicates a risk of pollen transmitting bee diseases so that we can consider it with a view to adjusting import conditions if required.

Psa: implications for beekeepers

By Dennis Crowley
President, Bay of Plenty Branch Member, NBA Pollination Committee

On Friday 5 November 2010, an orchardist found some spotty-looking leaves and unhealthy vines in his Gold kiwifruit orchard and asked someone to take a look.

The rest, as they say, is history. Here's a partial timeline to Sunday, 14 November:

NOVEMBER 8: At 9.15 pm the Ministry of Agriculture, Forestry and Biosecurity (MAFBNZ) advised that their testing of the suspected vine infection has been confirmed as *Pseudomonas syringae pv actinidiae* (Psa). Not welcome news.

NOVEMBER 9: Zespri today confirmed two orchards were issued with Restricted Place Notices by MAF Biosecurity, after the Psa virus was found in the vines of a second Te Puke orchard.

NOVEMBER 10: The Minister for Biosecurity is holding meetings with kiwifruit industry representatives and growers in Te Puke this morning.
- A third Bay of Plenty kiwifruit orchard has been placed under Restricted Place Notice after symptoms of a bacterial infection were found on its vines last night.

NOVEMBER 11: MAF has decided to begin copper-spraying the worst affected orchards, after satisfying itself about any concerns.
- Copper spraying of vines is on hold due to uncertainty of its effect on vines.
- A team comprising AsureQuality Limited and industry technical staff will be selecting orchards in the Te Puke area for random testing today or tomorrow.

NOVEMBER 12: Six orchards have now been issued with Restricted Place Notices by MAF Biosecurity.
- The number of tests underway by ZESPRI and MAF is accelerating everyday and is subject to change; however, Zespri is expecting results from approximately 60 tests by the end of Sunday.
- Spraying copper on the first two confirmed orchards will go ahead.

NOVEMBER 13: Another kiwifruit orchard is confirmed as having Psa, bringing the total number infected to four.

NOVEMBER 14: A meeting today will decide whether to try to eradicate or not.

I heard about the find on the news at lunchtime Monday 8 November, and then my phone started ringing and didn't stop till Friday 5.00 pm with a workable outcome for those of us beekeepers who do kiwifruit pollination. Psa is a kiwifruit vine bacteria and doesn't affect the fruit, other plants, animals or humans. It kills off the vine only and is present in both Gold and Green kiwifruit. In Italy it destroyed a large portion of kiwifruit orchards and can have an ongoing effect on production, but with management you live with it. In Japan they use antibiotics to deal with it. We don't know if we have the same strain of Psa as they have overseas, so we don't yet know how it will react in New Zealand. But it is still a concern to the kiwifruit industry.

What did this mean for beekeepers?

Because Psa was found in Gold orchards and there was uncertainty and fear around the nature of the bacterial infection, beehives were considered a possible method for spreading Psa through the pollen and the bees. Green orchardists didn't want hives used in Gold orchards to be used in Green orchards. Orchards outside the Te Puke area didn't want hives that were used in Te Puke. Orchardists didn't want hives used in early Green orchards to be used in late Green orchards, especially early green orchards close to the infected Gold orchards.

With all this confusion, beekeepers didn't want to bring hives in to pollination at all and we didn't want to have hives quarantined in infected orchards and not able to get them out again. We had talks with Zespri, beehive auditor Neale Cameron and MAF over the week and finally came up with a workable plan so we could get on with pollination.

The first talks with Zespri were a little extreme in the extent of proposed movement controls: I could see a major problem in banning the second use of approximately 10,000 hives. We comprised on controls on just the hives in and around the infected areas, but I wasn't happy with even that number of hives.

On Wednesday I had a meeting with Richard Pentreath and Simon Limmer from Zespri and Karyn Froud from MAF. Joel Vanneste (a bacteria expert from Plant and Food Research) was also there, and Kerry Thomas (MAF's movement control person) was on speakerphone.

During that hour-long meeting with the help of Joel's explanations, we came to see that beehives weren't a big problem in spreading Psa. Bees do/could carry the Psa bacteria on them as well as the pollen. However, if hives had a spell of 4–5 days away from the orchards, the bees could be used again as their grooming would remove most, if not all of the bacteria and would have eaten some of the pollen they had gathered. This was observed in monitoring fire blight. As Joel was happy with that, Kerry Thomas was happy to relax the restrictions on hives.

Kerry passed the decision on to Paul Bolger, who had to tidy up the control permits and get it all signed off, which happened at 5.00 pm Friday 12 November.

Status as of 14 November

Try not to use hives twice. If you have to, spell them for five days and five kilometres away from kiwifruit before using them again.

If an orchard has a Restricted Place Notice placed on it—either before the bees go in or after the bees go in—you need a movement permit to bring them out again. You will need to spell them for five days away from kiwifruit before using them again.

As I write this, we had not yet learned of the outcome of the decision to eradicate or not.

A very trying pollination season

By Neil Mossop, Chairman, NBA Pollination Committee

All beekeepers know about the AFB NPMS our industry operates, but we were all about to learn about the Psa, especially those of us who do kiwifruit pollination.

I first heard about Psa from one of my orchardists, who rang on Monday 8 November when Psa was confirmed in an orchard in Te Puke. He commented that this disease is the 'foot and mouth' of the kiwifruit industry. So began many meetings and sleepless nights for kiwifruit growers. I would like to acknowledge Russell Berry, who attended open meetings with growers, Zespri and MAF, then promptly reported back to beekeepers about the events unfolding.

A member of MAF Biosecurity rang me to say they had been so busy responding to the outbreak that they had overlooked that bees would be placed into orchards in the next couple of weeks. I stated that our company had already started placing beehives. The recommendations for procedures to be followed by beekeepers were quickly formulated, some of which are mentioned in Dennis's article on the previous page and detailed below.

Hive placement:

1. Place hives in orchard at no less than 10% flowering (preferably more)
2. Avoid direct contact with vines and moving through orchard canopy
3. Avoid placing hives directly next to vines
4. Place hives in larger groups throughout orchard or
5. Place hives at gate or load out area for grower to place into orchard
6. Orchardists feed the bees to minimise vehicle and people movement in orchard

Prior to leaving an orchard:

7. Beekeeper to check for vegetation on truck and remove
8. Spray disinfectant on truck tyres and worker boots

Hive removal:

9. Remove hives at no more than 90% flowering
10. Observe the Restricted Place Notice protocols and movement controls where Psa is confirmed in an orchard.

Imported pollen and artificial pollination

At Psa meetings it came to light (for the first time to beekeepers) that pollen has been imported into New Zealand from countries such as China and Chile. This concerns us greatly as, to our knowledge and understanding, the beekeeping industry was not consulted and none of the pollen was tested for bee diseases.

MAF has stated it is safe as it is collected before flowers are opened, but who is checking that this is being done in all situations? I understand that in New Zealand, pollen is collected from bees and used for artificial pollination. Who is to say this is not done in other countries?

On 14 November, MAF Biosecurity sent out a letter cautioning growers against the use of artificial pollination as this practice is a possible vector of Psa. Many orchardists decided not to use it and have instead increased their bee numbers to compensate.

I spoke to Zespri at a meeting in August and have written articles, stating there was going to be a shortage of beehives for pollination, because some beekeepers would have severe losses due to varroa mite. I have heard from a reliable source, only a few days into pollination and before the recommendation regarding artificial pollination, that there was a large shortage of beehives for kiwifruit pollination this year. In addition, we have had a very poor spring with severe weather conditions, which have also contributed to many hive losses.

Some beekeepers have been ringing around trying to obtain beehives to fulfil their orders, but many have been unsuccessful as the beehives are simply not available. I have also heard reports of beekeepers taking hives off honey production to fulfil orders and charging fees of $220 per hive.

Maybe in the past the fruit growers have felt there are plenty of beehives, but as they have learned this year our industry is experiencing serious problems too, and beehives do not just appear at the snap of a finger.

Honey imports and *Nosema ceranae*

I am very disappointed and shocked that MAF did not do a full delimiting survey for *Nosema ceranae*. It was found in Coromandel but we do not know how extensive it is or how long it has been here. MAF appears to have considered the risks of imported pollen to be quite low for the kiwifruit industry. They also consider imported honey to be a manageable risk for bee diseases, but I do not agree.

Summing up, it has been a very trying kiwifruit pollination season, which has added considerable stress to growers, beekeepers and their bees. We are looking forward to a better honey season.

Another example of signage into a kiwifruit orchard. Photo: Fiona O'Brien.

Biosecurity risk pathways

By Byron Taylor
Apicultural Technical Advisor, AsureQuality Limited

I'm sure that most people reading this article would have heard the phrase, 'The world is getting smaller', referring to the increasing ease and affordability of travel as technology improves.

Travel that may have involved days or weeks on a ship 50 years ago can now be achieved by air in hours. Additionally, the ability to trade, not just with our close neighbours, but with virtually any country in the world, has given us access to goods that previous generations simply did not have.

With trade, however, comes an element of risk—not just commercially but also to our environment, our economy and even our health. For this reason New Zealand, like many of our trading partners, carries out a range of activities designed to protect the country from exotic pests and diseases that could affect our economy, the environment or the health of the population. These activities are known as 'biosecurity'.

How is biosecurity achieved?

Generally, for the beekeeping industry, biosecurity measures are in place to protect the environment and the economy. This protection is achieved in a variety of different ways that can also be broadly categorised into three areas:

- pre-border
- border
- post-border.

Pre-border activities happen before things get to our borders, usually in the country of origin. When dealing with freight, pre-border activities can involve requirements such as cleaning, inspection, treatments, and restrictions that are usually encompassed in Import Health Standards. When travelling, the quarantine declarations that are completed on the aeroplane or ship prior to arriving in New Zealand are a part of pre-border activities.

Border activities are those that literally happen at the border and can also include cleaning, inspection and treatments.

Post-border activities are those that happen after the border. These include quarantine as happened with imported drone semen, surveillance programs such as the Honey Bee Exotic Disease Surveillance Programme, response activities such as what happened for varroa, and control measures such as the American Foulbrood National Pest Management Strategy.

How significant are biosecurity risks to New Zealand?

New Zealand is in an enviable position from a biosecurity perspective. We have one of the lowest percentages of the world's top biosecurity pests and have no land borders. However, as with most other nations, New Zealand is a part of the world trade scene and as such, must put measures in place to minimise the biosecurity risk while not unnecessarily hindering trade.

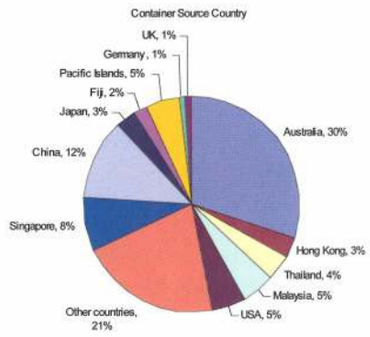
Sea containers

In 2009 nearly 600,000 containers were imported into New Zealand (over 1600 per day). Most of these containers came into North Island ports, with Auckland and Tauranga alone handling 76% of the total volume (CTF Bulletin, 2009, Issue 2). Not all containers were carrying goods (38% were empty). However, in many cases, it is the container itself that is the risk (possibly carrying a swarm of bees) rather than the goods that are within. It is somewhat sobering to realise that over 8000 of the containers imported (1.4%) did not meet the biosecurity requirements.

The most common type of contaminant found on or inside non-compliant containers was soil (38%), followed by decreasing numbers of other contaminants and pests. Contaminants and pests found included spiders (12%), insects (12%), plant products/residues (11%), seeds (7%), insect damage to cargo or packaging (3%), noncompliant wood, ants, animal products and fungal growth (all at 2%), bark, straw, reptiles, unidentified material (all at 1%) and snails (0.5%) (Container Transitional Facility Bulletin, 2009, Issue 1).

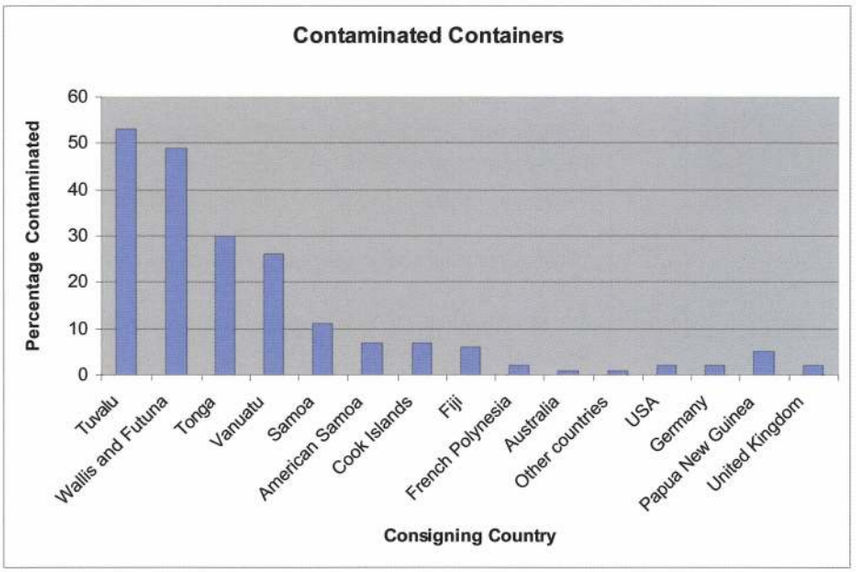
While it is not possible to get specific information about pests of the beekeeping industry from this data, the fact that almost 1000 containers had insect contamination indicates a clear risk. Additionally, over 3000 containers had soil contamination, a known vector for small hive beetle, which pupates in soil.

In addition to the contaminants found on imported goods (or the containers that carry them), risk is also influenced by where the goods came from. We know that some countries are higher biosecurity risks than others based on the pests and diseases found in that country. Below is a breakdown of where containers came from in 2008.



Source: Biosecurity New Zealand. CTF Bulletin Issue 1, March 2009.

As shown, Australia is our biggest trading partner with around 180,000 containers imported in 2008. If we couple this information with the list of non-conforming



Source: Biosecurity New Zealand. CTF Bulletin Issue 1, March 2009.

containers by source country, we can get a good picture of the risk. Above is a graphical representation of the percentage of non-conforming containers by country in 2008.

As can be seen, many of the Pacific islands have high percentages of contaminated containers; however, thankfully they generally do not have any beekeeping pests and diseases that are exotic to New Zealand. In contrast, Australia has a much lower non-compliance rate of 1% but with the volume of trade, this amounts to 1800 containers. Applying the averages for the type of contaminants (as already discussed), there would be around 650–700 containers arriving from Australia each year with soil contamination (a spread vector for small hive beetle). Approximately 200 containers may arrive from Australia with insect contamination.

Air transport

Between July 2009 and June 2010, 4.79 million air passengers and crew arrived in New Zealand. During this time 150,580 risk goods were seized, of which 13% were undeclared.

Air travel is a significant pathway for pests and diseases. In some cases it is a more effective vector due to the speed at which transfers take place. An example is the Asian Mite, *Tropilaelaps clareae,* which allegedly cannot survive long without honey bee brood as they cannot feed on adult bees. While they may struggle to survive long enough to be transported by ship to New Zealand, a flight, being a much shorter timeframe, could improve the odds of survival.

What can I do?

It is tempting to say that biosecurity is the responsibility of Biosecurity New Zealand and that they should implement systems that protect us from these risks. However, while it is true that Biosecurity New Zealand is responsible for ensuring that biosecurity risk is managed, it is in the best interest of all New Zealanders to ensure that we maintain our enviable pest and disease status. As an industry, it is in our best interest to help ensure that exotic pests and diseases of bees are kept out and that if they pass through the border, they are found at a point where something meaningful can be done about it.

So, as beekeepers we need to educate ourselves in what to look for when inspecting hives and to report anything that looks unusual. We would rather have a sample test negative than have no sample and discover a pest or disease too late.

Suggestions for further reading

Container Transitional Facility Bulletins (Biosecurity New Zealand): http://www.biosecurity.govt.nz/publications/ctf-bulletin/index.htm

Morse, R. A., & Flottum, K. (1998). *Honey bee pests, predators and diseases* (3rd. ed.). Medina, OH: A.I. Root Co.

Biosecurity New Zealand & AsureQuality Ltd. (2008). Honey Bee Exotic Diseases and Pests.

Who do you call?

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

AFB RECOGNITION COURSES

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

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

ASUREQUALITY LIMITED

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

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

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

Varroa surveillance field day in Raetihi

By Mary Allen

I feel the varroa mite (*Varroa destructor*) causes a lot more trouble in bee colonies than we give it credit for.

The mite weakens the hive, leaving it vulnerable to other diseases. In a hard climate, hives need to be in good health to survive the cold and bloodless period.

I remember being told that some bees will survive but as their hypopharyngeal glands (brood-food glands) have been damaged by varroa while in the pupa or capped stage of development, they will not be able to feed the next generation of bees adequately. I do not know how many generations this will go on for. We were also told that many bees will be deformed (which sometimes is obvious) and they will only live for half as long. (In summer a worker bee lives for about six weeks.)

Beekeepers treat hives in autumn to knock down the mites before the last brood is laid before winter. As we are not permitted to treat our hives while the honey is still on, these hives often are mite-infected at this stage. In warmer climates they can have several generations of bees, so it is not as important to avoid loss of winter bees.

Survey your beehives when removing treatments

MAF, AsureQuality Limited and Plant and Food Ruakura scientists keep saying we must survey our hives after varroa mite treatment. We have been guilty of not doing this. By this time of the year we are tired of bee work and want to get on with the other things awaiting our attention. We do some surveillance during the season (more in the early years), and if we find too many mites we take the hive out of honey production and treat it.

Field day report

On 6 November 2010 we held a field day at our farm near Raetihi. Several people had rung me beforehand to complain about losing the bees from their hives, although they still had honey on their hives. When I asked, they told me there were no dead bees. I suggested it was due to varroa but they replied, "we looked and there was no varroa on our bees. We had treated our hives".

I was suspicious that some hives were not treated on time or correctly. One possible reason for strips not working is having been left too long in the sun.

Many hobbyists who keep bees like to use organic methods. We know these methods may not work on every hive.

We had six hives in one small apiary we had forgotten to treat in the autumn for varroa. This spring three were dead and the other three very weak so we brought them home.

Most of November has been warm but it was cold and wet when we held the field day. As there was not too much rain, we were able to spend some of the time looking at beehives.

Varroa surveillance

Before the field day I asked three people to bring along their *Control of Varroa* book, by Dr. Mark Goodwin and Cliff Van Eaton, published in 2001. Now I see there is a new book titled *Control of Varroa* by Dr. Mark Goodwin and Michelle Taylor, which I would like to read and buy a copy of one day. *[Editor's note: the book Mary refers to is the 2007 revised edition of* Control of Varroa. *You can order the book through the NBA website www.nba.org.nz (click on the Publications link), or ring the NBA on 04 471 6254.]*

The surveillance methods we used were:

1. The sugar shake: We did not find any mites. We have used this method before and found mites.
2. Strip in jar: This is the method we normally use. When a hive is badly infested with mites we find them.
3. Soapy water wash: As this method kills the bees it is not the most popular method, but we found it did show up mites the most. We initially found 11 mites, and the more the bees were rolled, the more mites appeared. We also used this method after the strip method using the same hive and found nine mites, although we had found none before.
4. Andrew used an uncapping fork on drone comb: We found a couple of mites.

It was very clear that the soapy water method worked the best.

People believed that even though we could not see the mites, they were still there. We explained that most of the bees had absconded from the mite-infested hives. Imagine how you would feel if you were covered with dinner-plate-sized mites causing itching. I do not blame the bees for flying off to try and get rid of them. Unfortunately they are unable to leave them behind.




The sugar shake, strip in a jar, soapy water wash and uncapping fork. Photos supplied by Mary Allen.

Producing good long queen cells

By Frank Lindsay, NBA Life Member

We all know that a good supply of pollen is vital in producing royal jelly.

But it's not the amount of pollen stored in the frames that counts; it's the amount of pollen in the bee's gut that's important. Something I learned within the first five minutes of attending a queen-rearing course many years ago.

When grafting a bar of queen cells, mash up a frame of pollen and honey and dribble it over the top of the cell bar. The bees hanging on the queen cell cups clean it up and can't help but produce royal jelly. The honey helps with the production of wax flakes to build the cells. Steve Taber had troughs of pollen pellets placed beside the brood to give the bees access to pollen. (See *Breeding Super Bees* by Steve Taber.)

More biobombs on the way?

By Jo Salisbury, Member, Wellington Beekeepers' Association

I have been coming up to speed recently on the issue of the proposed Australian honey imports and the related 'biobombs' (diseases *P. alvei,* European Foulbrood, Israeli Acute Paralysis Virus and *Nosema ceranae*).

The more I read, the more people I talked to, the more alarmed I became. I went through a period of wondering 'is MAF Biosecurity NZ failing us?' As I heard about their (lack of) response to the Nosema ceranae incursion I moved on from that. Now I am wondering 'why is Biosecurity NZ failing us?' As I researched it, I have been trying to get to the nub of the issue.

It seems to me from listening to concerned beekeepers and the wider agricultural community that the core issue is role. Being part of the big MAF new look, Biosecurity New Zealand's actions demonstrate confusion about their role, which drives attitude, focus and behaviours and failures. You don't need to go far to figure out what their role should be: it's in their name, security. They are supposed to keep our borders secure; the appropriate attitude to a possible threat from someone in that security role is 'guilty until proven innocent'. I am hearing that there are dedicated individuals working for Biosecurity New Zealand who are trying to keep New Zealand safe, unfortunately they seem to be either poorly led or there are not enough of them on the ground.

Biosecurity New Zealand is supposed to be like the airport security before you board a plane. I want to know security have searched all my fellow passengers and their baggage rigorously for bombs and weapons before I hop on that plane. I don't care if the security people aren't friendly; in fact if they refuse to crack a smile I am reassured they have the right kind of people for the job and that they are focussed. If there was no one searching me and they asked all the nice terrorists to self-report on a well-designed little form instead of having proper security, I wouldn't be flying with that airline. I want real security with physical searches for physical threats, not paper security.

Likewise to keep this New Zealand plane in the air economically, we need to know we won't be blown up by 'biobombs' mid-flight. That means Biosecurity New Zealand needs to be focussed on their security role. I don't expect them to take on a New Zealand industry rep role. I don't expect them to take on a judge's role: 'innocent until proven guilty'; that is the role of the World Trade Organisation court. I don't expect them to be an importers' rep: 'just let it in unless the NZ industry can prove it's dangerous'. I do expect them to have a security attitude to anything coming across our borders that is 'guilty until proven innocent'. I do expect if the vector for threats is physical then the interception needs to be physical. In the words of one bee industry person, 'we need more overalls, not more white shirts'.

The MAF website suggests that they regard trade promotion as an important consideration in their ministry. To continue the above analogy, why would you make your airport security manager responsible for sales and new ventures? They don't have the background, inclination or skills for it. The security manager's only consideration should be whether that trade delegation is carrying anything dangerous.

Finally if a 'biobomb' does make it across our borders (like *Nosema ceranae*) then I expect a response similar to an airport security breach:

- alarms blaring
- for the area to be cordoned off
- for there to be people rushing about in official uniforms, armed with everything they have, focussing on eliminating the threat.

I don't expect silence, or to be told, 'we don't believe it's worth worrying about'. I find that silence more frightening than the loudest alarm.

The question in my head now is, 'how do we get Biosecurity NZ back to their core role of protecting us?':

- move them into a security organisation such as Customs?
- appoint an ombudsman over them?
- appoint a truly independent review panel on incursions (independently appointed with representatives from the industries likely to be affected)?

I don't know what the answer is, but until we solve it, I am convinced that the next 'biobomb' is not a case of 'if' but 'when'. In the meantime, how do we get a decent response from them on *Nosema ceranae* and Aussie honey imports?

Postscript

Since I first drafted this article the kiwifruit PSA biosecurity breach occurred. Two points:

1. this was another biobomb; that is another failure of our biosecurity
2. we got the 'silence' response, the kiwifruit PSA seems to be of the 'alarms blaring' variety. Why the difference?

[Editor's note: a version of this letter was published in the Dominion Post *on 17 November 2011, page B5.]*

Response from MAFBNZ

Dear Editor:

Wellington Beekeepers' Association member Jo Salisbury's recent letter asks what can be done about MAF Biosecurity New Zealand (MAF), which she sees as confused in its role and 'failing us'.

Continued on page 19

BAYVAROL®

NZ's No 1 VARROA TREATMENT

Why?

- it's highly effective (up to over 99% efficacy)
- it's the easiest to use (rigid strips - no curling)
- 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
- it can be used during the honey flow if required
- strips have a 5 year expiry date from date of manufacture

Note:
There have been **NO** confirmed reports to date in New Zealand of Varroa being resistant to Bayvarol®

We'd strongly recommend that you use Bayvarol® as one of your alternate treatments.

Bayvarol is New Zealand's most popular Varroa treatment, for **very** good reason.

Current prices as at October 2010

20 to 80 strips	$1.98 + GST each
100 to 780 strips	$1.89 + GST each
800 to 8800 strips	$1.53 + GST each
9600 plus strips	$1.48 + 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.

For any enquiries or orders, please phone 03 358 7498 or email: Bayvarol@beehealthy.co.nz

BK121

Bayvarol ® - Registered trademark of Bayer AG Germany - Approved under the Animal Products (Ancillary and Transitional Provisions) Act 1999

Ecroyd Beekeeping Supplies Ltd

Distributors, Exporters & Importers of Beekeeping Equipment
Distributors of Bee Healthy & Beeway Honey & Bee Products

www.beehealthy.co.nz

www.ecroyd.com

P.O. Box 5056 Papanui, Christchurch 8542, New Zealand • 6A Sheffield Crescent, Burnside, Christchurch
Phone: (03) 358-7498 • Fax: (03) 358-8789 • Email: ecroyd@beehealthy.co.nz

Continued from page 17

Ms Salisbury says she expects MAFBNZ to consider 'anything' crossing our borders to be 'guilty until proven innocent', and would like 'real security with physical searches for physical threats, not paper security'.

Unfortunately, physical inspection of the approximately four million passengers, around 500,000 containers and tens of millions of mail items which arrive annually in New Zealand is not possible. To do so would impose widespread delays and costs on passengers and traders, the great majority of whom pose no biosecurity risk whatsoever.

To best manage the biosecurity risks coming through the border, MAF believes we need to target our inspections to the areas of greatest risk. This approach has a number of benefits—it provides incentives for industry to improve compliance voluntarily, it places costs on those responsible for creating risks, and it enables MAF to focus more on its enforcement measures to prosecute those people intentionally trying to break New Zealand law.

Our stakeholders are also supporting our efforts to manage more risk offshore. This includes offshore inspection, co-management and offshore assurance and equivalency programmes (where MAF shares the management of biosecurity risks with industry). Examples of this include accredited persons inspecting low-risk containers on MAF's behalf, and the cleaning of sea containers offshore by the importer/exporter.

Inspection remains an important part of MAF's work. In 2008/09 MAF's staff received 13,840 notifications of possible pests and diseases, investigated 684 potential incursions, undertook 27,695 tests for suspected exotic pests and diseases affecting animals, and examined 6,824 specimens of suspect exotic pests and diseases affecting plants.

MAF cannot successfully manage biosecurity risk on its own. We need others to recognise the risks for which they are responsible, and work with them to ensure they manage those risks effectively.

With this in mind, we are always interested to know how we can improve the quality of our work, and to provide information to industry participants on how we all can manage risks most effectively. MAF welcomes the Wellington Beekeepers' Association to contact us directly to share information and any new ideas.

Regards,
Jeremy Lambert, Acting Director, Cargo Clearance MAFBNZ

AHMA responds to advertisement

By John Rawcliffe, for and on behalf of the AMHA Executive

In the November 2010 issue of the *Beekeeper* magazine, page 16, there was an advertisement about a product called Manuka Booster.

The Active Manuka Honey Association has three key concerns over this advertisement.

1. The advertisement used the trademark UMF®. This trademark is registered to the Active Manuka Honey Association and the people involved in the advertisement were not licensed to use the mark. We have acted accordingly to protect the rights of AMHA's licence holders and the company has agreed to only use NPA (non-peroxide activity) in the future.
2. A more immediate concern for the New Zealand beekeeping industry is the use of any additive, be it through feedstock or directly added to the honey, to artificially increase the level of non-peroxide activity. The addition of Methylglyoxal, DHA, sugars, any other chemical or excessive heating for any reason is clearly in breach of the Codex Alimentarius definition of honey and is classified as adulteration. AMHA has allocated resources in this year's budget to determine methods of detection for any added material. It is also working with laboratories overseas not only to test for levels of non-peroxide activity but for any adulteration as well.
3. The third concern is that advertisements of this nature can compromise the hard work that the NZ beekeeping industry does to maintain the integrity of our clean, green brand in international markets. Claims like those in this advertisement have the potential to raise doubt over the quality of New Zealand honey, and that's something we all need to avoid.

The danger to the New Zealand industry where honey can be exported in bulk and adulterated in overseas markets, or overseas honey can be adulterated and then claimed to have the same properties as New Zealand honey, is very real. Science has opened the door to some answers as to the complex nature behind Manuka honey but has far from the full picture of how it works. The snippets of information we have can allow anyone (in the case of the cited advertisement a German chemist) to imitate activity markers like Methylglyoxal in the honey. We don't want to go down the track the dairy industry went down; protection against fraudulent activity, adulteration and counterfeiting will always require a proactive approach when New Zealand honeys fetch higher retail margins than other honeys.

Honey is a natural product from the nectar of flowers; the Quality Trademark UMF® has its foundation in ensuring that honey on retail shelves is true to its origin, true to its label claim and true in its composition.

[Editor's note: The NBA does not condone the publication of material—either editorial or advertisements—that contravenes good beekeeping practice. The NBA is investigating this matter.]

API LIFE VAR ®

API LIFE (ALV) contains four essential oils: Thymol, Eucalyptus, Camphor and Menthol, absorbed on a vermiculite wafer, with slow vapor release.

The best organic option against cross-resistant varroa mites from hard chemicals strips.
The easiest, cheapest, quickest and sustainable way to treat your beehives, whether you are amateur or professional.
ALV will guarantee your beekeeping in the future.
No resistance to ALV in the world since 25 years.
Increases your honey production.
Increases your propolis production.
Kind to your queens and bees.
Residue free on all products of the beehive

We won't be beaten on prices

Our New Prices from 1st of January 2011
1 pce = 2 wafers

Up to 100 pces $5.00 + GST ($2.50 per wafer)
200 to 1900 pces $4.60 + GST ($2.30 per wafer)
2000+ pces $4.00 + GST ($2.00 per wafer)

Payment is required before delivery
Prices are subject to change without notice

For order and information
Importer and distributor
Reuben Stanley, Beegreen Ltd, 07 3332249
Beegreen@fastmail.fm

Chemicals laif, Italy, makers of Api Life var, mites control.
Api Herb, *Nosema ceranae* prevention
Api Go, for brood disease prevention
www.chemicalslaif.it

LETTERS TO THE EDITOR

Roulette

By Reuben Stanley, Beegreen Ltd.

This is a response to the President's report in the October 2010 issue on the topic of 'Varroa field days in Otago'.

The NBA president, Frans Laas, reported that the Otago varroa field days were a well-organised event but there was no balance between the hard chemicals companies and certified organic products for mites control.

One would have to question, who is putting the bullet in the NBA gun? It appears to me that the hard chemicals companies get the loudest voice, even though the NBA executives know full well that hard chemicals strips have passed their used-by date in the global beekeeping industry.

The spin-doctors are working overtime to get the last of the market in the South Island before it completely fails the beekeepers in the North Island. It is the same mite that has been exposed to these hard chemicals cocktails for 10 years. Acute phases of varroa mites here in the North are as bad now as they were when they entered New Zealand in 2000.

I have used organic mite control (ALV) for 10 years: five years overseas (where the mites are fully resistant to chemical strips) and five years in New Zealand. I have been treating hives organically with minimum hive losses. I know that organics is sustainable. So who is really playing roulette with a loaded gun? For me it is the beekeepers that are only using chemical strips.

See the front cover photo in the October issue, with chemical burn through the brood. And then they tell you that hard chemicals don't affect the bees and brood. Yeah right.

OBITUARY

Don Hoole (1936-2010)

By Terry Gavin, Trevor Cullen and Neil Stuckey

Northland Branch suffered the loss of Don Hoole recently and we are all poorer for his passing.

He took an active part in branch affairs and was active in all aspects of beekeeping in Northland. Don was a great friend and colleague at all times.

Don was brought up in back-country Northland at a tiny place called Tutamoe, when nobody had any money, travel was by horseback and an existence living was made out of farming. Don moved to other areas, still farming, and while managing a meat and wool farm he encountered the honey bee, which he and his wife Edna took a liking to, and became one of Northland's most successful beekeepers.

Comb honey caught the Hooles' imagination and they became the biggest producers in this country. Sounds simple, doesn't it, but to learn to export, with all its downfalls and difficulties, was a huge effort by them both. Hard work was the order of the day and proves the old saying that many do not recognise opportunity, as it usually comes disguised as hard work.

Don's only fault, if it can be described as one, was that he didn't ever slow down and downsize in his later years. Indeed, at an age when most people would be thinking of looking towards their retirement, Don purchased another 400 hives.

In addition to the very large crops of comb honey produced each year, there would be

the small matter of 100-odd drums of bulk honey as well. However, Edna made the observation that Don was at his happiest when he was working with the bees.

In his last weeks, Don's greatest concern was for his wife Edna and her welfare, which was typical. Don was always thinking and caring about others, and is sadly missed by us all.

Don is survived by wife Edna, daughter Caralyn and sons Kerry and Shane.


EXPORT QUALITY PACKAGING
NO SUPPLY CONTRACTS REQUIRED
Time for a fresh alternative for your packaging requirements?
Pharmapac's new range of export quality packaging for honey is now available, including the latest 2KG square jar. Our standard range of honey jars include clear and amber with white or coloured lids available. Sizes range from 250GM - 2KG.
Pharmapac is a New Zealand owned company, with more than 25 years in the business of designing, manufacturing and producing plastic packaging solutions for not only local, but an ever growing list of international clients.
Our products are all manufactured in New Zealand and no supply contracts are required.
For more information or product samples please contact us at:
Pharmapac Limited
88 Wairau Road
Glenfield
North Shore City 0627
+ 64 9 444 9631
sales@pharmapac.co.nz
100% NEW ZEALAND OWNED & OPERATED
PHARMAPAC
PPAC
NEW ZEALAND MADE
www.pharmapac.co.nz

Beekeeper burnt by meths in smoker

Some of you may have read about a Masterton beekeeper whose face was badly burnt when he used methylated spirits to light his smoker.

The 28-year-old beekeeper, Carlo Snyder, was working at a remote site for his employer, Steens Honey. Mr Snyder suffered first-degree burns to most of his face after a wind gust blew the spirits flames into his face. A colleague dialled 111 and the injured man was flown by emergency helicopter to Palmerston North Hospital for treatment on 23 October. He was discharged later that evening.

Mr Snyder was "very lucky" not to have inhaled the fumes from the methylated spirits, and that his eyes, nose and throat were not badly burnt. Nevertheless, the man said that he feared he "might not be able to work or see again", and added, "Out of 10 [for pain], it's a 10. It was very painful".

How not to get burnt

Using mentholated spirits is risky as you cannot see the flames, therefore this practice shouldn't be recommended. Most beekeepers use paper or just dry pine needles to light their smokers.

Lighting a smoker and keeping it going is the first lesson a beekeeper must master. We are now going into our dry season when all beekeepers must be very careful about how they light and use their smokers.

Source

Boyer, Seamus. "Man badly hurt as bee smoker flares." *Wairarapa Times Age* 26 October 2010: A1

The article can also be read online at http://www.times-age.co.nz/local/news/beekeepers-face-torched/3927659/

Keep hydrated!

By Frank Lindsay, NBA Life Member

Commercial beekeeping is hot work. You are doing heavy work in heavy clothing.

It's essential that you take in a litre of water every hour. Sugary drinks will not do the trick as they restrict the amount of water going into your bloodstream. A first sign of dehydration is thirst and a dry mouth, followed by a headache. At this stage it gets dangerous, particularly if you are doing heavy work. Drugs will chemically thin your blood to relieve the headache but this is not alleviating the problem of dehydration.

Another symptom of dehydration is getting muscle cramps at night. I was in Australia last month and basically was walking around with a camera. I didn't realise I was losing as much water as I was and suffered night cramps until I got my water intake under control.

I have learnt that water intake is essential. Once, when taking honey off at the end of the day, I thought, "I'll just finish taking the honey off this last apiary," when my mouth went dry, I had headache and suddenly I collapsed. I didn't notice anything wrong immediately and finished taking off the honey supers, but I'd burst a blood vessel in my eye. Within a day I had a big black spot in the middle of my vision. I left it too many weeks before getting attention and now I have an eye I can't really focus properly. Keep drinking water. If your urine is yellow, you are not drinking enough.

Reducing injuries on farms from quad bikes

By the Department of Labour

Every year about 850 people are injured on farms riding quad bikes. Five die.

This toll has prompted the Department of Labour to promote four basic safety steps:

- Ensure riders are trained/experienced enough to do the job
- Wear a helmet
- Choose the right vehicle for the job—pay close attention to what your quad bike owner's manual says about carrying passengers. Most manufacturers' manuals say passengers shouldn't be carried. Also consider the maximum towing and carrying limits for your bike
- Don't let kids ride adult quad bikes. The manufacturers of all quad bikes sold in New Zealand say children under 16 should not ride quad bikes rated over 90cc.

Farmers who don't follow these safety steps risk penalties under the Health and Safety in Employment Act if someone working on their farm is seriously injured.

For more information about quad bike safety on farms visit www.dol.govt.nz or ring 0800 209020.

Farm for Sale

Raetihi, North Island

79 hectares (196 acres)
250-300 F/D bee hives can be included
plus three-quarter depth honey supers.
Close to Mt Ruapehu and the Whanganui River.
Manuka in gullies.

Enquiries to Andrew or Mary Allen
Phone 06 385 4138
Email AandM_Allen@xtra.co.nz

Kiwi Extracts (formally Extracts NZ Ltd)

Wants your propolis
We pay top prices

Call Steve Olds
or Ian Boyer
(03) 542 3512
Email solds@extractsnz.co.nz

Kiwi Extracts
57 River Terrace Road
Brightwater, Nelson

Telford
Rural Polytechnic
Te Whare Wanaka O Puerua

COLITO SCIENTIA

Applications are invited for the following position

APICULTURE TUTOR

Responsibilities include:
- Tutoring theory and practical
- Managing and monitoring field work and work experience
- Co-ordinating students' learning
- Providing student learning support

- This is a full time position
- Located in Kaitaia
- Contract is for one year initially

If you enjoy working with young people and wish to join a specialist Polytechnic with a strong rural focus then contact:

Suzanne Carruth
Private Box 6, Balclutha
Ph: (03) 419-0300
Email: suzanne.carruth@telford.ac.nz

Applications close
Friday 3rd December 2010

Telford Rural Polytechnic is an Equal Employment Opportunity Employer

Bee suits from small to 5XL

300 grams per m2/white cotton denim
10 Pockets
Elasticised cuffs with thumb hook
Elasticised and zip ankles
Delivered to NZ mainland at $99.00

Gloves non-vented or vented white leather
Delivered to NZ mainland at $25—$29.00

Gloves non-vented or vented yellow leather
Delivered to NZ mainland at $35—$39.00

All in stock

BEEWARE LTD
Phone 021 214 0231
Email beeware@xtra.co.nz

BEWARE OF OUR GREAT PRICES

From the cradle to the hive

By Mary-Anne Thomason

Kintail Honey was established in 1947 by Dudley Ward.

Dudley operated a small operation for many years until he was joined by several of his sons and the business started expanding slowly.

One son, James, took over Kintail Honey. Dudley was an NBA president and served on the national executive for many years. James has grown and developed the business to be one of New Zealand's bigger operations. James was joined in the business by one of his sons, Damien, just a few years ago. And now on it goes as we have wee Marni, the fourth generation interested in the bees.

Damien introduced Marni to the inside of a beehive last weekend. As a wee Ward she found this very interesting, of course. Since then she has had two stings in a three-day period, when picking bees off flowers to show her mum, Marsha.

Marni holding the wee corks. Waiting for Grandpa James to show her what to do. After Grandpa demonstrated where to put the corks, Marni has a turn. Photos supplied by Mary-Anne Thomason.

The photos show Marni Ward helping Grandpa James set up mating boxes at just 16 months old. Marni's job was to put a cork in the holes.

Double centenary for Lorenzo Langstroth

Christmas Day 2010 marks the 200th anniversary of the birth of 'The Father of American Beekeeping", the Reverend Lorenzo Lorraine Langstroth.

According to Wikipedia, Rev. Langstroth "was popularly credited with discovering the 'bee space,' though this discovery had already been implemented in European hives".

Langstroth "revolutionised the beekeeping industry by using bee space in his top-opened hive".

Among his many contributions was his invention of the first movable frame beehive in America, for which he received a patent on 5 October 1852.

Langstroth made many other discoveries in beekeeping, and contributed greatly to the industrialisation of modern beekeeping. He died on October 6, 1895.

Source

Modified from information provided in Wikipedia, the free encyclopedia, http://en.wikipedia.org/wiki/Lorenzo_Langstroth. Accessed 15 August 2010.

WEATHER

La Niña locked in—a warm early summer

A moderate to strong La Niña is well-established in the tropical Pacific, and may strengthen further through the rest of 2010, says the NIWA National Climate Centre.

La Niña conditions are likely to continue through to autumn of 2011.

Early summer (November to January) temperatures are likely or very likely to be above average for this time of year across the whole country.

Rainfall is likely to be normal or below normal over the South Island, with below normal soil moisture levels and stream flows likely over much of the South Island. In the North Island, rainfall is likely to be normal or above normal, with above normal soil moisture levels and stream flows in the east, according to the Centre's latest seasonal outlook.

The National Climate Centre's seasonal outlook states that mean sea level pressures are likely to be above normal near New Zealand and to the south of the country, for the three months as a whole.

Tropical cyclone activity is likely to be near- or above-normal this season (November–May). The risk of an ex-tropical cyclone passing close to New Zealand is slightly above the long-term average. On average, at least one ex-tropical cyclone passes within 500km of New Zealand in 9 out of 10 cyclone seasons.

Overall picture

Temperature: Averaged over November–January, temperatures are likely or very likely to be above average in all districts. Sea surface temperatures are presently near normal around New Zealand, but are expected to become warmer than normal around the North Island as the season progresses.

Rainfall, soil moisture, and stream flows: Seasonal rainfall is likely to be near normal or above normal in the north and east of the North Island, near normal over the southwest North Island and the northern South Island, and normal or below normal over the rest of the South Island. Soil moistures and stream flows are likely to be above normal in the east of the North Island, near normal in the western North Island and northern South Island, and below normal over the rest of the South Island.

FROM THE COLONIES

Auckland Branch

In late October, the Auckland Beekeepers' Club and the NBA's Auckland Branch installed a sentinel hive on the Royal Balcony of the Auckland Town Hall. As reported in the September issue, the hive was given to Auckland City on 30 June as part of the second National Bee Week to raise the profile of the importance of bees to New Zealand's economy and its largest city. The sentinel hive will be paid for and maintained by the NBA's Auckland Branch, and will be carefully monitored monthly for exotic incursions.

Auckland Beekeepers' Club president Kim Kneijber is our Auckland Mayoral honorary beekeeper. She is seen here installing a nuc in one of her delightful replica Victorian hives. Kim is being observed by a fascinated media team for *Good* magazine, led by Josh Gale.

The bees are very happy with their new site on the Royal Balcony and have expanded rapidly. The honey supers are now piling up.

- Maureen Maxwell, Northern Ward Representative

Photo: Maureen Maxwell.

Hawke's Bay Branch

Things are ticking along in the Bay; the weather has been a bit off and on with more feeding required than normal. Areas with large amounts of flowering broom are swarming as usual.

Our annual disease inspection day was well attended this year and we had nine teams in the field. I haven't heard the final results but I believe that foulbrood was detected in three separate hives, which is a good result.

Don't forget that if you get any rare or unusual honeys, save some for the honey competition at the 2011 NBA conference. One I would particularly like to try is cabbage tree honey: if it tastes like it smells, it would certainly be a winner.

- John Berry, Branch President

Southern North Island Branch

Eight beekeepers from the Southern North Island Branch travelled to Victoria and New South Wales for a week to work with Australian beekeepers. They generally worked in teams of two, going to different areas to work hives.

The trip was very educational and everyone learnt a lot about Australian methods; for example, how they use OTC for EFB, and some lucky ones found small hive beetle and EFB in hives. Two members spent a day with Doug Somerville, which was very educational. The Australians use one-brood-box hives and have up to six honey flows a year, so hives can produce 150 to 200 kilograms of honey—but to our tastes some of the honey was not very nice.

The majority of the hives were on pallets: some with four hives, others with six hives. All hives face the same way, with the back ones having a 60-millimetre gap from the front ones to enable the bees to get out. Each apiary was a truckload and depending on the size of the truck, there would be 100 to 300 hives in an apiary.

Reports from each team will be published in due course.

The Wanganui Beekeepers' Club held two AFB recognition and competency courses, one on 13 November (as the Raetihi one was cancelled) and another on 21 November.

- Neil Farrer

Nelson Branch

The sun is finally shining in Nelson, bringing with it all the usual beekeeping dramas such as swarming and only average queen picking. Apple pollination went well with the weather co-operating at the right time.

With kiwifruit in a couple of weeks (bearing in mind I wrote this on 4 November), we are all flat out two-queening hives and getting them ready for that big honey flow we all hope for at this time of year.

- Gareth Ayers

Otago Branch

In the first few days of October someone flicked a switch and we went from the coldest September ever, with a million lambs lost in the south, to the sunniest October on record. November has continued warmer than normal and suddenly our bees have had the best spring in years.

The downside of this tremendous sudden build-up is keeping the bees out of the trees, but at least in a year like this there are plenty of choices. There are a lot of splits being made out there at the moment.

Meanwhile an early crop of sorts is coming in off every available flower: from thyme in Central Otago and kamahi on the coast to hawthorn in abundance seemingly everywhere. I am beginning to think that this might be our summer already!

The consistent good weather has been great but has again put us on course for a drought, especially in Central and the country north of Dunedin. As usual, we will wait and see what the summer brings.

For new beekeepers there is an AFB course and competency test in Wanaka on 5 February. If you haven't got your 'licence to drive a beehive' yet, please take up the opportunity. Safer for all on the road.

Happy swarm catching.

- Peter Sales, Branch Secretary

Stolen hives

We have had beehives stolen from alongside the Ruatiti Road, Raetihi.

I know some people think we have a lot of beehives and we will not miss two or three but each hive means a lot to us as it is our living. We are small compared to most commercial beekeepers; in fact, we do not run enough hives to make much income. Our costs seem greater than our profits; especially now we have to treat to control the varroa mite twice a year. A new unpainted hive without bees costs over $200.

Remember that hives easily seen from the road are vulnerable to theft.

- Mary Allen

It's all go for the honey flow

By Frank Lindsay, NBA Life Member

In my area the bush is flowering, producing an abundant supply of nectar and pollen. Pasture plants like dandelion and buttercup are flowering after rain.

In the bush a lot of the early sources are now flowering: hinau (*Elaeocarpus dentatus*), with its creamy bell-shaped flowers is flowering, although it lasts for only a week. Kaiwhiria (*Parsonsia heterophylla*), one of our climbing vines, is producing masses of flowering clusters along the tops of trees. Rewarewa, kamahi, and cabbage tree are all in flower while mahoe is budding. Nectar is pouring into the hives. On the warm northern slopes, manuka has just started to flower: the next crop.

Everything is now go for the honey flow. All we have to do is get the bees out of their swarming mode into gathering nectar and storing it in the supers provided.

How you set up your hive(s) will depend upon the conditions in your area. This will differ depending on whether you live in a city where there is a continuous flow, or in a rural area where the honey flow is based on short-duration pasture sources.

Demaree swarm prevention method

Beekeepers with many, sustained sources will want the queen to keep rearing brood. It's best to allow the queen room by under-supering (putting the new supers on directly above the brood nest). If you are on a short one-off flow, perhaps you should restrict the queen's laying by producing a brood break. This will get the bees that would otherwise be looking after the brood nest into the air to gather nectar.

One way of restricting the queen's laying is to Demaree the hive, using a queen excluder and a super of foundation frames. Strip the hive to the bottom board and put the brood supers on the upturned roof. Find the queen and place her, along with the frame of brood she is on, into the centre of the new super on the bottom board, with the foundation frames on each side. Then place the queen excluder on top of this super and arrange the next super so that it contains all the frames with cells of eggs and open brood. The next step is to reassemble the hive, putting the extra foundation frame in the middle of a super where it will be drawn out.

Five days later, go through the super that contained the open brood. Inspect the surface of every frame where the eggs or very young larvae were, removing any emergency queen cells that the bees have started. Generally they will be flooded with royal jelly and will extend outwards and downwards from the surface of the frame.

> "Every time you disturb a hive, depending upon what you do, it can take as little as an hour or up to three days for the bees to settle into working again."

All this depends upon finding the queen but for the new beekeeper, this can be just about impossible until they know what to look for (or unless the queen has been marked). A queen excluder can be used to narrow down the area of where to look by inserting it between the first and second super. After four days all the eggs in one super will have hatched, so it's just a matter of looking over a few frames for eggs. Once spotted, you know the queen is in that super.

Using a minimum of smoke so that the bees are not disturbed, start by removing one of the outside frames. While still holding it in your hands, look down on to the surface of the frame that has just been exposed for a bee that stands higher than the others. It will be heading down away from the light. If you see nothing, then look at the frame in your hands. Scan around the outside of the frame, working into the centre, looking for a gap in the bees covering the surface of the frame on each side and under the bottom bar of the frame. There's usually a space around the queen when she's resting, with all the attendant bees facing in towards her.

Put each frame you have inspected into another super that is sitting on a cover board so the queen, if you missed her, can't run away and hide underneath. You will generally find the queen on a frame of emerging bees and cells that already have eggs in some of them. If you still can't find the queen, set the hive up with a super of brood and bees covered with a queen excluder. With an empty super on top of the excluder, shake all the bees off the frames into the empty super, then apply a little smoke to drive most of the bees down into the lower super. The queen will now be in the mass of bees that are left. Set up the hive as described above with a frame of emerging brood in the bottom super, the rest being foundation frames. Shake the bees from the empty super and those covering the excluder into the bottom super. For good measure, invert the excluder so any bees still on the queen excluder will end up in the bottom super. (NB: this should not be done on a warm sunny day when the neighbour is out mowing the lawn—the bees can get quite tetchy.)

There are other, less disturbing ways of locating a queen. If you have two hives, a frame of brood (without the nurse bees) can be taken from one hive and placed in the other for 30 minutes with the hive closed. The queen will detect the presence of another queen on the frame and will investigate. Using as little smoke as possible, remove the frame and look for the queen.

A second method mentioned on the Blackburn Beekeepers website : when you have to get rid of an unsatisfactory queen, don't put your foot on her: put her in a matchbox and place her in the freezer.

Whenever you want to find a queen in a colony, take this old dead queen out of the box and pin her to the top of a central frame.

Close the hive. Wait 10 minutes and then open it up quietly. The queen you want to find will be there busily trying to get rid of her (dead) opponent.

Emergency queen cells developing.

Rearrange the hive as described above and check again for queen cells in five days. This time, when you reassemble the hive, set back the third super slightly on one corner to create an upper entrance. This will allow drones to fly and provide a short cut into the honey supers for the foraging bees. Add another super on top when the bees are covering the middle three frames.

If you are putting on foundation or plastic foundation frames, it's important to draw the bees up into the new super by bringing up a couple of frames that the bees have already started to store nectar in. Every week, move those frames that the bees haven't started drawing out into the centre so they are spaced one drawn, one foundation, so eventually all will be drawn out. Add another super before they have started capping the frames.

For the new beekeeper

Many new beekeepers have just got their first hive. It's an exciting addition to the family and a source of fascination and wonder. If you are like I was at that time, you will want to look in it at every opportunity—but you shouldn't. Every time you disturb a hive, depending upon what you do, it can take as little as an hour or up to three days for the bees to settle into working again. Also you have a new young queen in amongst bees from another hive—not her genetic offspring—so disturbing a new hive can result in the queen being balled. This can be a protective ball or a suffocating ball that ends with a dead queen, so for the first four weeks, curb your temptation to totally pull the hive apart.

What you should be doing is assisting the bees to grow in numbers. Provide a litre of sugar syrup (50/50 sugar to water by weight) to the hive every couple of days so the bees only need to go out for pollen. At this stage in the hive's development, it could be as little as a few hundred bees flying; the rest are maintaining colony heat and hanging in chains, producing wax flakes to build out the frames you have given them.

Every week, move the outside frame containing either brood or nectar and pollen out one space and place a foundation frame in the space. This will keep the bees building out the frames and keep the queen laying in them. Move any that contain a good proportion of pollen in the centre of the comb, out to the outside of the cluster. Pollen frames restrict the size of the brood nest, so keep moving them out.

Once the bees are covering all the frames in the super and have drawn them out, put on the next super and encourage the bees to come up into it by putting two frames of brood into the centre of the new super. Place the foundation frames from the second super near the outside frames in the first super for the bees to draw out and so the process goes on. Once the hive is into the second super, you can reduce the amount of sugar feeding as the bees will start field duties and will also be bringing in nectar.

All you want to achieve at the end of the season in February is two supers drawn out and the top super full of honey. At this time you can take a couple of frames for yourself but you may have to feed a little syrup to make up for this robbing, depending upon conditions. Some hives will go beyond this point and will perhaps draw and fill another super of honey. Others will not grow this quickly. It depends upon the position of the hive and the resources around them. The more help you give them in the first couple of months, the better off the hive will be.

Hive not supered early enough.

Setting up nucs

When helping new beekeepers to set up nucleus hives, I have noticed some have not set them up correctly. A big problem is that they are using trough top feeders and placing them into a normal super, leaving a big gap between the feeder and the bees below.

I have had to put in binder twine to be used as a ladder for the bees to climb up, but the bees have also built comb in the space on top of the frames instead of drawing out the foundation frame. The bees should be restricted to one super space. A cover, sack or any sort of board with a hole in the centre can be used over the top of the brood frames to restrict them. Or you can make a shallow super that just holds the feeder, with only a bee space below to stop the bees building brace comb. Once the bees learn where the sugar syrup is, they will continue to feed from the feeder.

Where possible work with a mentor, attend field days and get out with other beekeepers. Just when you think you know a little about beekeeping, the bees will do something that's not in the books. It will take you about five years to start to know what you are doing and then another 40 years as you will still make the odd mistake. We are very lucky that bees tolerate and work around our mistakes.

Tutu

Coming up to Christmas, start observing those tutu bushes. It's going to be a dry summer for some, so tutu could be a potential problem.

Things to do this month

Check feed, swarm control, check for failing queens, get your varroa strips out. Keep weeds down around hives. Introduce nuclei, super up your hives, fit foundation into comb honey frames and prepare the honey house equipment. First honey extraction for some. Don't forget to check for AFB before removing any honey.

Take time out once the supers are on and enjoy your family. Have a nice relaxing couple of days, confident in the knowledge that those bees are working like mad. All the best for Christmas and hopefully, a bountiful New Year.

INDEX

New Zealand BeeKeeper, Volume 18, 2010

Central Otago report	Michael Vercoe, NBA Pollination Committee	9	Oct 9
Changes in nectar flow timing	Wayne Esaias, Robert Wolfe, Joanne Nightingale, Jaime Nickeson, Peter Ma (Apimondia 2009 abstract)	8	Sep 21
COI compliance under close scrutiny	Rex Baynes, AFB NPMS Manager	8	Sep 10
Comment from the Treasurer	Glenn Kelly	1	Feb 4
Committee instrumental in pollination issues	Neil Mossop, NBA Pollination Committee Chairman	9	Oct 8
Conference programme unveiled	Nelson Branch Conference Organising Committee	4	May 18
Department of Labour publications	Department of Labour	6	Jul 23
Did you know?	Rex Baynes, AFB NPMS Manager	3	Apr 39
Disease outbreak in kiwifruit	Katie Owen, MAF Biosecurity New Zealand	11	Dec 8
Do your bees have too much space?	Kumar Vetharaniam	3	Apr 6
Do's and don'ts of AFB control	Dr Mark Goodwin	3	Apr 10
Don Hoole (1936–2010)	Terry Gavin, Trevor Cullen and Neil Stuckey	11	Dec 21
Double centenary for Lorenzo Langstroth	Modified from information provided in Wikipedia	11	Dec 26
Dr Jim Edwards receives ONZM	Publications Committee	1	Feb 13
EFB control in Australia	Brian Lancaster	7	Aug 14
EFB working party under way	EFB Working Party	3	Apr 23
Effects of EFB and OTC on beekeepers	Frank Lindsay	4	May 15
Exotic disease surveillance under way	Byron Taylor, AsureQuality Limited	4	May 10
Experiencing the charms of the Chathams	Maureen Maxwell	4	May 21
Export non-compliances: APA obligations	New Zealand Food Safety Authority	9	Oct 21
Feeding and other field work	Frank Lindsay	7	Aug 25
First reports of varroa resistance in New Zealand	Dr Mark Goodwin, Dr Oksana Borowik and Heather McBrydie, Plant & Food Research Ltd.	1	Feb 6
Frans gets chatty on Radio NZ	NBA	6	Jul 9
From the cradle to the hive	Mary-Ann Thomason	11	Dec 25
Gearing up for spring	Frank Lindsay	6	Jul 21
Getting it right when times are tight	Department of Labour	1	Feb 25
Getting to grips with the Big 6	Department of Labour website	8	Sep 15
GIA: careful consideration needed	Frans Laas, NBA President	9	Oct 4
GIA: Implications for the industry?	Frans Laas, NBA President	6	Jul 4
Government needs to rebuild trust	Frans Laas, NBA President	10	Nov 4
Handmade honey skincare	Maureen Maxwell, Executive Council member, Northern Ward	9	Oct 58
Happy 100th birthday, Claude!	Comvita press release, 18 August 2010	8	Sep 10
Hive lifter reduces back injury risk	Kushla Haenen	6	Jul 19
Honey and avocado face mask	Maureen Maxwell	10	Nov 13
Honey and tutin: sample results	Extracts from NZFSA discussion paper and *NZ Herald*	8	Sep 12
Honey Bee Exotic Disease Surveillance	Byron Taylor, AsureQuality Limited	9	Oct 12
Honey competitions in Ireland and Scotland	Maureen Maxwell	4	May 20
Honey hobby reward	Peter Watson, reprinted from *The Nelson Mail*	8	Sep 26
Honey seized from sweet yacht	NBA	6	Jul 7
Honey shows in France, Chile and Nelson	Maureen Maxwell	2	Mar 9
Impressions of Scotland	Maureen Maxwell	3	Apr 52
Industry needs to reach agreement on biosecurity responses	Frans Laas, NBA President	4	May 4
Insect inmates serve sentence	NBA	4	May 27
It's all go for the honey flow	Frank Lindsay	11	Dec 29
Japanese market in delicate balance	Steve Lyttle	10	Nov 6
Kaitaia Beekeeping Training School	Dr David Woodward, Telford Rural Polytechnic	1	Feb 9
Keep hydrated!	Frank Lindsay	11	Dec 23
Keep monitoring your varroa treatments	NBA	3	Apr 19
Keeping NZ honey's reputation sweet	Matthew Haggart, reprinted from the *Otago Daily Times*	1	Feb 25
Kiwi queens fit for a Queen	John Chapple	3	Apr 57
Kiwifruit pollination hive quality	Shane Max and Richard Pentreath, ZESPRI Tech Transfer	3	Apr 53
La Niña conditions for the rest of 2010	National Institute of Water & Atmospheric Research	8	Sep 21
La Niña intensifies; warm late spring likely	National Institute of Water & Atmospheric Research	9	Oct 57
La Niña locked in—a warm early summer	National Institute of Water & Atmospheric Research	11	Dec 26

Ladies and gentlemen, start your extractors!	Maureen Maxwell	1	Feb 28
Let's build a stronger NBA	Frans Laas, NBA President	3	Apr 4
Lifelong love of bees	NBA	2	Mar 6
Looking after the new beekeeper	Anne Hulme	5	Jun 12
Looking back on the error of my ways	Anne Hulme	6	Jul 15
MAF draws line of defence at Queenstown	Grant Bryant, reprinted from *The Southland Times*	6	Jul 6
MAF investigates *Nosema ceranae* finding	NBA Secretariat	9	Oct 15
Make this man redundant	AFB NPMS Management Agency	3	Apr 9
Making nucleus/swarm boxes	Anne Hulme	10	Nov 24
Management Agency gets tough on COI	Rex Baynes, AFB NPMS Manager	9	Oct 27
Managing hive expansion	Frank Lindsay	9	Oct 54
Managing the media	NBA	6	Jul 9
Media round-up	NBA	7	Aug 9
Meet some colouring-in competition winners	Hyslop family (Mark, Karen, Angus, Gemma & Alice)	9	Oct 21
Meet the new Executive members	Stephen Black and Kerry Gentleman	9	Oct 53
Member issues heard at Auckland meeting	Daniel Paul	3	Apr 43
Mild conditions likely to continue	National Institute of Water & Atmospheric Research	6	Jul 20
Mobile x-ray machine another MAFBNZ tool	MAF Biosecurity press release, received 11 August 2010	8	Sep 8
Move from Telford to Agribusiness Training	Dr David Woodward	9	Oct 41
National Honey Show award winners	NBA	7	Aug 11
NBA calls for one voice	Frans Laas, NBA President	7	Aug 4
NBA Pollination Committee starts work	Neil Mossop, NBA Pollination Committee Chairman	8	Sep 12
Neonicotinoid pesticides and honey bees	Barry Foster, NBA Pollination Committee	9	Oct 11
New & Small Beekeepers' Forum informative	Frank Lindsay	7	Aug 8
New honey bioactivity website online	University of Waikato	9	Oct 23
New Zealand beekeeper, apiary and hive statistics	AFB NPMS Management Agency	9	Oct 51
News from the Wanganui Beekeepers' Club	Wanganui Beekeepers' Club	2	Mar 24
NIWA's seasonal climate outlook: January–March 2010	National Institute of Water & Atmospheric Research	1	Feb 11
NZFSA clarifies bee fees information	New Zealand Food Safety Authority	3	Apr 49
Obituary: Richard Beeby	Russell Poole	2	Mar 7
On your marks … get buzzing!	NBA	3	Apr 14
Oxalic acid registered in Canada	Frank Lindsay	6	Jul 6
Paris—queen bee of the urban apiary world	Hugh Scofield (BBC News, Paris)	10	Nov 10
Permit to keep AFB material	Rex Baynes, AFB NPMS Manager	3	Apr 9
Photography competition results	Publications Committee	7	Aug 9
Preparing frames and boxes for winter	Anne Hulme	4	May 16
President's report	Frans Laas, NBA President	1	Feb 3
President's report	Frans Laas, NBA President	2	Mar 3
Preventing starvation and varroa infestation	Frank Lindsay	8	Sep 28
Producing good long queen cells	Frank Lindsay	11	Dec 16
Proposed AFB NPMS budget	AFB NPMS Management Agency	9	Oct 31
Psa: implications for beekeepers	Dennis Crowley, BOP Branch President/ NBA Pollination Committee	11	Dec 9
Queen rearing: grafting and mating nucs	Gary Jeffery	8	Sep 13
Reducing injuries on farms from quad bikes	Department of Labour	11	Dec 23
Reminder about suspect sample submissions	Frans Laas, AFB NPMS Chairman	9	Oct 29
Reminder to all beekeepers	Rex Baynes, AFB NPMS Manager	3	Apr 35
Removing 'frosting' from honey	Publications Committee	4	May 21
Report from the earthquake zone	Brian Lancaster, Canterbury Branch President	9	Oct 6
Report of BPSC meeting	Dr Jim Edwards	3	Apr 17
Report of BPSC meeting	Dr Jim Edwards	7	Aug 29
Report of BPSC meeting	Dr Jim Edwards	9	Oct 41
Review of tutin standard	Jim Sim, New Zealand Food Safety Authority	3	Apr 8
Roy Paterson Trophy 2010	NBA	7	Aug 7
School opens in Far North	Adapted by Dr David Woodward from a Te Runanga o Te Rarawa press release	3	Apr 24
Scolypopa and tutin	Publications Committee	9	Oct 23

Selecting for varroa resistance	Gary Jeffery	1	Feb	11
Selling honey at the farmers' market	Anne Hulme	9	Oct	45
SHB, varroa and thermoregulation	Marc O. Schaefer, Wolfgang Ritter, Jeff S. Pettis, Peter Neumann (Apimondia 2009 abstract)	6	Jul	12
Slimy honey and absconding bees	Marco Gonzalez, AsureQuality Limited	4	May	6
Staff at work: then and now	Publications Committee	8	Sep	17
Studying bee brains to understand ours (part 7, Australian SHB study trip report)	Allan Pimm	4	May	12
Sugar price may slump	Lucia Kassai, reprinted from Bloomberg.com	6	Jul	11
Taming your technofear: part 3	Andrew Lindsay	2	Mar	13
Taming your technofear: part 4	Andrew Lindsay	5	Jun	14
Tar deposits and cockroaches	Publications Committee	3	Apr	41
Thanks to you all!	Glenn Kelly	7	Aug	6
The British National Honey Show	Maureen Maxwell	5	Jun	18
The need to quarantine two hives	Wanganui Beekeepers' Club	3	Apr	27
The rest of the Big 6 (part 2)	Department of Labour website	10	Nov	15
The versatile mesh floor and sticky board	Anne Hulme	7	Aug	23
The win-win ecology of honeybee introductions	David W. Roubik, Rogel Villanueva (Apimondia 2009 abstract)	8	Sep	19
Then what happened?	Maggie James	8	Sep	17
These are the days of our hives	NBA	5	Jun	24
Time for reflection	Frank Lindsay	5	Jun	21
Timing varroa treatments for winter survival	Tjeerd Blacquiere, Bram Cornelissen, Lonne Gerritsen, Jozef van der Stehen (Apimondia 2009 abstract)	4	May	23
Toxic honey—the actual story	Frank Lindsay	5	Jun	8
Tracheal mites—an overview	Byron Taylor, AsureQuality Limited	1	Feb	15
Training, trout and tramping	NBA	3	Apr	50
Trees and shrubs of New Zealand: *Entelea arborescens*/Whau	Tony Lorimer	1	Feb	24
Trees and shrubs of New Zealand: *Alectryon excelsus*	Tony Lorimer	9	Oct	57
Trees and shrubs of New Zealand: *Arthropodium cirrhatum*	Tony Lorimer	6	Jul	13
Trees and shrubs of New Zealand: *Passiflora tetrandra*/Kohia	Tony Lorimer	3	Apr	41
Trees and shrubs of New Zealand: Two *Elaeocarpus* species	Tony Lorimer	8	Sep	19
Trials of a beekeeper	Frank Lindsay	3	Apr	21
Tutin compliance options standard consultation	Jim Sim, New Zealand Food Safety Authority	9	Oct	22
Tutin sampling and compositing issues	Jim Sim, New Zealand Food Safety Authority	3	Apr	8
Using a top syrup/sugar feeder	Anne Hulme	8	Sep	25
Vandals strike in Otago	Publications Committee	2	Mar	6
Varroa surveillance field day in Raetihi	Mary Allen	11	Dec	15
Visit to the Luxembourg Gardens, Paris	Maureen Maxwell	10	Nov	12
VSH honey bee breeding programme	Michelle Taylor, Mark Goodwin and Omar Martinez, Plant and Food Research	9	Oct	17
Waikato Branch bee diseases funds appeal	Russell Berry and Waikato Branch	9	Oct	37
We hope to meet you there!	Kerry Gentleman, Nelson Branch Conference Organising Committee	3	Apr	13
Weight of honeybee queens	Malgorzata Bienkowska, Beata Panasiuk, Dariusz Gerula, Pawel Wegrzynowicz (Apimondia 2009 abstract)	6	Jul	12
Western Australia Beekeepers' Conference	Frank Lindsay	5	Jun	19
What every good beekeeper should know	Dr Karyne Rogers, National Isotope Centre, GNS Science	5	Jun	11
What is correct frame spacing?	Ron Morison	4	May	17
What's up at HQ?	NBA	7	Aug	15
When things go wrong	Frank Lindsay	10	Nov	19
Which bees do which tasks?	Reprinted from Wellington Beekeepers' Association	6	Jul	11
Wintering and wasps	Frank Lindsay	3	Apr	59
Wintering well	Frank Lindsay	4	May	26
Working constructively benefits all	Frans Laas, NBA President	11	Dec	4

Erratum

The front cover of the March issue was erroneously labelled 'February 2010'. The volume and issue number of the March issue (vol. 18, no.2) are printed correctly, though, as are all page footers inside the journal.

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

Lower South Island Ward

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

East Coast Ward

Barry Foster (Vice President)
Tawari Apiaries Ltd
695 Aberdeen Road
Gisborne 4041
Ph: 06 867 4591
Fax: 06 867 4508
Mobile: 027 449 7131
Email: bjfoster@xtra.co.nz

Northern Ward

Maureen Maxwell
BeesOnline/Wild Forage Ltd
97 Taylor Road, Waimauku
Auckland 0882
Ph: 09 411 7065 (h)
Mobile: 021 956 349
Email: maureen@beesonline.co.nz

Waikato Ward

Stephen Black
Bees-R-Us
685 Uruti Road, RD48
Urenui 4378, Taranaki
Ph: 06 752 6860
Email: bees@beesrus.co.nz

Bay of Plenty Ward

Neil Mossop
Mossop's Honey
1064 State Highway 29
RD 1, Tauranga 3171
Ph: 07 543 0971
Email: neil@mossopshoney.co.nz

Southern North Island Ward

Mary-Ann Lindsay
26 Cunliffe Street
Johnsonville
Wellington 6037
Ph: 04 478 3367
Email: lindsays.apiaries@clear.net.nz

Upper South Island Ward

Kerry Gentleman
Ward-Holmes Road
RD2, Takaka
Ph: 03 525 7571
Fax: 03 525 7569
Email: frazer.kerry@clear.net.nz

Central South Island Ward

Trevor Corbett
PO Box 20
Waipara, North Canterbury 7447
Ph: 027 450 4567
Email: beeworks@xtra.co.nz

NBA Branches: First named is President/Chairperson. The second named is Secretary.

NORTHLAND

Sarah Peacey
Wairua Apiaries
76 Malone Road
RD 9, Whangarei 0179
Ph: 09 434 6344
Mobile: 021 031 9129
Email: sandspeacey@gmail.com

Simon Peacey
Wairua Apiaries
76 Malone Road
RD 9, Whangarei 0179
Ph: 09 434 6344
Mobile: 021 858 648

AUCKLAND

Ian Browning
1824 Great South Rd
RD 3, Drury 2579
Ph: 09 236 0764

Bob Russell
101 Kern Rd
RD 3, Drury 2579
Home Ph: 09 294 8656
Work Mobile: 027 284 8951
Email: bob.russell@paradise.net.nz

WAIKATO

Cameron Martin
Haumea Road
RD 1, Galatea 3079
Ph: 07 366 4804
Fax: 07 366 4804
Email: busy-bee@xtra.co.nz

Jane Lorimer
Hillcrest Apiaries 'Kahurangi-o-Papa'
RD 3, Hamilton 3283
Ph: 07 856 9625
Fax: 07 856 9241
Mobile: 027 294 6559
Email: hunnybee@wave.co.nz

BAY OF PLENTY

Dennis Crowley
PO Box 16156, Bethlehem
Tauranga 3147
Ph: 07 579 2554
Email: crowleys@slingshot.co.nz

Barbara Pimm
448 Woodlands Road
RD 2, Opotiki 3198
Ph: 07 315 7650
Email:hikuhoney@xtra.co.nz

POVERTY BAY

Don Simm
CMB35, Manutuke
Gisborne 4010
Mobile: 021 150 3041
Email: manutukeherbs@clear.net.nz

Barry Foster
695 Aberdeen Road
Gisborne 4041
Ph: 06 867 4591
Fax: 06 867 4508
Email: bjfoster@xtra.co.nz

HAWKE'S BAY

John Berry
46 Arataki Rd
Havelock North 4130
Ph: 06 877 6205
Email: jrberry@ihug.co.nz

Mary-Anne Thomason
15 Sydney Tce, Takapau
Hawkes Bay 4203
Ph: 06 855 8038
Email: kintail_honey@xtra.co.nz

SOUTHERN NORTH ISLAND

Peter Ferris
PO Box 255
Masterton 5840
Ph: 06 378 7632
Email: happy.ferris@xtra.co.nz

Frank Lindsay
26 Cunliffe Street
Johnsonville
Wellington 6037
Ph/Fax: 04 478 3367
Email: lindsays.apiaries@clear.net.nz

NELSON

Frazer Wilson
Ward-Holmes Road
RD2, Takaka
Ph: 03 525 7571
Fax: 03 525 7569
Email: frazer.kerry@clear.net.nz

Michael Wraight
15 Titoki Place
Motueka 7120
Ph/Fax: 03 528 6010
Email: wraight@xtra.co.nz

CANTERBURY

Brian Lancaster
1195 Coaltrack Road
RD 1
Christchurch 7671
Ph: 03 318 7989
Email: be.lancaster@xtra.co.nz

Linda Bray
Braesby Farm, RD 1,
Ashburton 7771
Ph/Fax: 03 308 4964
Email: birdsnbees@xtra.co.nz

OTAGO

Allen McCaw
Milburn Apiaries
RD 2, Milton 9291
South Otago
Ph: 03 417 7198
Email: amccaw@clear.net.nz

Peter Sales
"Te Ora"
RD 1, Port Chalmers
Dunedin 9081
Ph: 03 472 7220
Email: foxglove@paradise.net.nz

SOUTHLAND

Carne Clissold
Glass Brothers Ltd
RD 5
Gore 9775
Ph: 03 207 1866
Email: carne@glassbrothers.co.nz

John Stevenson
Southern Lakes Honey
PO Box 163, Te Anau 9640
Ph: 03 249 7954
Email: sl.honey@gmail.com

NBA LIBRARIANS

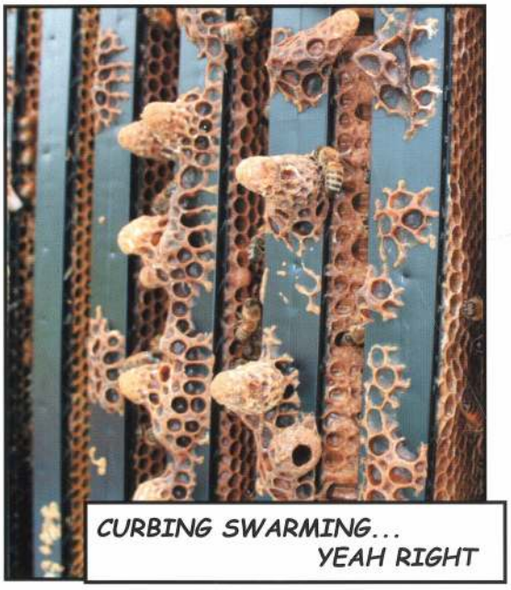
Roger and Linda Bray
Braesby Farm, RD 1, Ashburton 7771
Ph/Fax: 03 308 4964
Email: birdsnbees@xtra.co.nz

If your details have changed, please email editor@nba.org.nz and secretary@nba.org.nz so that we can update your details in the journal and the NBA website.

Photo diary of a BOP beekeeper during November

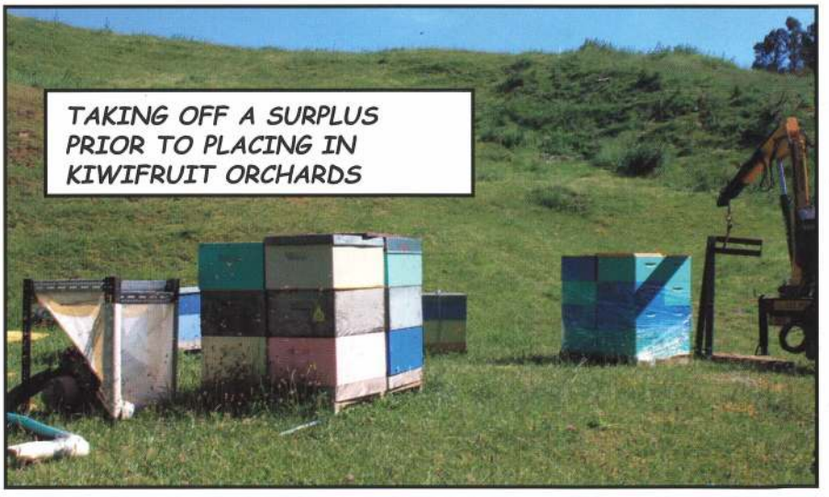
READYING POLLINATION HIVES

SHIFTING HIVES



CURBING SWARMING... YEAH RIGHT

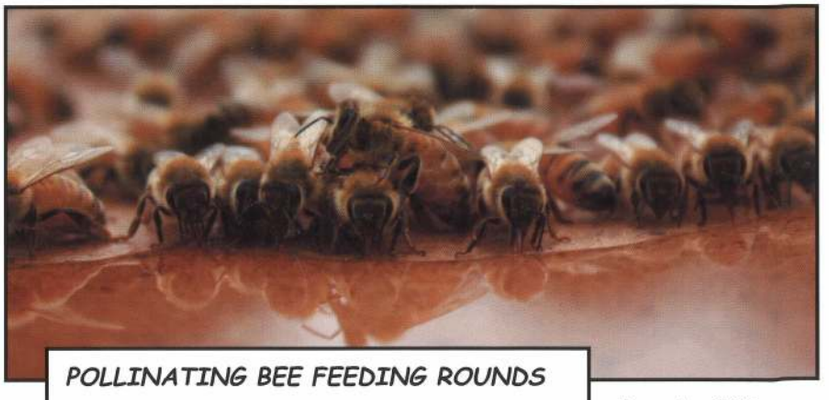
NEWLY MATED QUEENS MYSTERIOUSLY DYING?



TAKING OFF A SURPLUS PRIOR TO PLACING IN KIWIFRUIT ORCHARDS

DISINFECTING TRUCK WHEELS BETWEEN ORCHARD VISITS FOR PSA CONTROL

All photos are by Greg Wagstaff.



POLLINATING BEE FEEDING ROUNDS