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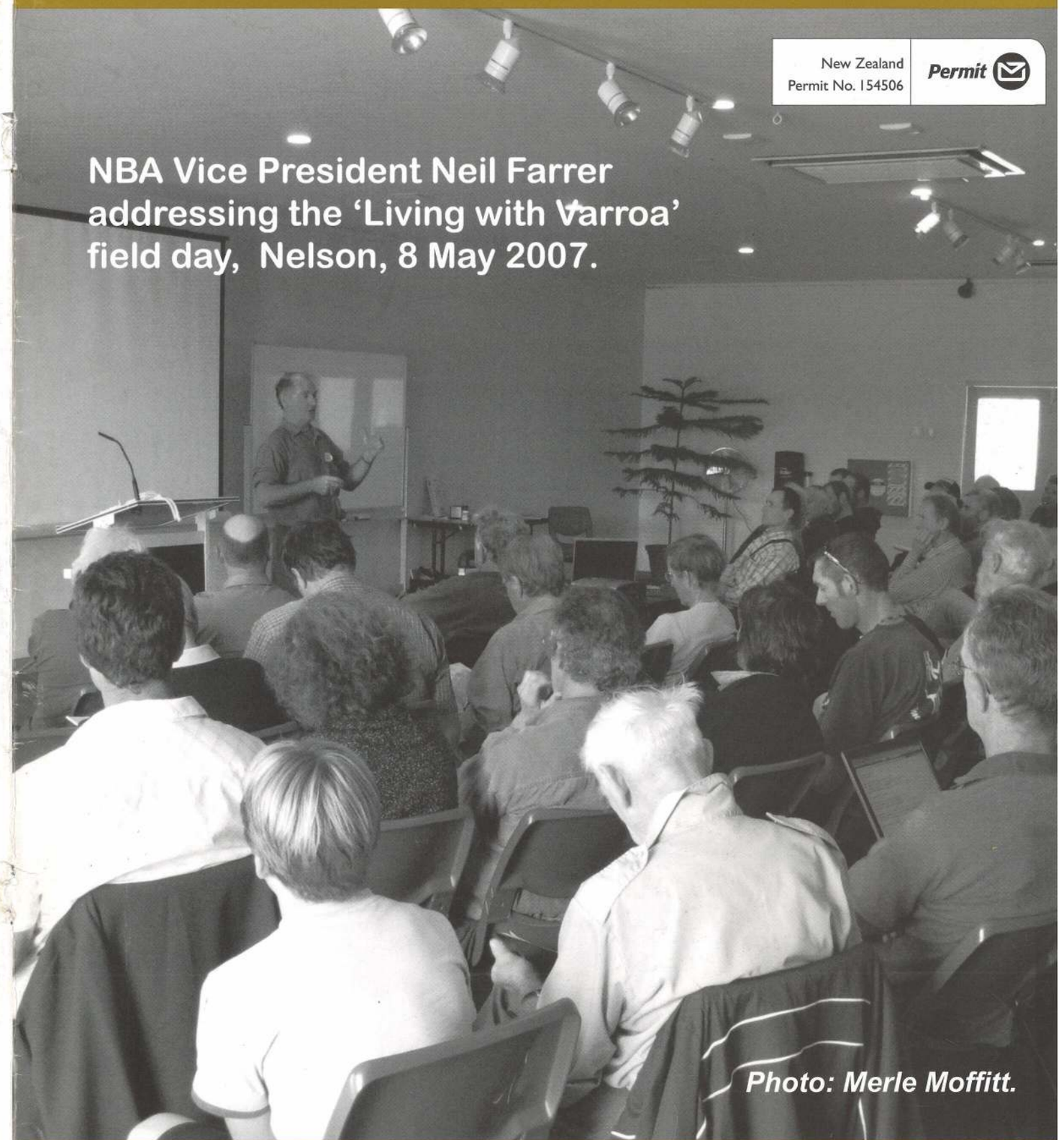

NBA Vice President Neil Farrer addressing the 'Living with Varroa' field day, Nelson, 8 May 2007.

Photo: Merle Moffitt.

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10th of each month for insertion in the following month

NB: No magazine in January

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

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

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President's Report

The beekeeping calendar year may be winding down or be finished for most; however, the Executive Council's workload seems to be increasing, maybe due to beekeepers having more time to come to meetings and raise concerns.

The Executive has been continuing to meet in the evenings twice a month to undertake NBA meetings and PMS meetings. The last two meetings have taken considerably longer than two hours. This concerns me as our costs are escalating, and with people tired after their normal day's activities, sound rational thinking may not be prevailing. We will need to address this issue in the near future to find a solution.

Research

The Sustainable Farming Fund (SFF) has finalised the selection of applications for funding to go through to the second round. Although our main varroa research application has gone through, some of the others were unsuccessful. The Executive will continue to work with the unsuccessful ones to find alternative funding, as we felt that all the applications were for necessary research that deserves our support.

The varroa research proposal undertaken by HortResearch will now require beekeeper support, both in kind and by cash. If you wish to make a contribution to this research project, please write or phone Pam or Jim Edwards to pledge your support and arrange payment.

Nelson varroa workshop

The Association has received funding from the SFF to run some workshops in the South Island, so that North Island beekeepers can share their knowledge on varroa management.

While I am sure that the Nelson workshop has been reported on in this issue, I thank the participants for being attentive and asking numerous questions: this helped to make sure that we got the necessary information to you and made the day very successful.

We are hoping that we have sufficient funds to run two to three more courses in the future as varroa is discovered further South.

Colony Collapse Disorder (CCD)

In recent weeks I have been swamped with media enquiries on what this disorder is and what it may mean for the future pollination of plants. Journalists have been asking me what causes this disorder, with theories ranging from the use of cell phones interrupting the bees' navigation, to use of insecticides, genetically modified plants and bee diseases.

Organisations around the world are collaborating to try to find out what is causing this large-scale loss of bees that is occurring through the US and in Europe.

A media release has come out from Apimondia to say that they will be scheduling a meeting while the Congress is being held in Melbourne—another compelling reason to attend this international apicultural meeting.

Conference in Dunedin

Reports from the organising committee indicate all is going well, with most of the speakers for the seminar programme organised. It promises to be an interesting few days. so I urge you to register to attend now to make the job easier for registration, catering and accommodation purposes.

I'll see you all there!!

- Jane Lorimer

2007 NBA Conference Seminar Programme 3–4 July 2007

This year's Seminar programme has four main themes and will feature a panel discussion linking them:

- bee and product research
- world trade
- varroa and bee disease management
- technology and security.

Each half-day session will feature speakers with expertise in these areas.

Bee and product research

Dr Mark Goodwin of HortResearch Ltd and Frans Laas of Betta Bees Ltd will update current beekeeping research in New Zealand. This work has focused on bee breeding, and varroa and disease resistance have been the main areas of research.

Here in Dunedin, the University of Otago has a number of departments involved in beekeeping-related science. The biochemistry and zoology departments have used bees for many years, investigating a variety of areas including neurophysiology (looking at brain function) and hormonal control of navigation. Geneticists are investigating gene expression in insects and are collaborating in the worldwide bee genome project, among other projects. Experts in these fields will give a fascinating insight into these areas of scientific investigation.

We will hear from researchers in the food sciences area of work done into nutritional values, glycaemic index (GI), and other projects, and the related marketing advantages for our honeys.

World trade

The key to profitable beekeeping in New Zealand is access to high-end world consumers. This session is devoted to the why, when and how to get your honey crop to world markets that will provide the best return. As many of you will know this is no easy task, and we will hear from those that are doing it and those that can help you do it too. Key speakers include Mike Brown from the UK National Bee Unit, Leone Evans from New Zealand Trade and Enterprise (NZTE), and Brett Hewlett, CEO of Comvita.

Varroa and bee disease management

Healthy bees? This session is devoted to how we can best maintain hive health in an ever-changing environment. We believe we have led the world in AFB disease control. Our varroa control strategy attempts to do the same but as the current CCD scourge shows, maintaining healthy colonies is a constant battle. Our speakers will focus particularly on varroa, as the evidence seems now to suggest varroa is a vector for many other ills.

The interaction of varroa and other diseases and pests therefore gets our full attention. Mike Brown is an expert in the field and along with New Zealand beekeepers and scientists, this session will keep you well informed.

Dr Benoit Siefert, the general manager and technical and regulatory affairs manager of Veto-Pharma, will give a presentation on varroa resistance: its development, characteristics, and the methods to recognise its development.

Dr Siefert has worked in animal health in France since 1990. In 2000 he joined Veto-Pharma to become Veterinarian Responsible, Delegate General Manager of this veterinary laboratory, in charge of technical matters and regulatory affairs, with a specialisation in honey bees.

Technology and security

Producing a crop is one thing: processing it, keeping it secure, and then getting it safely to the market is another. This session will address these areas of the beekeeping industry. New innovations in honey processing equipment, protection of equipment and hives, and product safety and traceability will all be covered by industry leaders and scientists involved in research and development.

Panel discussion: how will our industry respond to new exotic disease incursions?

Probably the most serious threat to the health of our bees and our livelihoods is new pest or disease incursions. Each new threat requires a planned response. For example, how would the arrival of EFB or the Small Hive Beetle affect hive management, product quality, access to world markets, your bottom line? Would a foot and mouth outbreak prevent you harvesting honey and keeping hives alive in the spring? Our panel will present some scenarios and involve you in discussion to better prepare us for these possible eventualities.

- 2007 Conference Organising Committee

GOING TO CONFERENCE IN JULY?

The Otago Branch is looking forward to seeing you in Dunedin for the Conference and AGM from 2–5 July 2007.

The registration form is in the April issue of *The New Zealand BeeKeeper.*

Don't forget to register before 15 June to avoid paying extra fees.

(See Peter Sales' Otago Branch report in 'From the colonies' on page 15 for more info on a post conference ski trip.)

Don't risk getting caught with resistant mites this spring.

Reserve your spring requirements now to ensure supply.
Payment is only required just prior to delivery.

Preserve the luxury of choice while we still have it!
Alternate your Varroa treatment to…

Apivar®

The active ingredient in Apivar® is from a different chemical family to that used in the other two strip treatments. Apivar® has now been widely used by commercial beekeepers throughout the North Island for Autumn and Spring treatments and has proved to be highly effective in NZ conditions. Apivar® will not cause any residue problems, will not harm your queens or bees and is safe and easy to use.

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VARROA AGENCY INC

Varroa Agency Incorporated News

Update from Varroa Agency Chairman Duncan Butcher

South Island Varroa Surveillance 2007

The Varroa Agency surveillance round for this year is now well underway.

Testing will be carried out over 909 apiaries and 10,035 hives. Hive testing started on the priority sites such as ports and airports and city areas, as well as along the main highways of the South Island.

Sampling kits have been sent out to 42 Authorised Persons Level 2 (AP2s), with a good number of the sticky boards already returned and sent to the laboratory for analysis. So far there have been no reports of varroa incursions from outside the varroa control line.

The Agency is also working with Biosecurity New Zealand in organising surveillance around the varroa control lines in Nelson, and in the Blenheim area. Twenty AP2s have been engaged to test 8,367 hives on 476 apiaries.

The Agency has had good industry support for the surveillance work, and thanks the beekeepers involved for their assistance with the testing.

If you are taking part in the surveillance programme, we'd ask for your continued assistance in getting the boards back to us as soon as possible, so we can test them. Thanks for your help with this.

The VAI surveillance program will be completed in September 2007, but the Biosecurity New Zealand-funded programme has to be finished by the end of May, with all boards tested and reports completed by the end of June. This will give beekeepers, and those who depend on bees for pollination, a good idea of varroa spread so they can plan accordingly.

The 2007 VAI varroa surveillance programme has been funded through levies on South Island beekeepers and South Island regional and unitary council contributions. Biosecurity New Zealand is funding the surveillance programme around the Controlled Area.

This is the last year for varroa surveillance in the South Island funded by levies. The Varroa Agency Inc. board members decided not to set a levy to carry out further varroa surveillance in 2008, following an extensive series of consultation meetings with South Island beekeepers in February. The consultation round was carried out to gauge support for the Agency to continue with its surveillance, movement control and education roles. Biosecurity New Zealand may carry out further surveillance work around the Controlled Area next season.

Just a reminder too, that bees cannot be moved outside the Nelson–Marlborough control area, and permits are required to move other at-risk goods from the control zone. Movement control restrictions still apply to transporting bees and at-risk goods from the North Island to the South.

The revised edition of *Elimination of American Foulbrood Disease without the use of Drugs – a Practical Manual for Beekeepers*, by Dr Mark Goodwin, is now available from:

Jim Edwards, 10 Nikau Lane, Manakau Heights, RD 1, Otaki 5581

NBA members $20.00 plus $1 postage

Non-members $25.00 plus $1 postage

Roy Paterson Trophy

A reminder to bring along to Conference your entries for the Roy Paterson Trophy.

Every year this is awarded to the person with the most innovative ideas or inventions for beekeeping. From the 'smoker that never goes out' to computer programs, the judges will consider all for the trophy and prizes.

Can varroa biocontrol varroa?

Kumar Vetharaniam
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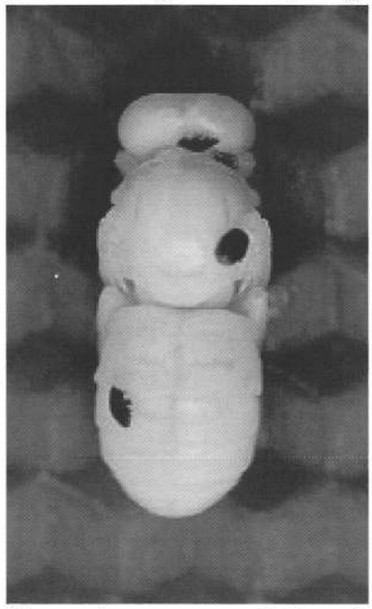
Introduction

Only two subspecies of *Varroa destructor* are known to infest European honey bees (the kinds we have in New Zealand). These are referred to as the Japan type and the Korea type[1]. The Korea type is the most widespread, and is highly destructive, causing the loss of huge numbers of colonies around the world. This is the type present in New Zealand. In contrast, some bee researchers feel that the Japan type does not destroy honey bee colonies[5,9] and in that sense is "benign". Colonies of European honey bees have been reported to have survived heavy, long-term infestation by the Japan type without treatment[6], yet showed little resistance to the Korea type[4]. This has led to the speculation that the Japan type could be useful for control of the destructive Korea type by competing with it[9]. This could provide a long-term management strategy to deal with the varroa problem.

The idea of a benign type of varroa might sound surprising. However, it is not in varroa's interests to destroy its host completely since that would mean a loss of its food source. Thus we could expect that, over a period of time without human intervention, European bees and varroa might evolve to a stage where they can co-exist together (if varroa does not drive the bees to extinction first). Since varroa has a much shorter time between generations, it is the most likely species of the two to adapt to bring about co-existence[10]. Perhaps the Japan type has already made this jump—either before or after it transferred to European bees. Could the Japan type be used to protect our bees by out-competing the Korea type? A theoretical study suggests yes, but only if the Japan type is truly benign[12]. Is the Japan type truly benign? The answer probably lies in why colonies succumb to varroa.



Varroa mites on a pupa. *Photograph courtesy of Dr Mark Goodwin, HortResearch Ltd.*

Spread of viruses by varroa

A popular hypothesis on how varroa kills colonies is that varroa spreads dangerous viruses when it feeds on the blood of adult bees and pupae[2,3]. This would occur in much the same way as mosquitoes spread diseases among humans. A low varroa population would cause little spread of viruses between the bees in a colony, and thus cause little harm. However, a large varroa population could raise the virus level in the colony to the extent that the colony is at risk of collapse. The viruses involved include Deformed Wing Virus, Chronic Paralysis Virus, and Acute Paralysis Virus[2,3]. The level of varroa needed to kill a colony would likely depend on the kinds of viruses present in the colonies, how fast they act, and the ability of the mites to spread the viruses[8]. Thus a mite population that would kill one colony may be tolerated in another because of such differences in the resident viral populations.

Transmission of viruses

For a varroa mite to transmit a virus from an infected bee to a healthy one, a number of conditions have to be satisfied, some of which require a degree of compatibility between the virus and the mite[7]. First, the mite must ingest virus-laden blood from the infected bee. Some of the consumed viral particles have to then breach the gut wall of the mite, enter the mite's tissues, and be able to survive there. Eventually the virus must then enter the salivary glands of the mite and infect the mite's saliva. Finally when the mite feeds on a healthy bee several days later, it must inject enough viral particles in its saliva to cause a new infection. The chances of this are increased if the virus can replicate within the mite's tissues. Interestingly, research has established that at least one virus, Deformed Wing Virus, replicates within the Korea type[3].

What could make the Japan type benign?

The Japan type could be benign by virtue of preventing viruses from either establishing or from replicating in its own tissues, thus reducing the amount of virus in its saliva. Alternatively, if the Japan type shows lower propensity to change its host bee, this could reduce how effectively it transmits viruses between bees. Of course, it may simply be the case that the Japan type appears to be benign when it is in fact not. This could occur if viruses spread by varroa are not present in areas where the Japan type has been established.

Potential for biocontrol of the Korea type

We carried out a mathematical modelling study that showed that the Japan type could control the Korea type by competing with it for brood rearing resources, and thus prevent it from growing to dangerous levels[12]. Additionally the two types will interbreed, but the hybrids appear to have reduced survival and/or reproduction rates[11], and this could aid in biocontrol. Our study showed that in order for control to be successful, it is best to establish large populations of the Japan type in all the colonies in an apiary. This would then protect against

Continued on page 8

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influxes of Korea type from neighbouring colonies. Benign mites would also spread to these neighbouring colonies and could slowly displace the Korea type from them.

Varroa-resistance in bees

The Japan type would have a lower population in colonies selected for increased resistance to varroa, but still could provide effective control of the Korea type. Additionally, use of a benign type of varroa might actually aid in the selection of varroa-resistant bees, since high mite populations could be allowed without threat to colonies, perhaps making it easier to compare resistance between different lines of bees.

Where to from here?

The possibility of biocontrol of using the Japan type has been suggested by modelling techniques looking at the situation from a colony perspective. Further modelling studies looking at the spread of mites, between colonies and geographically, would suggest the feasibility of this strategy at the national level. Additionally, we must answer several questions: is the Japan type truly less destructive? If not, can a benign strain of varroa be found? Can it be established in our colonies in populations large enough to be effective? Will it work in the field? To answer these questions, experimental trials must be performed. This may involve experiments on a remote, offshore island in which the Japan type is introduced into colonies of European bees to gauge the impact of this mite. If the mite proves to be benign, actual biocontrol experiments could be performed by introducing the Korea type to the island as well. Later, all going well, we may be in a position to actually use benign mites to protect colonies in the field. This could provide commercial opportunities in breeding benign mites and getting them established in large numbers in colonies. And eventually, perhaps, this may remove the need for expensive chemicals or time-consuming methods to counter one of the current banes of bee keeping.

Acknowledgements

I would like to thank Mark Goodwin for helpful discussions and comments.

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Roadside inspection guidelines for heavy vehicles

(do your own walk-around before you hit the road and save time, money and lives)

Vehicle inspection guidelines for the New Zealand Police and Land Transport New Zealand (Land Transport NZ) at roadside or weighbridge inspections will mean consistency across the country.

If you are a driver or an operator, you can do the walk-around inspection yourself and have the defects fixed BEFORE you hit the road. So, if a defect is found by the Police or Land Transport NZ, it shouldn't come as a surprise to you.

The diagram below outlines what the walk-around inspections will cover. Keeping your vehicles roadworthy is a safety issue and a legal requirement—it's not optional. YOU are responsible—both driver and operator—for ensuring your vehicle complies with all regulations and safety standards.

A 10 minute walk-around now could potentially save you time and money later, and could even save your life.

How defects are categorised

Defects are categorised in the guidelines as dangerous, serious, or moderate, depending on their safety risk. The consequences vary according to the risk to safety that any particular defect may cause.

The consequences

If a defect is found by the Police or Land Transport NZ, the consequences range from:

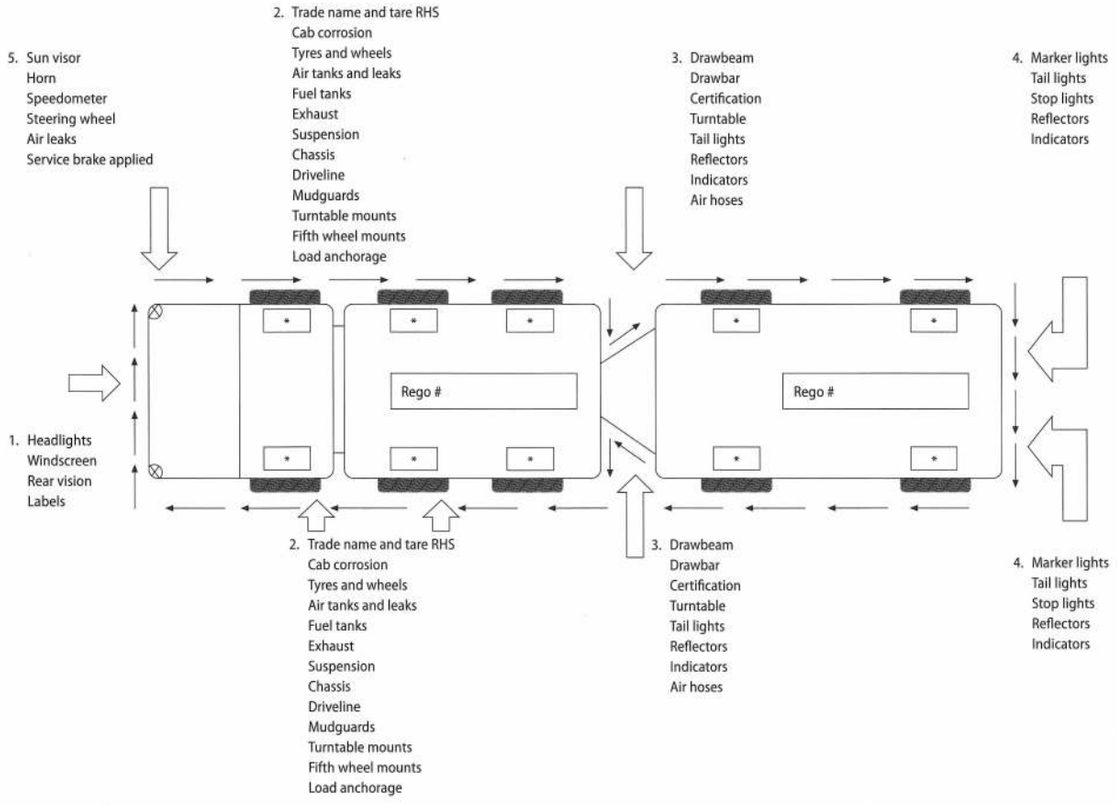
- an instruction to repair the vehicle
- being parked up
- being issued with a non-operation order (red or green)
- and/or being given an offence notice.

The Land Transport NZ website has a full list of the defects in each category and what the consequences may be if a defect is found: www.landtransport.govt.nz/vehicle-safety/defects/index.html

Note: The guidelines are a summary of some legal requirements only and should not be the only vehicle safety information upon which you rely.

See http://www.landtransport.govt.nz/publications/docs/roadside-inspection-guidelines-heavy-vehicles.pdf for the full version of the guidelines.

Visual walk-around inspection (truck and trailer)



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Milestone for the Berry twins

Believe it or not, the Berry twins have reached the ripe old age of 50 and to celebrate Karen and friends set up a 'hippy' birthday party. I don't know where everything went; but the big shed was cleaned out for the occasion, with their dolls and other childhood playthings on display. I think Mother had dug out all the photos and works of art that had ever been produced in their early days.

As befitted hunters and fishermen the supper was full of venison, pork and fish dishes. Many friends and relations entered into the spirit of the evening that was a buzzing success.

- A partygoer

ATTENTION CONFERENCE GOERS!

This year's Branch Competition: Bonnets and Sporrans!

Judges will be looking for the funniest–most outrageous! (Wearable Art is a hint.) Be sure to bring yours to the Conference Dinner.

Keynote speaker at NBA Conference 2007

Mike Brown from the United Kingdom is one of the keynote speakers at this year's conference. Mike is the current team leader and head of the United Kingdom National Bee Unit, Central Science Laboratory (CSL).

His initial background and training was in commercial beekeeping, and before joining the CSL National Bee Unit he worked in commercial beekeeping in France, Tunisia and California. In France, Mike worked for one of the largest French bee businesses, Famille Mary, who run over 2,000 colonies for honey, royal jelly and pollen production and specialise in sales of a wide range of apiculture products (including 30 different types of honey) by mail order. In Tunisia he worked on a United Nations Food and Agriculture Organisation (FAO) project for a short while, looking at various varroa control options including essential oils (his first contact with the varroa mite). In the USA, Mike helped manage a queen-rearing business in the foothills of the Sierra Nevada Mountains in California for a number of years.

Mike joined the National Bee Unit in 1988 and was responsible for laboratory diagnostics, apiary management and commercial work, moving to managing the field advisory and inspection service from 1993–2002. He became head of the integrated NBU in April 2003, with responsibility for management of the bee health programmes in England and Wales. These responsibilities encompass general apiculture and colony management, bee diseases and their diagnosis, recognition and control. The NBU provides training and extension programmes, covers regulatory affairs and import risk analysis etc., and supports research and development of the UK bee health programme.

Mike brings a wealth of knowledge with him to our conference and will talk at the seminars on a number of topics including world trade, residues in honey and their market effects, and varroa and its interaction with other bee disease. All of these topics are key issues that New Zealand beekeepers face at this time. We welcome Mike to New Zealand and look forward to his participation in this year's conference.

- Peter Sales
Organising Committee, NBA Conference 2007

From the colonies

Auckland Branch

It's back to work for me after a couple of weeks off with our first child, Matai Harrison, born on 14 April. Mum and baby are both well. He even got his first letter in the mail a couple of days ago. Pity it was from the IRD.

The last of the honey was put through the plant this week. The system is due for a good cleaning out. The honey struggled through due to spin floats and the fine filter gauze clogged with crystallised honey, as well as hardened honey at the bottom of the extractor. "Captain, she can't take much more of this," I thought to myself in a thick Scottish accent as I signalled Alex the Bulgarian to activate the pump. More honey poured into the unwilling spin float and at one stage it looked and sounded as though she was going to take off and walk across the shed floor. Honey pouring in the top end but nothing coming out the other is usually a bad sign. I grab on and try to brace it, just another 30 kgs, I say, then it'll all be over. Nope not happy, the inevitable happens and I find myself having to roll up my sleeves once again.

We had a few laughs in the shed this week; a few scenes were reminiscent of a 'Fawlty Towers' script. Today we packed the last of the season's honey, we were all pleased to see the end of it. Next week we start wintering down.

- James Harrison

Bay of Plenty Branch

Autumn is well here in the BOP and with it a slowing down of the workload. The weather has been great—lots of sunshine and little rain—so everyone has been able to get out and about to finish off all those jobs. The bees seem to be in good shape, with good stores of both pollen and honey and high bee numbers. Wasps, however, remain a constant problem throughout the district. Varroa levels are pleasing with a wide variety of treatments being used to maintain control. Although the honey season was patchy in places, overall we seemed to have fared OK, with the crop around the district average, or just below. We also seemed to have survived RMP audits, which for most of us was a new experience and not too daunting in hindsight. We are now concentrating our efforts on the field day in June, which will be a good day out for all. Conference also looms, with several of our members heading south to what I am sure will be a memorable, informative and fun event.

- Barbara Pimm

Waikato Branch

It has been a benign autumn, very little wind (until today) and only one frost recorded so far. Some trees are still holding their autumn colours, and others like apples and the cherry tree outside my office remain steadfastly green. While good for the bees and the beekeepers, it has meant the wasps have been a problem too, more noticeable than in the last few years.

Our branch AGM and a general meeting were held a couple of days ago (18 May) and the general consensus was that it has been an average to above-average honey crop. Mind you, there are some who still have honey to lift and extract. And there was unanimous agreement that there is less opportunity in these days of varroa, RMPs, bureaucracy and paperwork, for us to enjoy any time off. Beekeeping operations are more intensive now than ever before—some would say this is a good thing—but only as long as prices for honey remain buoyant.

A stalwart of our branch, Lewis Olsen, has been elected as chairman for the next twelve months. Other office bearers remain as before, assisted by a committee of eight. There was robust discussion at the general meeting following the AGM, with a number of Notices of Motion put forward. Biosecurity issues were very much to the fore. We will meet again in June to vote on all the Notices of Motion and also to elect a Ward Representative.

-Pauline Bassett

Hawke's Bay Branch

From the President

It was pleasing to see the Exotic Diseases Survey being done again this year in Hawke's Bay, but I was shocked to be shown the number of mites on the sticky board from one of my hives that had been under treatment for over six weeks. Fortunately it was just two of my mates' idea of a joke and the sticky board had come from another hive. Actually, they had me fairly well wound up and I now deeply regret that I did not cover the sticky board with some exotic-looking beetles that I had found that morning. Resistance will happen, but fortunately it hasn't happened quite yet.

I would like to take this opportunity to give a big thank you to Ron Morison who has just retired as our branch secretary. I don't know how long Ron has been doing this job but it's been longer than I have been a branch member, and he has done a wonderful job of keeping everything running smoothly and reminding me of all things that I have forgotten. Ron is still an active hobbyist beekeeper and will continue to support the branch in any way he can. Please note our new branch secretary is Mary-Anne Thomason.

- John Berry

From the Secretary

Hawke's Bay is still suffering from severe late-drought conditions: while not affecting the bees now, it could create complications next season. Southern Hawke's Bay looks lush, but Central Hawke's Bay and Hawke's Bay pasture have virtually not a blade of grass on it. As an indication of the severity, it is mid-May and the province is still under a total fire ban.

An average to above-average crop was produced in the majority of the province this year. Most beekeepers have

their hives wintered down now with their strips out, entrance guards in and good winter stores on board.

The Branch will hold an AFB recognition course and competency test on 14 July 2007 at Arataki Honey, Havelock North, 9 am. The branch also has available a one-on-one (or one-on-two) course for anyone experiencing reading or language difficulties, on a date to suit during the winter. These courses are a wonderful opportunity for any non-compliant DECA holders to become compliant. The cost of the exam paper is $25.00, while the tuition and venue is provided free of charge. Please contact me on 06 855 8038 to make arrangements and obtain the revised edition of the book *Elimination of American Foulbrood Disease Without the Use of Drugs.*

The next Branch meeting will be on 18 June (7.30pm at Arataki Honey) to discuss remits.

Finally but importantly, our Branch would like to recognise and thank the contribution made to the Branch by retiring Secretary/Treasurer Ron Morison. Ron's steady holding of the reins of the branch for approximately the last 15 years has been a wonderful asset. His contribution and input will be missed, but we hope he will continue—among other things—to be the Branch's chief photographer, sending in photos and articles to this magazine.

Recently rediscovered old minutes books show our Branch was formed in 1919, so in another 12 years we will celebrate our centenary. Through the years, the Branch has existed because of the dedication of people like Ron.

- Mary-Anne Thomason

Southern North Island Branch

We have had our Annual General Meeting—the same officers were re-elected.

Planning is under way for the expected demand for DECA courses and competency tests. The trainers will meet on 5 May to prepare for the courses and we will be referring to the new edition of the AFB Manual. We will advise the dates for the courses as soon as possible.

Most members are reporting a reasonable crop but unfortunately not the same level as expected of Manuka. There was a late Clover flow, followed by Lotus Major. Now we are wintering down and ensuring that the varroa treatment has been effective.

Hobby clubs in our area are also having AGMs and honey competitions. The variety of honeys and the very high standards that many achieve is impressive. We are fortunate in our area that there is a backbone of older commercial beekeepers who share their knowledge with the 'smaller beekeepers', helping them and their families to understand finer points of hive management and preparation of honey, either for sale or for giving to family, friends etc.

- Neil Farrer

Nelson Branch

NBA 'Living with Varroa' field day

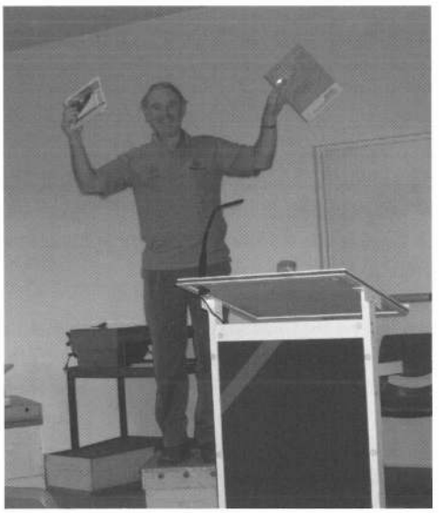
On 8 May the NBA presented their 'Living with Varroa' field day at the Tahuna Conference Centre in Nelson. Over 80 attentive beekeepers attended from as far afield as Auckland, the West Coast and Dunedin. The experiences and information presented by five North Island beekeepers was varied, informative, and thought provoking. Representatives from various aspects of the beekeeping community took part, including those who told us about their registered varroa treatment products.

The field day was funded by the Sustainable Farming Fund and we are very grateful that we will certainly benefit from the eclectic presentations related to varroa. Some of the highlights included Jane and Tony Lorimer's DVD production demonstrating their oxalic acid treatment.

Neil Farrer created a bit of steam when he demonstrated the use of his FGMO fogger. He also did his best to represent the absent Stuart Ecroyd by standing on a bee box, but somehow it just wasn't Stuart. His Reuben Stanley impersonation was perhaps a bit more credible.

Continued on page 15

Continued from page 13



Neil Farrer on bee box, trying to be as tall as Stuart Ecroyd

Barry Foster was particularly helpful to those beekeepers who are organic producers, including both hobbyist and commercial. Gerrit Hyink focused on his use of single box brood nests, a popular request that came out of the Biosecurity New Zealand workshop.

There was much interest in the sugar roll test for varroa at the end of the day, but we were once again disappointed not to see one single varroa. This was of concern to many, as the one bee sample was known to be from a varroa infested (but treated) hive and the other eight samples came from colonies in the middle of known varroa territory. We are left wondering if the Apistan test is more reliable.

Participants practising the 'sugar roll' test for varroa

Conditions in the Nelson area

Nelson has now had three months of Indian summer and the bees on the Waimea Plains are certainly using up a lot of their stores by flying around in the warm sunshine. However we have had our first frost now, so perhaps winter will arrive.

Varroa is known to be springing up around the Waimea Plains. The varroa surveillance in the Wairau Valley and Marlborough Sounds is well under way, almost a month earlier than in other years, so we are grateful as it lessens the negative impact on hives with clustered bees. We look forward to the results, which will determine if varroa has continued to spread in the Marlborough Sounds and Pelorus area and whether it has entered the Wairau from the west end. One point that was repeatedly made at the field day is that varroa is always where you don't expect it to be. Be attentive in your surveillance and find varroa before it destroys your hives. I talked to several at the field day who said that they didn't have varroa. How did they know? Because they hadn't seen it yet!

On 10 May we had a much-needed small amount of rain. Everything is very dry so perhaps this winter has arrived. Most of the beekeepers I talked with at the field day have wintered down their hives.

We had our AGM on 15 May: all current officers were re-elected.

- Merle Moffitt

Photos: Brent Kindley and Merle Moffitt

Otago Branch

Winter seems to be holding off: we've been experiencing pleasant days with few frosts. I see a few beekeepers are still harvesting the last of their honey or driving around with a feed tank. It is just as well the weather is nice, as some of us are still finishing off the varroa surveillance work, the last one we will do as a full South Island survey.

It is interesting opening up hives for the exotic survey samples too, and finding that many hives around the Dunedin area are just starting to begin breeding again. The mild conditions no doubt will be encouraging that. I am also pleased to report that there are some beautifully kept hobbyist hives around town: many seem to have made a box or two this season of delicious bush and Manuka honey. Well, you have to lick a taste once in a while, don't you? Avoiding those bees while you lift your veil is the challenge.

I have come across one yard that looks like a bomb site, with rotting hives and gear everywhere. It is owned by someone you couldn't call a beekeeper. I daresay, looking on the bright side, that varroa will eventually take care of him. At least it was registered!

This autumn, Otago has had one or two moderate AFB outbreaks. This is a bit disappointing because AFB really is few and far between now. A year or two of zero outbreaks before varroa arrives would have been nice.

Conference update

The Conference crew is pretty happy with progress and you are assured of a great Seminar program too. We've had only a few starters so far for a post-Conference ski trip. We need a minimum of 15 to get a group discount. It will be a bit tricky as this weekend falls during the school holidays, and accommodation is already tight if we want to spend a night in Central Otago. The good news is the fields intend to be open by then if snowfalls allow.

So we will see you in the South in a few weeks maybe.

- Peter Sales

About the Apiary

The weather has changed during the last month and now we seem to be having more rainy than sunny days. There's still a fair bit of bee activity during the warmer days, visiting Lacebark *(Hoheria sexstylosa)* and early-flowering Spanish Heath *(Erica lusitanica)*.

I was a bit late getting strips into some apiaries so have seen a bit of PMS and a few dead hives, mostly due to wasps: they attack in numbers and overwhelm the bees. I have had to close entrances right down so the bees have a chance to defend their hives but when it's cool, the wasps seem to be able to get in and out without much trouble. Poisoning them is a slow job but effective. Here's hoping for a cold snap to knock off the wasp nests and end this problem.

On a visit to my organic apiary (two hives servicing a small organic farm), the first thing I noticed was a queen on the landing board surrounded by a few bees. She was still of a good length, suggesting she'd been laying, so I cupped her in my hands and blew my breath over her to warm her up. She made no real response and seemed to be crippled on one side, perhaps signalling the changing of the guard where the daughter queen had driven out the old queen.

The bees weren't agitated by a little smoke (bees will fan and roar when they are queenless), but there weren't any eggs in sight and the brood was just emerging, indicating no eggs had been laid for a few weeks.

If it wasn't a new queen, perhaps the old queen had succumbed to some sort of problem, but in the meantime I've marked the hive for another inspection. If there still isn't any brood (we have brood in the winter), I'll slowly introduce a queen from a nuc into the hive. This queen will stay in a protected queen cage for about a week until the older field bees have got used to her pheromone level. Otherwise these older bees will send her from the hive despite being queenless (if that's the problem).

Replacing a queen that has started to become a drone layer is easy at this time of year. Queens are easy to find as they are usually on the last couple of frames of brood the bees are maintaining. Hold the frame that the old queen is on and remove her (I usually pick her up and squash her). Then place the frame flat on the brood super and find the new queen in the nuc. Coax her onto the frame from the brood box by driving her slowly down with your finger, or if you are experienced, just pick her up and put her down where the old queen was. Watch the reaction of the bees on the frame for a couple of minutes. If they surround her and begin feeding her, she is accepted. If they attack her, lift her off again and cage her. Then have another look in the hive for the second queen. If you don't find her, put the caged queen into the hive so she is slowly released through candy. If you don't have any candy made up, a marshmallow or a jellybean will do.

Extracting, or attempting to ...

Extracting came to a standstill last month when the electric boiler started hissing steam as it wasn't turning the power off when it got up to pressure. Being a technician for 30 years I checked boilers, air conditioning systems and batteries in telephone exchanges. Most of these old systems worked through mechanical switching in those days (we went electronic when a selenium rectifier was replaced with a new type of diode in the 1970s), and so I thought I'd have a look at it. I metered all the connections, which worked OK, so the problem was mechanical, probably coming from the pressure switch. It was only 30 years old but had done good service so I looked around for a replacement.

It wasn't until I started to connect the pipes to the new replacement switch that I noticed the small hole in the old pressure switch housing was blocked with something. Curious, I cleaned it out with a needle and behold: water came out the hole. I wondered if that might have been the problem all along so reconnected it and presto, the switch worked. So it's working again and I have a spare that might come in handy in another 30 years' time. (Now I know what some of you are thinking, but I get my electrical gear checked out by an electrician so everything is compliant.)

My other problem was that I was in the middle of doing a small batch of Pohutukawa that took only a few days to go solid. It took an afternoon to strip everything, heat and clean out the pipes so I could start again. In the meantime the Pohutukawa in the frames had gone solid. They will need quite a few days of gentle heat to soften and by using a pricker, perhaps I might get half the honey out of the frames. If not,

the hives these supers came from will have a lot of extra feed honey this winter.

Preparing for spring

Winter days are also days for planning and renewal. When it's wet outside there are always plenty of other jobs to do inside, although I did take a week off and came back with some venison for the freezer. *[Editor's note: Frank's hunting trip was the subject of a two-page article in the* Dominion Post, *Saturday 5 May 2007, pages E6–E7.]*

I mostly use escape boards to clear bees from honey supers, which work well as soon as there's a little chill at night, but the manufactured ones with hardboard centres don't seem to stand up to the rigours of commercial beekeeping. They tend to break when full boxes of honey fall on them.

In my travels I visit lots of beekeepers, picking up ideas and tips, some of which I'd forgotten over the years. At one Wanganui beekeeper's establishment I wondered what the stack of thick plywood was for and was shown his escape boards. The rims were at least 2 cm thick and durable.

During part of my boiler down time woes I have been making new bee escapes out of salvaged timber and ply I'd swapped for sheets of hardboard. These boards use plastic circular escapes, which let the bees out and when held up to the light, you can see if they are blocked. All it takes is a little air (a quick blow) to clear them. The escapes will allow bees back into the supers above if left on too long, but mostly they are very efficient and will clear out all but a few bees overnight.

Another problem with escapes is that you must have well-fitting gear. I still have quite a lot of supers with additional ventilation in them and have used rolls of cloth tape to seal them up. Occasionally I miss a crack and find on my return next day that bees are starting to rob the undefended supers.

I have been replacing my supers as money permits, a hundred or more supers a year, but the downside to cleaning up your gear is that propolis production drops off. No longer am I able to pull large chunks of propolis off the end bars below on these extra entrances. But the advantages are that I'm working with nice new gear, and the bees now fill the whole comb with honey instead of leaving a ring of empty cells where the wind blows into the supers.

So get some planning in during the winter. Look at your production records for each apiary and weed out those that don't perform, or have hives continuously knocked over by stock (or is it vandalism?). Plan a replacement programme and set priorities. If you are like me, you will at least complete half what you plan before spring work starts in earnest again. And take a holiday as part of or after your trip south to conference. There are plenty of places that are warm in winter, even if it's just to soak in a hot pool. (It's nice to sit in a hot pool in Hanmer with the snow falling on your head: it's only cold when you get out.)

Things to do this month

Render down cappings and old combs. Make up new equipment for the coming season. Check the effectiveness of your mite treatments.

- Frank Lindsay

Approved code of practice for cranes

About this time last year, I was fossicking around on the OSH website, where I stumbled on the Approved Code of Practice for Cranes (ACOPC). When you think of a crane, it conjures up a picture of tall buildings being put together on the Auckland landscape, and occasionally something you may pass on the open road, but in reality the following is what I found tucked away in the definitions of the ACOPC.

Crane

1. means a powered device, powered in both the vertical and horizontal directions that can, by the movement of the whole device or of its boom, jib, trolley or other such part, reposition or move suspended loads both vertically and horizontally
2. includes all parts of the crane down to and including the hook or load-handling device, and all ropes, wires, chains or other devices used to move the hook or device
3. does not include lifting tackle that is not an integral part of the crane.

Looking through the Parts of the CoP, you feel that the crane categories don't really apply to us; however, as so happens in many areas of legislation tucked away, in this case Part 13 is the one that could catch you out.

"Part 13: Vehicle-mounted truck loader cranes (including knuckle boom and telescopic/straight boom)

13.1 General

Vehicle-mounted truck loader cranes (both new and second-hand and including knuckle boom and telescopic/straight boom) require design verification by an inspection body in accordance with the PECPR Regulations *[Pressure Equipment, Cranes, and Passenger Ropeways Regulations 1999]* and parts 2 and 5 of this code, prior to certification for use within New Zealand. Parts 3, 4, 6, 7 and 8 of this code also apply.

A supplier, manufacturer or controller of such a crane shall provide the following documentation, as in part 5.2, to the inspection body carrying out the design verification. Where crane documentation is not available, the New Zealand agent for the crane manufacturer may be able to provide the documentation if the crane serial number is quoted.

(1) For full details of the safe load indicators, radius indicators and so on that are required on the various crane types, refer to Appendix A.

13.2 Additional requirements

In addition to the requirements in part 13.1 and part 3: Operational requirements for controllers, the following are also required:

(1) Suppliers shall provide:
- (a) manufacturer's rating chart
- (b) manufacturer's recommended installation instructions
- (c) operating and maintenance instructions
- (d) hook certificate
- (e) hook block, sheave block and wire rope certificates, where appropriate.

(2) Before putting a crane into service, there shall be:
- (a) a certificate from a Land Transport New Zealand-approved HVEC engineer to certify that the crane installation/vehicle modification complies with the crane/vehicle manufacturer's recommendations as specified in Land Transport Rule: *Heavy Vehicles 2004* (Rule 31002). This includes an assessment of suitability of the mounting to include crane loading. Note: This Rule should be read in conjunction with Land Transport Rule: *Heavy Vehicles Amendment 2005.*
- (b) a certificate of inspection from an inspection body before first use as a crane
- (c) a stability test demonstrating the stability of the vehicle with the crane at a maximum load for any given radius, which must be carried out with the crane level and on level ground. Note: If a wheel does lift off the ground, a further test with a 10% overload may be carried out at 90° to the tipping line. If the vehicle remains with up to half the wheels in any one axle set off the ground and at least one braked wheel is loaded, the unit is deemed to be stable. (This is to clarify the definition for

a dual wheel axle and a tandem axle set found on many trucks.) Note that trucks fitted with only a drive-line park brake will not have a braked wheel when one drive wheel is off the ground.

(d) a note in the form of an approved load chart on the crane where it is visible to the operator describing any area of potential instability and operating limitations of the crane.

(3) Annual visual and operational inspections by an equipment inspector are required to assess the general condition for continued safe operation and certification. This should cover (but is not limited to):

(a) all boom and extension pins and bushes
(b) stabiliser beams, pins and leg operation. A vehicle fitted with outriggers must either have a locking device that is able to be seen in a locked position when the outriggers are retracted, or a visual or audible alarm for the driver to be warned that the outriggers are not fully retracted
(c) extension cylinder guide blocks
(d) control rods and pins
(e) hook pin and safety latch
(f) valve bank mounting
(g) tank mounting
(h) hydraulic hoses
(i) column or slew ring
(j) crane to truck chassis mounting
(k) demount mechanism on truck and crane
(l) crane base stop blocks fitted to both sides of main beam
(m) chassis spacer fitted on mounting bolts
(n) mounting bolts tight with lock nut or nylock
(o) load radius rating chart fitted
(p) parking bolt and parking mount
(q) operation of overload protection systems and load holding valves
(r) electrical emergency stop and radio compliance
(s) crane documentation including certified rating sheets marked with crane unique identifier and serial number
(t) maintenance and repair records including any new rope certificate
(u) general condition of crane structure, fastenings and chassis
(v) coatings condition (paint etc.), markings and labels
(w) condition of welded joints
(x) winch, sheaves, hook block and bearings (where fitted)
(y) condition of hoist ropes (where fitted)
(z) rope anchors and dead ends (where fitted)
(aa) hook block and swivel bearing
(bb) jib
(cc) manual extension
(dd) remote/radio controls to be tested, where applicable

(4) Up to 15-tonne metre cranes shall:

(a) comply with 13.1, 13.2(1) and 13.2(2) above
(b) be fitted with load holding valves on main, outer and extension booms
(c) be fitted with pilot-controlled double check valve on each stabiliser jack
(d) have an annual inspection carried out by an equipment inspector.

(5) Over 15-tonne metre cranes: *[see Code of Practice]*

(6) All certificates of inspection must be placed and visible in the vehicle cab.

(7) When moving on the road, the crane boom must be either located in or on the parking mount provided, or located or locked in a position such that the boom cannot move outside the vehicle dimensions.

(8) If, at any time, a vehicle-mounted truck loader crane has a device fitted for the purpose of lifting personnel, it must also comply with the *Approved Code of Practice for Elevated Work Platforms*. **Note:** "Tonne metre capacity" is the lifting capacity in tonnes multiplied by the minimum radius."

There is a minimum 12-monthly check requirement. Another definition in the CoP is the letters (SWL), as seen on the back of the loader:

Safe working load (SWL): for gantry type cranes, means the maximum load the crane can lift and, for all other cranes, means the maximum load at minimum radius. The crane rating sheet shows the maximum load at other radii.

Another term to look out for is **"Controller"**. In our case it's the owner of the business; however, it could also be the lessee of the equipment, etc. The controller of a crane is responsible for the safe testing, operation, inspection, repair and maintenance of that crane.

Every controller of a crane shall ensure that:

(1) operators carry out daily and weekly checks to enable the crane to be operated safely, according to the controller's written procedures based on the manufacturer's instructions, and that the controller can demonstrate that the checks have been carried out.

Inspection and certification

Every controller of a crane shall ensure that:

(1) cranes are inspected by an equipment inspector and issued with a certificate of inspection by the inspection body at intervals not exceeding 12 months
(2) records are kept of the date, time and results of any inspection carried out and the name of the inspection body involved
(3) the inspection body engaged is currently an IANZ-accredited inspection body and the equipment inspector is an approved signatory for the relevant type of crane
(4) the unique identifier assigned by the inspection body is permanently and clearly marked on every crane when it is issued with a certificate of inspection for the first time
(5) maintenance records are made available to the equipment inspector

Continued on page 20

Continued on page 19

(6) where practical, the remaining life, based on the actual conditions of use, is recorded at every inspection.
Note: An industry working party is considering the matter of major inspections and when to apply them and this will cover the assessment of the remaining life of the crane and provide details of what is to be recorded.
(7) non-destructive testing (NDT) reports are approved by a suitably qualified signatory working for an IANZ-accredited inspection body.

One point to be aware of: when the truck is having its Certificate of Fitness, vehicle testing seems to be more interested in the fact that your name is written on the side of the truck in complying with the goods service license than whether the loader has been certified. One day …

-Fiona O'Brien

Source

The Approved Code of Practice for Cranes* was published by the Department of Labour, March 2001, revised March 2007. The full Code of Practice is available on http://www.osh.govt.nz/publications/booklets/cranes-acop/index.shtml

*Includes the design, manufacture, supply, safe operation, maintenance and inspection of cranes.

Apimondia 2007, Melbourne, Australia, 9 –14 September 2007

Information sheet no. 9
GREAT NEWS!

The Organising Committee has extended the closing date for early bird registration until 15 June. Go to www.apimondia2007.com and complete the online registration. If you do not have access to the Internet, phone The Meeting Planners on 1300 799 691 (within Australia), +61 2 9265 0890 (international), or fax +61 2 9265 0880 (international) and a registration form will be sent to you to fill out and return.

Demand for the ApiExpo sites has been greater than we originally expected, so an extra area has now been opened up to cater for all those wanting to show their products at Apimondia. To see who is going to be there, with a short summary on what they have on display, go to www.apimondia2007.com and click on ApiExpo. If you have not yet booked your space, now is the time to get online to see what is available and make your booking. Do not miss out on the opportunity to show your products to delegates from at least 58 countries.

- Trevor Weatherhead, Organising Committee

Notice of 2007 Annual General Meeting

THE NATIONAL BEEKEEPERS ASSOCIATION OF NEW ZEALAND

Notice of 2007 Annual General Meeting

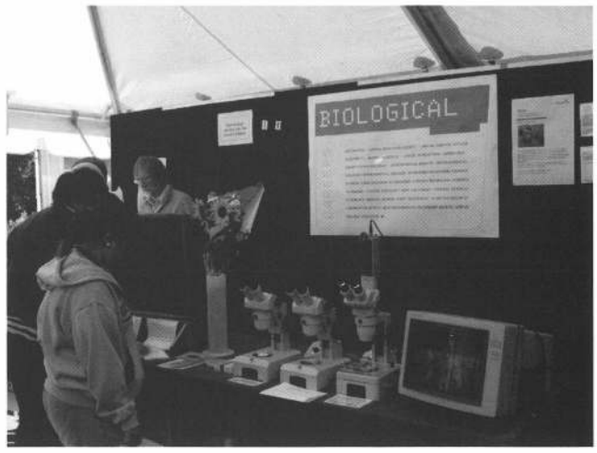
The AGM will be held on Thursday 5 July in the Kingsgate Hotel, Dunedin.

Pursuant to the Rules of the Association, **notices of motion** and any **proposals to alter Rules** must be received by the Chief Executive Officer no later than 5.00pm on Monday 21 May, 2007.

Nominations for Ward representatives must be received by the Chief Executive Officer no later than 5.00pm on Thursday 28 June, 2007. Elections for 2007 **Ward representatives** are required in the Waikato, East Coast, Upper South Island, Southern South Island, Canterbury Branches.

Jim Edwards
Chief Executive Officer

University of Waikato open day



The University of Waikato hosted an open day on 4 May 2007. Hundreds of students came to look at their options in attending the university. Pictured is the biology display, where Dr Ray Cursons of the Genetics Department talked with would-be students.

On display was a frame of brood and bees, and under the microscope were pollen samples.

Photo: Jeremy O'Brien.

Letters to the Editor

Small hive beetle in Victoria, Australia

I read the article on small hive beetle in the March 2007 issue. I would like to make some observations about small hive beetle in Victoria.

Small hive beetle seems to be very specific in its requirements to flourish. The climate in Victoria seems to stop it from being a pest. Other factors, such as the worst drought for 100 years, may also be a factor. In 2005, some beekeepers moved to the south coast of New South Wales to a Spotted Gum honey flow through the late autumn/winter. Overnight, thousands of small hive beetles invaded the hives: they must live in the forest and when beehives appear they are attracted to this host. They cause problems for weak colonies and especially queenless hives.

The beekeepers then moved their bees to the Robinvale area to pollinate almonds. Victorian hives free of beetles were at possible risk of catching the beetles, especially due to the many thousands of hives in close proximity. Despite the two seasons of almond pollination, the beetles do not seem to have transferred. During the warmer months, bees with beetles and clean Victorian hives worked Eucalypt honey flows less than a kilometre apart and no transfer of beetles seems to have occurred. I would suggest the beetle is a problem in warm, high humidity areas with vegetation that suits the beetle. In Australia this seems to be the coastal strip from Batemans Bay to Queensland.

In New South Wales when hives are moved inland to hot dry conditions, the beetles' activity disappears. I would think many parts of New Zealand would be too cold and lack the humidity required.

These observations of mine are based on friends' reports, as after two seasons of exposure I still have not seen a small hive beetle.

John Edmonds
Mount Duneed, Victoria

Unusual sugar source

Dear Editor,

I made an interesting observation recently which I thought might be of interest to your readers.

I am a hobbyist beekeeper with a few hives in west Auckland. We are surrounded by the native bush of the Waitakere foothills and my bees have little trouble finding nectar, remaining active well into the mild Auckland winters. However, I was recently surprised to see that my bees had found an alternative autumn sugar source. A large healthy ash tree *(Fraxinus excelsior)* near the apiary was literally humming with bees, and wasps were also pretty abundant. *Fraxinus excelsior* is a deciduous tree native to Europe. This one was starting to change colour and drop its leaves—there were certainly no flowers in sight. On closer inspection the underside of some of the green leaves was shiny in patches, and bees could be seen licking these leaves. It appeared that the shiny film was a dried-on sugar solution, which it was sweet to the taste. I am guessing that the secretion from the leaves was a sugar adjustment related to the change from summer growth to winter dormancy.

This unusual 'nectar' flow was very short lived and the bees lost interest after a few days, so leaf sugar from deciduous trees seems unlikely to be of commercial importance in New Zealand. Perhaps in large deciduous forests this food source may be important. It would be interesting to hear from your readers further afield who may have something to add. *[Editor's note: if you've had a similar experience, please write and share it with us.]*

- Dave Whittaker

David Whittaker
Senior Molecular Biologist
ViaLactia Biosciences
Auckland

Contribution to varroa research—and a challenge

(Letter sent to Jim Edwards, 16 May 2007)

Dear Jim

Following the article in the May edition of the NZ Beekeeper the Wellington Beekeepers Assoc has unanimously agreed to contribute $1,000 to the varroa research project in order to assist Dr Mark Goodwin and his team to continue the work in developing and maintaining varroa resistant colonies. Our cheque for this amount is attached.

We believe the future of beekeeping in NZ is dependent on continued research into a natural solution to varroa and deserves full support from all commercial and hobbyist beekeepers.

Our club would like to challenge all other beekeeping clubs and groups to make a similar contribution to this valuable project and to this end welcomes publication of our contribution details and challenge in the next edition of the NZ Beekeeper.

Yours faithfully

John Burnet
Treasurer
Wellington Beekeepers Assoc. Inc.

The colour of lemons

As a child I remember Mum and Dad buying a new car for the business. A yellow-coloured Hillman, Chrysler Avenger commercial van. The colour was enough to warn us, but the fact that we had a new vehicle outweighed any concerns about the colour.

Yellow is … you guessed it … a lemon. Everything that could go wrong did. The window wipers flew off the car and one day the headlight decided to disappear skyward in the middle of the night. I remember one trip in the country, coming home with two tyres with Panda kits in them and a flat in the boot: maybe the last was just our luck. I could tell you of many more incidents.

A couple of years ago we ventured down the path of buying a loader for the back of the truck. The purchase of a loader was to help the beekeeper preserve his back and to make us more independent, instead of waiting for staff to turn up. We looked at many options, finally settling on one that was … yellow. However, just like my parents' new van, a new loader with no problems and a good lifespan was an attractive prospect, and its colour was far from our thoughts. The loader took a few trial runs to get used to, but we thought we were home and hosed, so to speak. Loading bees into the dump site one night, there was a knock on the driver's window and a rather panicked beekeeper looking in. I could just make out the words that the loader had broken down. The hydraulic hose had burst, showering fluid all over the place. The beekeeper was none too happy and the bees were even worse.

The loader we had owned for only 12 months or so had not had a lot of use, but the use it had been getting, unbeknown to us, was wearing the hose contained inside the sealed mast. The hose had worn though on rough metal, screwing and pinching both the hydraulic and electrical cables around each other. A disaster, just waiting to happen.

We had to now start the long process of trying to determine what went wrong and how to fix a foreign machine, and we needed the loader right then! A farming friend recommended the local tractor franchise: the staff fixed the hose but didn't clear the lines out properly. So the winch hydraulics didn't work because of fine particles blocking the valves, but nobody could work that out. The tractor franchise said it was the electrics; the auto electrician said it was the hydraulics. One of the drawbacks of buying specialised equipment for a small industry is that mechanics and engineers aren't used to working on these machines. So we headed off to more specialised hydraulic consultants.

The team were friendly, listened to me as I explained how it worked and then proceeded to systematically work through the loader. As well as working with commercial auto electricians, they got us back on the road. There have been other hiccups; however, we are fine tuning and in changing some of the design of the loader we have been able to get back to work. Unlike our Mitsubishi trucks, which have had recalls when problems are detected, no recall was ever issued for an absent rotary union. This problem has affected other New Zealand beekeepers as well.

Complying with the Code of Practice for Cranes

Finding this wonderful document (see related article on page 18) was like a light at the end of the tunnel after the problems we had experienced with the loader. It was a chance for us to pick up on any further problems by getting a professional check over. Initially we had used bolts to bolt the loader to the deck, but the engineer learnt early on that we had used too few when we checked one day and one had sheared off.

The amount of weight the loader can lift onto the truck without stabiliser legs (which we are purchasing at present) is incredible, and the twist on the truck with a 100kg concrete weight is a revelation. There were other things that needed to be done. Our SWL (safe working load) has been lowered from 200kg to 100kg, which we are happy with, as that can easily be rectified with the stabiliser legs coming into play. Actually, as I write this, I realise that we are due for the next 12-monthly check.

Some of the items on the last check sheet are as follows:

- Boom Extension
  - including cracks or damage
  - all boom section welds
  - rams
  - all pivot pins, lock plates, bolts, split pins
  - hydraulic hoses for wear damage or leaks (if it's covered you won't always detect this)
  - ram guides and tracks
- Winch
  - check winch and winch fittings
  - conditions of winch rope and rope anchors, dead ends (where fitted)
- Crane Base
  - oil tank mounting
  - value bank mounting
  - swivels
  - hydraulics
  - control rod, pins and levers
- Inner Main Lift Boom
  - cracks and damage
  - rams
  - pipes
  - hydraulics.

This list has many more categories, and is a great warrant of fitness.

We can easily put the trucks in for their 10,000 km service and now I feel a lot happier that the loader goes through the same process. Of course it is still our responsibility to check the loader on a regular basis, which has led to changing the winch ropes when wear appears.

So will we contemplate a lemon again? Yes, I really think that lemons themselves get a bad name: because some are sweet it's just the bitter ones that leave a sour taste in your mouth.

- Fiona O'Brien

Caught in the act ...

... of working

Arthur Ayban of Tweeddale Apiaries

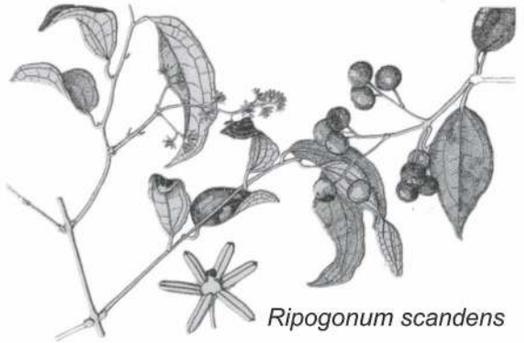
Photo: Fiona O'Brien

Trees and Shrubs of New Zealand

Ripogonum scandens

Common name: Supplejack

Maori name: Kareao



Ripogonum scandens

The Supplejack is a black and brown stemmed climber related to the Lily family. It has large oblong leaves and long racemes of green-coloured inconspicuous flowers at the end of the shoots, which usually not seen as they are always high up in the treetops. More noticeable are the bright red berries that contain a single seed in them—they are edible but do not contain much flesh.

The Supplejack gives the bees a good supply of nectar from November to January.

The juice from young roots was used as a substitute for Sarsaparilla. The juice was also drunk for skin problems and rashes. Women drank large quantities of the liquid to procure an abortion—not always successfully—some declaring that the revolting liquid was worse than having the baby. The juice was also applied to the skin for venereal disease.

- Tony Lorimer

Caught in the act ...

... of working

Geoff Harper (top) and Ginny Harper of Kintail Honey, Central Hawke's Bay.

Photo: Fiona O'Brien.