




# The New Zealand BeeKeeper



Permit Post   
Wellington, N.Z.  
Permit No. 154506



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

## Jane Lorimer (President)

Hillcrest Apiaries  
'Kahurangi-o-Papa'  
RD 3, Hamilton 2021  
Ph 07 856 9625  
Fax 07 856 9241  
Mobile 027 294 6559  
Email: hunnybee@wave.co.nz

## R Neil Farrer (Vice President)

7 Nixon Street  
Wanganui  
Ph 06 343 6248  
Mobile 027 457 9634  
Email: farrer@infogen.net.nz

## Brian Alexander

Woodhaugh Apiaries  
RD 3, Kaukapakapa  
Ph/Fax 09 420 5028  
Email: bee@xtra.co.nz (Attn:Brian)

## Gerrit Hyink

271 Lindemann Road  
RD 1, Katikati  
Ph 07 549 1223  
Fax 07 549 3290  
Email: hyink@xtra.co.nz

## Barry Foster

Tawari Apiaries Ltd  
695 Aberdeen Road  
Gisborne  
Ph 06 867 4591  
Fax 06 867 4508  
Mobile 027 449 7131  
Email: bjfoster@xtra.co.nz

## Arthur Day

Marlborough Apiaries Ltd  
PO Box 307  
Blenheim  
Ph/Fax 03 577 8143  
Mobile 021 223 4790  
Email: arthur@beekeepernz.com

## Roger Bray

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

## Frans Laas

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

## EXECUTIVE OFFICER:

**Jim & Pam Edwards**  
World Veterinary Consultants  
10 Nikau Lane  
Manakau Heights  
RD 1, Otaki  
Ph 06 362 6301  
Fax 06 362 6302  
Mobile 021 631 447  
Email: jimedwards@xtra.co.nz

## EXECUTIVE SECRETARY:

**Pauline Bassett**  
PO Box 234  
Te Kuiti  
Ph/Fax 07 878 7193  
Mobile 027 227 1863  
Email: waihon@actrix.co.nz

<p><b>Chris Taiaroa (Hon. Librarian)</b> 43 Princes Street Waikari, Nth Canterbury 8276 Ph: 03 314 4569 Fax: 03 314 4568 email: chris.tony.taiaroa@clear.net.nz</p>	<p><b>AgriQuality phone:</b> <b>0508 00 11 22</b></p>	<p><b>James Driscoll</b> <b>AFB NPMS Manager</b> <b>PO Box 9098, Hamilton</b> <b>james@driscoll.pn</b></p>	<p><b>Magazine subscriptions:</b> — 11 Issues — <b>NZ \$66.00 GST inc</b> <b>Overseas Airmail</b> <b>US \$55.00</b></p>
---	---	--	---

**BRANCHES: The first named person is the President/Chairperson. The second is the Secretary.**

## NORTHLAND

**Simon Peacey**  
76 Malone Rd, RD 9  
Whangarei 0121  
Ph/Fax: 09 434 6344  
Mobile: 025 270 8922  
email: peacey@paradise.net.nz

## Jo Scott

148 One Tree Point Rd  
Ruakaka  
Ph: 09 432 7149  
Fax 09 432 7144

## AUCKLAND

**Ian Browning**  
1824 Great South Rd  
RD 3  
Drury  
Ph: 09 2360764

## Bob Russell

101 Kern Rd  
RD 3  
Drury  
Home Ph/Fax: 09 294 8656  
Work Mobile: 027 284 8951  
email: bob.russell@paradise.net.nz

## WAIKATO

**Russell Berry**  
Arataki Honey  
2488 SH5 Waitapu  
RD 3  
Rotorua 3221  
Ph: 07 366 6111  
Fax: 07 366 6999  
email:  
russell@arataki-honey-rotorua.co.nz  
**Cameron Martin**  
Haumea Road  
RD 1  
Galatea  
Ph: 07 366 4804  
Fax: 07 366 4804  
email: busy-bee@xtra.co.nz

## BAY OF PLENTY

**Dave Black**  
PO Box 3194  
Greerton  
Tauranga  
Ph: 07 573 4434  
email: mail@thebeegardens.com  
**Gerrit Hyink**  
271 Lindemann Rd  
RD 1, Katikati  
Ph 07 549 1223  
Fax 07 549 3290  
email:hyink@xtra.co.nz

## POVERTY BAY

**Peter Burt**  
725 Back Ormond Road, RD 1  
Gisborne 3801  
Ph: 06 868 4771  
email: pwburt@xtra.co.nz

## Barry Foster

695 Aberdeen Road  
Gisborne 3801  
Ph: 06 867 4591  
Fax: 06 867 4508  
email: bjfoster@xtra.co.nz

## HAWKE'S BAY

**John Berry**  
46 Arataki Rd  
Havelock North  
Ph: 06 877 6205  
Fax: 06 877 4200  
email: jrberry@ihug.co.nz  
**Ron Morison**  
31 Puketapu Road  
Taradale, 4001  
Hawkes Bay  
Ph/Fax: 06 844 9493  
email: rmorison@clear.net.nz

## SOUTHERN NORTH ISLAND

**RN (Neil) Farrer**  
7 Nixon Street  
Wanganui  
Ph: 06 343 6248  
Fax: 06343.3275  
email: farrer@infogen.net.nz  
**Frank Lindsay**  
26 Cunliffe Street  
Johnsonville  
Wellington 6004.  
Ph/Fax: 04 478 3367  
email: lindsays.apiaries@xtra.co.nz



[www.nba.org.nz](http://www.nba.org.nz)

## NELSON

**Glenn Kelly**  
PO Box 421  
Motueka  
Ph/Fax 03 528 8174  
email: glennkelly@xtra.co.nz  
**Michael Wraight**  
15 Titoki Place  
Motueka 7161  
Ph/Fax: 03 528 6010  
email: wraight@xtra.co.nz

## CANTERBURY

**Roger Bray**  
Braesby Farm  
RD1  
Ashburton  
Ph/Fax: 03 308 4964  
email: birdsnbees@xtra.co.nz

## OTAGO

**Brian Pilley**  
45 Elwyn Crescent  
Green Island  
Dunedin  
Ph: 03 488 0151  
Fax: 03 488 0152  
email: beelinesupplies@xtra.co.nz  
**Peter Sales**  
"Te Ora", RD1, Port Chalmers  
Dunedin 9030  
Ph: 03 472 7220  
email: foxglove@paradise.net.nz

## SOUTHLAND

**Doug Lomax**  
61 William Stephen Rd  
Te Anau  
Ph: 03 249 9099  
Fax: 03 249 9068

## NZ Beekeeper Printed & Published by:

**South City Print**  
P.O. Box 2494, South Dunedin.  
**Advertising: Allan Middlemiss**  
Telephone: 03 455 4486 Fax: 03 455 4486  
email: ckp@xtra.co.nz  
**NBA membership & Magazine Subscriptions:**  
**Pauline Bassett**  
National Beekeepers Association  
Box 234, Te Kuiti  
Ph/Fax: 07 878 7193  
email: waihon@actrix.co.nz  
**Editorial/Publication:**  
**Nancy Fithian**  
8A Awa Road, Miramar, Wellington 6003  
Ph: 04 380 8801 Fax: 04 380 7197  
Mobile 027 238 2915  
email: fithian.jones@xtra.co.nz

# President's Report

The highlight of this year was conference in Christchurch — those of you who did not attend missed a most enjoyable event. I would like to extend the Executive's thanks to the organising committee for a job well done. To have in excess of 200 people attending the seminar series indicates to me that beekeepers are happy with this format. (I've just had feedback from the organisers, who said that they prepared 230 name tags).

Dr Jerry Bromenshenk from the United States was an excellent speaker: he not only kept to time, but was lively and humorous as well. The subject of sniffer bees certainly caught the attention of the media — that bees could be used to detect land mines, rather than sending in humans and dogs to find these mines at their peril. When Jerry told us how many countries have buried land mines, it was clear that these trained bees will have a huge amount of work ahead of them.

The other interesting presentation he gave concerned the future opportunities for New Zealand beekeepers. He really made me think when he outlined the number of hive losses in the US and described their growing almond industry. Jerry said there may be an opportunity to supply bees for almond pollination. Is it possible to do this for their pollination season? I was also talking to Mark Goodwin the other day, and he indicated that some parts of Australia had also had large hive losses.

Of course next year the conference will be in the heart of the Waikato, where our branch is celebrating 100 years in existence. To commemorate this we will be featuring beekeeping from the past until today, and maybe into the future. If you have a collection of old interesting pieces of equipment or old packaging material that we could use in a memorabilia display, please contact the Waikato branch with a list of what you have. We are also planning to hold a special get together for some of the older beekeepers to acknowledge their contribution to the industry, which will allow for a great deal of reminiscing.

## Future concerns

Two topics of concern emerged at conference: pyrrolizidine alkaloids and the composition of the Bee Products Standards Council. An ongoing issue associated with overseas market access emerged after conference. Each of these concerns is discussed below.

### *Pyrrolizidine alkaloids*

Another of the conference presentations was given by Mike Clear of the New Zealand Food Safety Authority (NZFSA). Mike has been involved in looking into the plants in New Zealand that have levels of pyrrolizidine alkaloids (PAs).

NZFSA has carried out a limited amount of testing on the important nectar-bearing plant *Echium vulgare*, more commonly known as Vipers bugloss. This honey has shown some levels of PAs, but of greater concern is that pollen exhibits higher levels of PAs.

The New Zealand Food Safety Authority (NZFSA) is planning to convene a group from the Bee Products Standards Council,

which will include some of the affected beekeepers, to put in place a programme to determine the suite of alkaloids in *Echium* species, and whether they are a minor problem or a major one. Once these factors are determined, a plan of action will need to be developed.



**Jane Lorimer**

We will keep everyone posted on the progress of this issue.

### *Bee Products Standards Council (BPSC)*

The BPSC met at conference. This body is supposed to be providing a whole-industry perspective to the NZFSA, without them having to go to each individual group to do the same presentation and then ask for feedback.

The Bee Industry Group (from Federated Farmers) attended the meeting. They tried to revisit the Terms of Reference, and indicated that they only wished to participate in the group if they contributed in kind. Both of these were unacceptable to the Council and the Bee Industry Group chose to leave the meeting, not wanting to be part of the BPSC. A letter will be sent to them to seek formal acknowledgement of withdrawal from the Council.

This leaves the NZ Honey Packers and Exporters Association and the NBA as the two groups involved. This will mean a greater cost to our association, but we believe that it is better to work with the NZFSA to achieve workable outcomes rather than NZFSA imposing conditions on us that are unacceptable. Between our two groups we believe that we still represent the whole industry.

### *Overseas Market Access*

Phil Ward and Steve Ainsworth appear to be the main players in NZFSA who are involved in this area. Of concern at the moment is a new draft proposal on access to the European

**Continued on page 4**

## Deadline for Publications

**October 2005 edition:** 20 September 2005  
(NB: Goes to all registered beekeepers in NZ).

**November 2005 edition:** 21 October 2005

**December 2005 edition:** 21 November 2005

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

Nancy Fithian  
8A Awa Road  
Miramar  
Wellington 6003  
Phone 04 380 8801  
Fax 04 380 7197  
email fithian.jones@xtra.co.nz

**Continued from page 3**

Union (EU) for bee products not intended for human consumption.

What astounded me is the fact that the protocols proposed are more stringent than those for honey for human consumption.

Also of concern is the use of the AFB PMS for allowing market access. This would be OK if those writing the protocols understood the strategy well, but this is not the case. Once again we appear to be fighting to get these people to understand our industry and the strategy they are using to facilitate access.

This is where the BPSC should be used to its best advantage, as this group is best placed to work with NZFSA on this issue. If this draft protocol is adopted, it will make it almost impossible to export bee products that are not destined for human consumption.

### **New NBA structure and the AGM**

The AGM went very well this year. Although attendance was down from last year, we still had a good core group there to debate the notices of motion.

The running of the AGM under the new rules was, to say the least, an interesting exercise. It was noticeable from the front that every member in attendance seemed to be happy that they could participate in the voting. It was also good to see that

we also had to use both the delegate vote and the poll vote to determine the outcome of some of the motions.

Something also to note (which had been unclear to me) was that we can receive any notices of motion from members, and they must be considered; that is, there is nothing to stop notices of motion coming onto the floor for discussion. In effect we no longer have a conference of Branch delegates — all is considered within the AGM.

It was also apparent at conference that people thought that where branches had amalgamated to elect a ward representative, those branches had disappeared. This is not the case: those branches can continue as long as there are sufficient members to make a quorum. In instances where the ward representative has more than one branch to represent, that person will have to ensure that they keep all of their branches informed as to the outcomes of Executive Council meetings, etc.

Tim Leslie from the Bee Industry Group came to the AGM to give a presentation on their idea of getting a Commodity Levy in place for bee related research. Although there appeared to be agreement about the need to find a mechanism to fund research, the use of the Commodity Levy for this purpose was not well received. Now that the new Executive Officer is in place, I believe that we should explore our alternatives to get an industry-wide funded research programme.

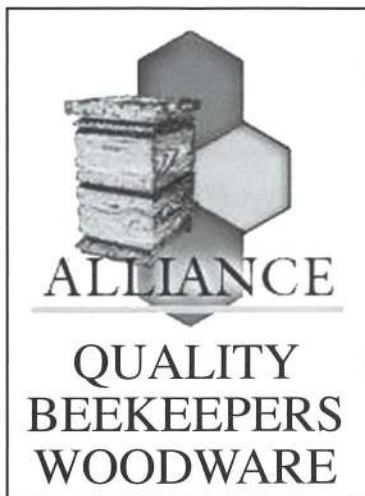
- Jane Lorimer

# **BeeLine Supplies**

Suppliers to the Beekeeping Industry

**45 Elwyn Crescent, Green Island Dunedin**

APPROVED STOCKISTS



### **MANUFACTURERS OF:-**

*Honey Supers All Sizes*

*Full Depth - 3/4 Depth - 1/2 Depth - Cut Comb*  
*(Seconds when available)*

*Bottom Boards - Hive Matts - Excluder Frames*

*Pollen Traps assembled and Kitset*

*Sugar For Sale*

*(Ex Stock Dunedin - Christchurch - Nelson)*

*Foundation Conversions*

*Foundation Sales*

### **Hours For Warehouse:-**

**Monday to Friday - 8.00am until 5.30pm**

**(Other times by arrangement)**

**For orders and quotations phone Brian and Heidi:**

Phone: (03) 488-0151 Fax: (03) 488-0152, After Hours: (03) 488-0151

Email: [beelinesupplies@xtra.co.nz](mailto:beelinesupplies@xtra.co.nz)

**Stockists of Tecpak Containers, Southern Cross Plastic Frames**

BK6

## Secretarial snippets

Conference 2005 was certainly a resounding success and a credit to the organisers from Canterbury and beyond. For me, the aftermath has been busier than the build-up, with membership and magazine subscription enquiries continuing to come in.

The Ward representatives are now getting to grips with the role they have to play in the Executive Council. The formal announcement of these Ward representatives was made at the AGM, as follows:

Northern	Brian Alexander
Waikato	Jane Lorimer
Bay of Plenty	Gerrit Hyink
East Coast	Barry Foster
Southern North Island	Neil Farrer
Upper South Island	Arthur Day
Central South Island	Roger Bray
Lower South Island	Frans Laas

At the conference dinner the already lively and noisy evening went into overdrive during the competition for the branch trophy. This was hotly contested, with teams of three from each branch assembling various beehive components. From outside the room it sounded more like an axemen's carnival! The team from Hawkes Bay were the winners, with the host branch Canterbury a close second.

There were a number of entries this year for the Roy Patterson Trophy. Conference speaker and guest Alexandros Papachristoforou of Greece judged the winner to be John Dobson from Hawkes Bay. John's innovative entry was a beehive inner cover with moisture removal slots. As well as the trophy the NBA Executive awarded a small monetary prize. The word is that this amount will be increased next year to encourage more entries for this award for innovation in beekeeping.

- **Pauline Bassett**  
Executive Secretary

**\*QUEEN CELLS \*CARRICELL INCUBATORS**  
**\*QUEEN BEES \*QUANTITY DISCOUNTS**

**\*John & Judy Dobson**

**\*RD1 Hastings New Zealand**

**\*Ph: (06) 870 7070**

**\*Fax: (06) 870 7077**

**\*Mobile: 0274 494 396**

**\*Email: [beeline@xtra.co.nz](mailto:beeline@xtra.co.nz)**

**\*web address: [www.carricell.com](http://www.carricell.com) [www.beezone.co.nz](http://www.beezone.co.nz)**

BK12

**Queens available for delivery throughout  
the North Island**



**New models coming soon for all Isuzu N Series Trucks**

**4 x 4 Trucks suitable for Bee Keeping use with all the extras you require.**

**Can be supplied with your choice of deck, flat, tipping or as cab/chassis.**

### AUCKLAND

Great South Road, Penrose  
Ph: 09 526 4866

John Weatherly  
029 819 6899

David Saunders  
029 933 0033

John McLeod  
021 710 882

Mike Callagher  
0274 966 259

Colin Dowson  
021 190 1313

### TAURANGA

116 Hewletts Road,  
Mt Maunganui  
Ph: 07 575 5399

Steve Hoyne  
021 190 6358

Tracey MacKay  
021 220 9810

### WHANGAREI

239-241 Lower Port Road,  
Whangarei  
Ph: 09 470 0849

Daron Turner  
0275 464 302

# Isuzu

**Reliability is Everything**



BK237

# News from the New Zealand Food Safety Authority

We were encouraged by the positive response from beekeepers at the annual NBA conference to the presentations made on Risk Management Programmes (RMPs), and appreciated the opportunity to meet many of you. By the time you read this, the RMP workshops will have been run and the final versions of the Code of Practice and templates will be on our website. At the time of writing we have had over 100 registrations for the workshops, and we are expecting many more as registration deadlines draw nearer.

One of the questions arising from the conference which we clearly needed to clarify was exactly which activities require an RMP. The waters had been muddied somewhat when we started to consider the inclusion of pollen and propolis in the Code of Practice. In fact, we had to scratch our heads a bit because of the way some of the legislation is worded, but the most important thing was to get something workable for the industry that still met the requirements of the law.

## Primary processing = no RMP required

Primary processing of bee products includes the following activities:

- (1) beehive management, including queen rearing for royal jelly production
- (2) collection of honey supers, temporary storage prior to delivery to the extraction facility and transport to the extraction facility
- (3) scraping or other collection of raw propolis, including removal from propolis mats, bagging and temporary storage of raw propolis, transport of raw propolis to an extraction facility
- (4) collection of pollen, bagging, holding in a freezer by the beekeeper and transport to a pollen drying/processing facility.

Effectively this means that beekeepers who don't process product or store finished product are exempt from RMP requirements. However, that does not mean these beekeepers are exempt from regulatory requirements. Primary processing of bee products is regulated under the Animal Products Act through the Human Consumption Specifications. NZFSA is currently consulting on some proposed changes to these specifications that may affect beekeepers. Copies of the consultation document have been mailed to all premises on our premises register, and can also be downloaded from the NZFSA website: [www.nzfsa.govt.nz](http://www.nzfsa.govt.nz). The closing date for submissions is 2 September 2005.

## Secondary processing = RMP required if Official Assurances wanted for product

Secondary processing is deemed to commence once the raw material (pollen, propolis or honeycomb, comb containing queen larvae/royal jelly) arrives at the facility where it will be extracted, dried, or otherwise processed, packed or stored. Secondary processing includes extraction, processing,

packing and storage of bee products.

To be eligible for an official assurance (export certificate), secondary processors must have an RMP registered in accordance with the



Animal Products Act 1999, by 1 July 2006. Operators will need to have their RMP completed, evaluated and submitted for registration by 1 April 2006 to ensure that their RMP is fully registered by 1 July 2006. Bee products for human or animal consumption produced in premises operating in the absence of an RMP after 1 July 2006 will be ineligible for official assurances.

- **Jim Sim**  
Senior Programme Manager  
Animal Products

### Beekeeper Required North Island

We require a full time qualified beekeeper to help run our beekeeping business in Tauranga. All enquiries to

**TAURANGA**  
07 552 4560 after 6pm.

BK243

### Tunnickliffe Timber Co Ltd

For: Honey Supers  
Full Depth  
3/4 Depth  
1/2 Depth  
Bottom Boards

*Can be supplied UNTREATED  
or in Bee friendly  
TANALISED® ECOWOOD™*

Contact: Derek Slabber  
Ph 0800 657 934  
Fax 07 304 8208  
Email [tunnickliffes@xtra.co.nz](mailto:tunnickliffes@xtra.co.nz)

BK174

# Notes from Conference and AGM

*[Editor's note: This is an edited version of a report emailed by Neil Farrer to SNI Branch members. Additional conference papers will be published in the next issue(s) of this magazine.]*

## Conference

### Monday seminars

Special interest group sessions took place, but I was not able to be present at any of them. I attended the mix and mingle in the evening and it was a good chance to meet and talk to fellow beekeepers from around New Zealand.

There were lots of interesting seminars on Tuesday and Wednesday, with approximately 200 people attending.

### Tuesday seminars

**Vipers Bugloss (Blue Borage) and plant alkaloids:** Some residues can be unacceptable — though the South Island beekeepers had a different view. In Australia 'Paterson's Curse' is also caught up with this problem.

**Definitive answers to log books:** Many beekeepers who drive heavy motor vehicles over the gross laden weight of 3,501 kgs or more are not fully aware of the responsibility to keep log books. The heavy truck log book rules state that a complete log of all driving must be kept during and up to 10 days after completing a truck journey. Most of us drive for say an hour, work for several hours on hives, then drive again. If you use a heavy truck, you will need to check how the log book and other rules apply to you. There is a 50km from home base exemption that may cover a lot of beekeepers.

**Code of Practice and Hygiene Standards:** We all have to be aware of the Food Safety Standards, especially for our honey houses and when transporting honey supers back for extraction. We had another session later on the Risk Management Programme and the templates that have been developed. NZFSA is organising seminars — our one was held in Palmerston North on 4 August, which all commercial beekeepers should have attended.

**Varroa-tolerant breeding:** Michelle Taylor presented a report on progress by HortResearch on this project, which will need a lot more research and breeding before we see queens that we can use. In the meantime, if you have a hive(s) that seem to work well and do not have heavy infestation, then start breeding from that queen.

**Organics — thymol and oxalic acid:** Mark Goodwin from HortResearch Ruakura discussed his experiments. He has found extreme variances in varroa control using thymol and oxalic acid, so beekeepers must keep monitoring. In the case of thymol crystals, HortResearch has found that a larger disk in the centre of the top box — with a layer of shadecloth stopping the bees from getting at the crystals — has been more effective, and in the centre above the brood or cluster there is a better heat range than at the side of the box.

**Sniffer bees:** Dr Jerry Bromenshenk from the USA gave several presentations of his experiments in which bees were successfully trained to find the odours of explosives from land mines. These experiments are continuing. *[Editor's note: see the article on sniffer bees on page 13 of this issue.]*

Jerry discussed pollination in California of citrus and almonds. Almond orchards have expanded very quickly and shortly there will not be enough beehives to pollinate them, so this could be an opportunity for New Zealand beekeepers to export bees in the future. We are likely to face a similar problem in New Zealand with the expansion of kiwifruit and gold kiwifruit orchards. Beekeepers will need to be aware of the increased demand for pollination in New Zealand and overseas in the next five to 10 years and to plan to have hives available.

Jerry also talked about a plastic strip, approximately 1cm by 10cm, which could be used as a transmitter that tracks supers similar to how barcodes are used today. The same technology could be used so that your cellphone would ring when the hive needed attention, or if the hive was being moved (stolen). He mentioned many other ideas for the use of the strip.

**Gaicho:** Dr J Keppler from Bayer in Germany talked about the product used in sprays called Gaicho. He endeavoured to inform us that it was OK to use and would not harm bees. But I felt that many listeners were not convinced. *[See page 17 for an article about losses on Poverty Bay flats: Editor]*

**Exotic disease surveillance:** AgriQuality presented several talks on this topic, including the implications, methods used and the results. AgriQuality needed to improve data collection standards, so AP2s completed the exotic inspections this year, with more satisfactory results both as to numbers inspected and samples obtained.

### Wednesday seminars

**Asset protection:** this seminar was presented by the Public Trust, and outlined the methods by which beekeepers can protect the home and family. The best method was a Family Trust: see your lawyer and/or accountant about it.

**Queen bee rearing:** David Woodward from Telford and Frans Laas presented papers on improving bee stocks.

**DIY exporting:** Tony Roper took us through the pitfalls and hazards of trying to export. It can be done but the preparation and paperwork must be A1.

**Residues in honey:** Steve Lyttle talked about the problems overseas and how we can avoid them. We need to keep our image clean and green.

**Importation of honey:** Leone Basher from MAF Biosecurity talked about the problems, New Zealand standards, and the overseas standards (or lack of them). Pressure is coming from the Australian supermarket chains to export honey

**Continued on page 8**

**Continued from page 7**

from Australia to New Zealand, with lots of risks for our bee stocks. Honey from Western Australia is the closest to coming to our shores, but it should be some time yet. New Zealand honey has unique features, but we all depend on a fair price to survive, and honey coming into the country at less than \$2 per kilo is very scary.

**AFB NPMS:** James Driscoll, Manager AFB NPMS, spoke on what is happening. He apologised for a glitch in the system which led to many beekeepers receiving a notice on not returning the ADR on time, when in fact most had. Otherwise, the AFB NPMS programme is functioning and has the goal to reduce AFB incidence to less than 0.01%. All beekeepers have a part to play in this.

**Varroa:** The new varroa response action group, Varroa Agency Inc, spoke on what they have done to date and hope to achieve. Paul Bolger later talked on MAF's views and actions. South Island beekeepers have been levied \$2 per hive for funding, which this provides approximately a third of the amount required. The rest is coming from local authorities.

In summary, we had two days of excellent talks and presentations, and of course, the opportunities to talk to other beekeepers over a cuppa, etc.

**NBA AGM**

The Southern North Island (SNI) Branch named me the delegate to the NBA's Annual General Meeting in Christchurch, July 2005.

**Election of President and officers:** Jane Lorimer was reelected and I was voted as the new Vice President of the NBA. The delegates from each ward were presented to the meeting. Telephone meetings will be held at least once a month and there will be up to three face-to-face meetings during the year.

**Executive Officer:** Some members of the Executive Council will meet soon to select a new Executive Officer. Candidates have been shortlisted. After the appointment has been made, the workload on Jane and executive members will decrease. The cost of the appointment has been budgeted for in the financial accounts.

**Remits on subscriptions:** All of these remits were lost, so the status quo remains with the voluntary subscriptions. Executive will need to take the matter on board and bring a recommendation to the next AGM. There was a lot of discussion, but in the end a poll vote was called, resulting in a vote of 183 for and 261 against, therefore the remit was lost.

**Other motions:** Motion 1 on unregistered hives, and Motion 2 on the cadet scheme were carried. Motion 6 on circulation of *The New Zealand Beekeeper* was lost. There were several late notices. One, recommending that NBA join Apimondia, was approved. The cost is likely to be around \$500 per annum. The other notices were voted down.

**AgriQuality report:** Murray Reid mentioned that beekeeper numbers had declined from 4956 in the year 2000, to 2947

now. Hive numbers had also declined over the same period from 320,000 to 293,000.

**Roy Patterson Trophy:** Innovation is alive and well. John Dobson won this year's Roy Patterson Trophy for his simple and effective method of using a slotted crown board and propolis mat to catch propolis and increase the air circulation in the hive.

**DECA:** Frank and Mary-Ann Lindsay are attending to the rewording of the tests.

**AFB NPMS:** There is concern over the strategy with certification for AFB for exports, especially to the EU, and is being discussed at Government level.

**Honey imports:** The meeting agreed to liaise with Government (MAF) over importation of honey. The NBA needs to keep the doors open to represent our view.

**Research funding proposal:** A presentation was given by Federated Farmers and the Bee Industry Group (BIG) over a levy to fund research. Members were not happy with the commodity levy approach and later agreed to oppose any commodity levy as put up by BIG. Research is necessary but at this stage beekeepers, particularly in the South Island, are feeling the strain with the AFB NPMS and varroa levies, plus the normal expenses of beekeeping. *[Jane Lorimer and Frank Lindsay have made further comments on this issue on pages 3 and 11. – Editor.]*

The 2006 NBA conference will be in Hamilton, so plan to be there, even if only for the seminars, to learn more about our industry.

- Neil Farrer  
NBA Vice President  
Chairperson, Southern North Island Branch

**BEEKEEPING EQUIPMENT**  
21 Frame Pender Extractor.  
Reasonable condition \$1400 + GST  
Maxant Cappings Spinner. \$950 + GST ono.  
Contact Bill 06 363 6604

BK233

**1996 Isuzu NPS 71 (4WD)**  
4.6L, 5 Spd, LWB (extended 150),  
7 tonne gross, Tow bar,  
208210 km, PTO.  
This vehicle is in good condition  
**\$18000 +gst.**  
Contact Bruce @ 07 312 9028  
or email honeybee@clear.net.nz

BK240





### Attendance at NBA Conference

The NBA Conference in Christchurch was a rewarding experience for us to finally put a face to the many people who we had talked to on the phone, had correspondence with, or had read or heard about. It was a special time also for Steve Olds, your beekeeper representative on the Board, to catch up with old friends and acquaintances.

The amount of time we were allotted to present to you about our progress over the last six months was a bit short, as we are sure that you had more questions you might have wished to ask us. We had an excellent meeting with the NBA Executive, and have agreed on how we can contribute to the American foulbrood register this year that we are required to use for our respective pest management strategies. We are also looking at ways we can help each other to benefit the beekeeping industry as a whole.

We restate our offer to oblige to any request for attendance at meetings where we can be of assistance in updating or informing beekeepers on the Varroa Pest Management Strategy.

### South Island beekeepers – did you know you must keep records of beehive movements?

Legally, a beekeeper must keep records of the movement, within the South Island, of any beehive owned by the beekeeper

between apiaries, honey production sites, and pollination sites. This requirement means beekeepers must keep a written note of where the hives were, where they were moved to, and the date of the move. Beekeepers also are required to record the disposal of any bees or beehives owned by the beekeeper in the South Island. These obligations are part of biosecurity measures required by the Varroa Pest Management Strategy to achieve our aim **to keep the South varroa free.**

While the requirement may seem like extra work for beekeepers, movement control is the only way for the South Island to ensure it stays varroa free. Movement controls have kept varroa out of the South Island for over five years already, which reflects the high levels of compliance and support from beekeepers in both islands. Close adherence to movement control conditions should enable the South Island to remain free of varroa for years to come.

These records must be retained for a period of three years. A breach of the rule is an offence under the Biosecurity Act.

For further information please telephone me on 03 445 0463.

- **Duncan Butcher**  
Chairman

# Buzzing News! Buzzing News!



**RAY DUNCAN**

**Mob: 021 739 760**

Phone: (09) 295-0510

Fax: (09) 298-1048

Email: rayd@interworld.co.nz

**FULL DEPTH AND 3/4**  
**One piece Plastic Frame and Foundation**

**EZI-FIT Plastic Foundation Insert**  
**TO SUIT YOUR WOODEN FRAMES**

**PLASTIC QUEEN EXCLUDERS**  
**NO DAMAGE TO THE BEES**

**QUALITY SERVICE AND VALUE**

## **Beetek Ltd**

[an associate of Interworld Plastics [NZ] Ltd]

BK18

It is a scientific fact that continuous use of Varroa control products made from the same chemical family will lead to the premature development of resistance.

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.

10 – 90 strips	\$3.75 each plus G.S.T.
100 – 990 strips	\$3.40 each plus G.S.T.
1000 – 4990 strips	\$3.10 each plus G.S.T.
5000 plus strips	\$2.85 each plus G.S.T.

Dosage Rate: 2 Apivar strips per brood chamber.

Price includes delivery. Payment is required in advance by cheque or electronic banking.

Phone or email for an order form.

## N Z Beeswax Ltd

**Postal Address**

Private Bag  
Geraldine 8751

**Factory Address**

44 Gladstone St  
Orari  
South Canterbury

**Phone:** 03 693 9189

**Fax:** 03 693 9780

**Email:** [info@beeswax.co.nz](mailto:info@beeswax.co.nz)

**Web:** [www.beeswax.co.nz](http://www.beeswax.co.nz)

Apivar® is the product and the registered trademark of:

Veto-pharma S.A.  Veto-pharma

14, avenue du Quebec F-91945 Courtaboeuf Cedex France

# Comment on proposed commodity levy for research

During conference Tim Leslie of the Bee Industry Group (BIG) gave an outline of their proposal to ask Government to make a commodity levy for research. Tim was taking about raising \$150,000 per year as a base funding proposal.

Everyone knows we have to commit funds to research and that we all wouldn't be so well off if weren't for Dr Peter Molan's honey research, not to underestimate just how much HortResearch has also contributed to the health and wealth of our industry.

One of the good things about a levy is that it would mean that all beekeepers owning over 50 hives would pay and there wouldn't be any hangers-on benefiting without contributing. A real drawback is the cost of establishing and doing the consultation necessary to get beekeeper approval, and again after five years when it would have to be renewed. This could be in the region of \$40,000 each time (for 450 beekeepers), plus no firm indication was given of the actual yearly administration costs.

At present we rely on personal contributions from 12 large beekeepers, Sustainable Farming Fund, the Honey Industry Trust, plus other horticultural organisations. All of our research is based on controlling varroa, which isn't surprising, but there are so many other things we could be looking at; for example, keeping our product residue free. Are the chemicals we are using producing residues in our honey? If they are, it could be used as a barrier to export markets. At present our honey is selling at a premium of \$2.00 above the world commodity price. We will have to maintain this edge by producing residue-free honey, propolis and pollen.

How would you survive if you were getting \$1.70 to \$2.00 per kg for your honey — the world price at the moment?

Research takes years to get a result. Dr Molan's work started more than 15 years ago and thanks to skilful promotion by Bill Floyd for Manuka and other varietal honeys, we are where we are today. If we don't all individually make a commitment to funding further research, we may become price takers when other countries catch up. (All countries are now looking at their honey — Australia has found that Jarrah is a very high peroxide honey). We should all consider putting five percent of our budget towards research every year. Or should we go down the commodity levy way

where everybody pays? I favour a levy, but I know the South Island beekeepers wouldn't accept this as they are feeling hard done by since the varroa levy was forced on them. They haven't looked at the big picture and worked out just how much it will cost them for miticides when they do get varroa.

A discussion followed Tim's presentation and a vote was taken, which soundly rejected the idea of a commodity levy. Was this result due to the rift that developed between BIG and the NBA since the splitting of organisations? Perhaps this contributed a little. Was it the dislike of the commodity levy principle: once bitten, twice shy? Most probably. Did everybody really give the idea consideration? Perhaps not, as there were still too many unknown costs in the proposal.

Whatever the reason we still have a problem. We need ongoing research and it has to be partially funded from our industry somehow.

- Frank Lindsay

## POLYSTYRENE MATING NUCS

Similar to those previously made by John Dobson  
Easy to use • Cost effective • Proven results  
1-100 \$10.00 plus GST 100+ \$9.50 plus GST

Phone Steve, Apiflora NZ Ltd

07 543 0984 027 4923 937

BK91

## interested in a career in beekeeping?

The **National Certificate in Apiculture** (Level 2) is starting soon....

- An introduction to Commercial Beekeeping
- Part time study over a year
- Practical and theory
- Unit Standard based
- Based in Gisborne

Course starts with a 2 day weekend on 3 & 4 September  
Tutors: Dr David Woodward (Telford)  
Paul Badger (Gisborne)  
Barry Foster (Gisborne)



Telford Rural Polytechnic



**Tairāwhiti Polytechnic**

te kuratini o te tairāwhiti

Freephone: 0508 POLYTECH  
Phone: 06-869 0810  
Email: info@tairawhiti.ac.nz

BK241  
2006/002

dream • attain • embark

www.tairawhiti.ac.nz

# New NBA Executive Officer appointed

Jim Edwards of World Veterinary Consultants has been appointed by the NBA Executive Council as the new Executive Officer. Jim will be assisted in this role by his co-director and wife Pam and will work from his home office north of Otaki.

Jim's involvement in the beekeeping industry goes back to the early 1990s when he was in charge of animal exports for MAF. He has a passion for our industry and currently has a number of roles. He consults to individual members, the Honey Packers Association and is Chairman of the Bee Products Standards Council.

Other interesting work has seen Jim facilitating the development of three codes of animal welfare for Biosecurity New Zealand. He is the Ministerial-appointed veterinarian to the Veterinary Council of New Zealand. He is Deputy Chair of the Kapiti Community Health Group Trust and has just produced a new website ([www.kapitihealth.org.nz](http://www.kapitihealth.org.nz)) of health resources. Jim is a former President of both the New Zealand Veterinary Association and the World Veterinary Association.

Jim and Pam are keen gardeners and have started developing their new three-acre garden. They have seven children and



**NBA President Jane Lorimer with new NBA Executive Officer Jim Edwards and wife and co-director Pam Edwards. Photo: Barry Foster.**

eight grandchildren between them and their first great-grandchild is due soon. Jim's other passion is speedway racing, and he and Pam own a 1956 Chevrolet Bel Air.

## TELFORD RURAL POLYTECHNIC



0800 835 367  
[www.telford.ac.nz](http://www.telford.ac.nz)

**Hear what all the buzz is about -  
Everyone's getting caught up in the swarm**



Certificate in Apiculture Knowledge - one year correspondence course.



Certificate in Queen Bee Rearing - six month correspondence and four week block course, which includes one week artificial insemination course.



Queen Bee Rearing Knowledge - six month correspondence course.

**Telford's correspondence courses  
learn at your own pace - start anytime**



Certificate in Apiculture - one year FULL-TIME (Feb-Nov), DECA, First Aid and Growsafe Certificates, 120 NZQA credits.

**Scholarships and Grants available for Full-Time courses**

# Harnessing the honeybee

## University of Montana (UM) researchers use insects to detect pollution, land mines

*The honeybee zoomed intently over the grassy meadow at the U.S. Army base, ignoring the lasers pinging off its fuzzy body. Every 26 seconds the green light lanced out, marking the bee's progress using lidar, radar's more-advanced cousin.*

Sampling the air with antennae that give it a bloodhound sense of smell, the bee followed an invisible chemical plume it had been taught to associate with food. The odor of explosives led the worker bee to a buzzing cluster of its sisters. This time there was nothing to eat, but the flying foragers visited the spot again and again, allowing lidar to paint a grouping of dots on a computer screen. Below the cluster, under the ground, was an anti-tank mine.

"That was my eureka moment," says Jerry Bromenshenk, a research professor in UM's Division of Biological Sciences. "That's when I knew I had seen a bee find a land mine."

Using bees and lasers to locate mines may sound like science fiction, but that's exactly what Bromenshenk and his colleagues did last summer at Ft. Leonard Wood, [Missouri]. The UM researchers and their partners conducted a blind field test July 25–Aug. 5 to see if bees could detect the location of explosives in a minefield. The mines were laid in a grid pattern, and each grid point might or might not have a mine buried under it.

UM Assistant Professor Colin Henderson says they felt slightly uneasy working in the minefield. "The mines were deactivated," he says, "but we were told there was a 5 percent chance that if you jumped on one hard enough it would detonate."

He says the bomb-sniffing bees allowed them to create a startlingly accurate minefield map, but then the bees congregated in the middle of a supposedly mine-free control area. The test continued for three days, and still many bees visited the spot away from the minefield.

"At first we thought maybe the bees were really getting fooled," Henderson says. "So we brought the chemistry guy in, and he sampled the area. He found a real strong TNT, DNT and amino-product breakdown. Basically there was a mine there or lost explosive that nobody knew about."

"So we found something that nobody knew was there, that nobody thought should be there, in a place where we weren't looking," he says. "That's when I said, 'Eureka!'"

Bromenshenk says bees and humans have had a long and mutually beneficial history. In nearly every community and country around the world, bees are kept for the honey and wax they produce and the crops they pollinate.

But for three decades Bromenshenk has worked to find another use for honeybees: that of accurate environmental sensors

that detect chemical and biological particles — including pollutants, biological warfare agents and explosives.

Honeybees are busy critters, often making hundreds of thousands of foraging trips from their hive each day. Most stay within a half-mile of home, though some venture up to two miles away. Within their range, bees buzz every nook and cranny in their quest for food.

Bromenshenk says honeybees are like flying dust mops because their bodies are covered with branched hairs that develop a static charge. They zoom around picking up all kinds of environmental particles and take them back to the hive.

The UM entomologist first started studying bees and their hives in the mid-1970s, when energy shortages prompted a plan to build about 30 coal-fired power plants in eastern Montana and the Upper Midwest. "Nobody knew what the environmental repercussions of that kind of development would be," says Bromenshenk, who was tasked to study impacts on rangeland insects. He decided to examine bees, since they are economically valuable.

"We started doing the chemistry of what showed up in the beehives," he says. "We found out we could follow the emissions from those power plants 20 to 30 miles out. With almost every other method, including direct plume samples, you couldn't follow the emissions that far. The bees were like little collecting systems — they were very discriminating — and this gave us the capability to look at huge areas quickly."

Bromenshenk's findings caught the attention of the Environmental Protection Agency, and soon his team was awarded grants to study whether bees could detect and map chemicals. For the next decade they used bees to sample everything from Superfund sites to urban and rural areas, and as far back as 1985 they published maps of industrial chemicals around Seattle's Puget Sound.

The UM researchers prefer to use beehives already existing in an area for their research, but sometimes they rent hives and transport them to a location. Initially, a standard chemical analysis would involve washing bees or grinding them to see what they had picked up.

That changed in the 1990s, when UM chemistry Professor Garon Smith developed a device to help scientists sniff the air inside beehives for volatile chemicals. The small

*Continued on page 15*

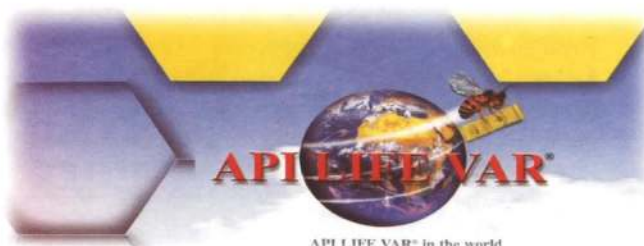
### South Otago Queen Bees

Nick McKenzie would like to advise his clients that he will not be producing Queen Bees or Queen cells commercially over the 2005/2006 season. He apologises for the inconvenience but thanks you for your support over the last 6 years.

BK238

# HERE AT LAST!!

Newly approved for use in NZ



## THE REGISTERED ORGANIC TREATMENT

- \*No residues
- \*No resistance to ALV
- \*User friendly
- \*Eco friendly
- \*Proven efficacy 95+ % average

## NEW VARROA TREATMENT!

### IMPORTER DISTRIBUTOR

(For enquiries contact Reuben)

### BEE GREEN

Reuben Stanley

Fax:

07 345 3375

Email

[beegreen@fastmail.fm](mailto:beegreen@fastmail.fm)

PO BOX 7102

Rotorua

(Contact for Lower Nth Island)

### BONGOA HONEY

Don Simm

Cell:

021 1503041

Phone/Fax

06 8683866

Email:

[donsim1@xtra.co.nz](mailto:donsim1@xtra.co.nz)

2 Walsh St

Gisborne

(Contact for Waikato BOP)

### MOSSOP'S HONEY

Neil & Wendy Mossop

Phone/Fax:

07 543 0971

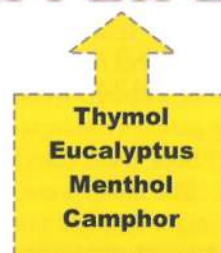
Email:

[info@mossophoney.co.nz](mailto:info@mossophoney.co.nz)

1064 State Highway 29 Tauriko

R.D.1, Tauranga

## API LIFE VAR®



Special introduction price from 01 Sept - 01 Dec  
\$3.95 per packet of ALV + GST

From the 02 Dec 2005  
1 box = 100 packets

1 to 9 boxes (100 to 900 packets)	\$4.30 each + GST
10 to 50 boxes (1000 to 5000)	\$4.20 each + GST
51 to 99 boxes (5100 to 9900 packets)	\$4.10 each + GST
100 boxes + (10000 packets +)	\$4.00 each + GST

Pre pay 30 days delivery Electronic - Cheque

## Guideline for the use of Food Grade Mineral Oil as an alternative varroa control



Figure 1 Propane Fogger



Figure 4 FGMO  
Emulsion Cords



Figures 2 & 3 Fogger Ready Position  
above  
FGMO Fog below



Figure 5 FGMO Emulsion  
Cord Tray



**NATIONAL BEEKEEPERS' ASSOCIATION of NEW ZEALAND (INC.)**

## Introduction

This guideline has been produced by the National Beekeepers Association of New Zealand, the owner of this code of practice for FGMO, and will be distributed to all registered beekeepers in New Zealand.

Enquiries should be directed to:

Executive Secretary  
The National Beekeepers' Association  
Box 234  
Te Kuiti

Current address for Executive Secretary can be found inside the cover of *The New Zealand Beekeeper*, and on the National Beekeepers' Association of NZ website: [www.nba.org.nz](http://www.nba.org.nz)

This guideline outlines a range of unique methods for the application of Food Grade Mineral Oil (FGMO) to beehives as an alternative varroa control. The methods have not been trialled in New Zealand. The effectiveness may be influenced by the timing of treatment and factors outside the beekeeper's control.

### Disclaimer

**While every effort has been made by the sponsor/owner to ensure that the information in this code is correct, the National Beekeepers' Association Incorporated does not accept any responsibility or liability for error or fact omission or interpretation, nor for the consequences of any decision based on this information.**

White mineral oil is produced under white room conditions to meet stringent international pharmacopoeia requirements.

Products used to control pests and diseases of bees must be approved by the Minister for Food Safety. Food Grade Mineral Oil has been approved by the Minister for Food Safety for the prevention or treatment of varroa (*Varroa destructor*) in beehives, under section 62(2) of the Animal Products (Ancillary and Transitional Provisions) Act 1999. This approval is subject to two conditions:

- use of the product is conditional on a Code of Practice being approved by the ACVM Group of the New Zealand Food Safety Authority (NZFSA) to ensure that the product is used correctly and consistently; and
- the use complies with the approved code of practice.

## Compliance and Obligations

Under the Agricultural Compounds and Veterinary Medicines (ACVM) Regulations 2001, certain compounds which are not registered trade name products can be prepared and applied by a person to animals including bees they own or lawfully occupy, on condition that that person complies with the Code of Practice for "own use of compounds".

People who use these compounds are subject to statutory obligations under the ACVM Act 1997, and are likely to be subject to statutory obligations under other legislation (i.e., Resource Management Act 1991, Health and Safety in Employment Act 1992, Hazardous Substances and New Organisms Act 1996, Animal Products Act 1999 and the Food Act 1981).

**Exempting compounds from registration under the ACVM Act does not exempt anyone from obligations imposed under any other legislation.**

## Offences and Penalties

Non-compliance with this code by persons using own compounds under Schedule 1 is a breach of the ACVM Regulations 2001.

Section 55, subsection 1 of the ACVM Act 1997 states that every person commits an offence against the Act who knowingly contravenes any conditions which apply to any agricultural compound exempt from registration by regulation made under section 75 of the Act.

Every person who commits an offence against subsection 1 of section 55 is liable on summary conviction, -

- a) In the case of a natural person, to a fine not exceeding \$39,000;
- b) In the case of a corporation, to a fine not exceeding \$150,000.

# Food Grade Mineral Oil (FGMO)

## Conditions on use of food grade mineral oil for varroa control

Use of food grade mineral oil is subject to two conditions:

- use of the product is conditional on a Code of Practice being approved by the ACVM Group of the NZFSA to ensure that the product is used correctly and consistently; and
- the use complies with the approved code of practice.



## Key points of the code of practice that are relevant to beekeepers include:

- 1) *Food Grade Mineral Oil* must only be used on your own hives, on land you own or lawfully occupy.
- 2) The compound must not produce residues in products that fail to comply with applicable food residue standards. While no residue limits have been set for *Food Grade Mineral Oil* in honey, the Food Act 1981 section 9(4)(b) stipulates that no person shall pack or sell any food containing any extraneous thing that is injurious to health, offensive, or the presence of which would be unexpected and unreasonable in food of that description prepared or packed for sale in accordance with good trade practice.
- 3) The compound must not be stored, prepared, administered or disposed of in a manner that causes unnecessary hazard to people, animals or the environment.
- 4) Any likely third parties must be advised of any hazards to themselves or their property.
- 5) Where necessary, appropriate officials must be advised of the use, and time and place of application of the compound. This could apply in the case of an accident or significant spillage, or if a compound is inadvertently used outside the conditions of this approval. Official notification of routine treatments is not required.
- 6) Adequate records must be kept to show that the points above have been considered, and due care taken to comply with them. For example, a beekeeper might record the date of application.
- 7) Where compounds are used by employees or subordinate persons who are not under direct personal supervision of the beekeeper, written instructions must be provided that direct:
  - how the compound is to be stored, prepared, administered and disposed of;
  - how third parties will be notified and advised of hazards;
  - how officials are to be informed of the use, time and place of administration.

## Guideline on use of Food Grade Mineral Oil for varroa control

### Sources of Product:

Mobil NZ Ltd pack size 20 & 205-litre in food grade containers.

### Minimum grade/standard of product:

(White mineral oil) 8042-47-5 Food Grade  
Density 0.846; e.g., Whiterex 307.

Substitute suppliers of white mineral oil, Food Grade 8042-47-5 within density range 0.820 to 0.860.

## Operator Safety

**Disclaimer: Mention of trade name product in this code of practice is solely for the purpose of providing specific information and is not an endorsement by the National Beekeepers' Association Inc of New Zealand.**

## Precautions

- Keep out of reach of children
- Wearers of contact lenses should consult with their optician before use
- Do not inhale thermal fog
- Wear clothing that protects the skin
- Wear goggles or face shield, chemical resistant gloves, boots and air-purifying cartridge-type respirator equipped for organic vapours plus particulate p51 filter.
- Work outdoors, stand upwind when using
- Wash skin thoroughly with soap and water after handling and before eating food
- Always light thermal fogger outdoors away from combustible materials

- Avoid skin and clothing contact with the hot areas of the thermal fogger
- Do not leave thermal fogger burning unattended
- Wait until thermal fogger is cold before removing the gas cylinder
- Avoid use in areas with dry vegetation or near forestry.

## FIRST AID:

**If SWALLOWED:** If more than a litre of food grade mineral oil is swallowed, immediately give 1 to 2 glasses of water. Seek medical attention.

**Eyes:** In case of eye contact: flush gently with water for 15 minutes. Obtain medical advice.

**Burns:** Immerse in cold water immediately

**Storage:** Store in original food grade container away from odours and other chemicals. Avoid conditions of extreme heat.

**Spillage:** Soak up food grade mineral oil with dry sand or similar material. Scrape up and remove to chemical storage area.

**Fire:** Extinguish with carbon dioxide, dry chemical or foam.

## DIRECTIONS FOR USE

### Food Grade Mineral Oil

- Light medicinal white oil
- Only use substitute food grade mineral oil conforming to 8042-47-5 Food Grade within density range 0.820 to 0.860
- Check product label specifications before use (e.g., Mobil Whiterex 307).

## Application Methods

A variety of methods have been developed to suit beekeepers' management. FGMO is not dependent on time of day, temperature or humidity for use. It does not oxidise, with no detection of residue by high-performance liquid chromatography (HPLC) laboratory analysis after three years' use. For best results do not allow hives to reach threshold limits before starting treatment. Select treatment option that best suits to prevent economic damage. Regular monitoring and use of screened bottom boards are recommended.

### 1. Thermal fogging (Figures 2 & 3)

Use a portable propane thermal fogger that delivers a FGMO dry fog particle size of 15 microns e.g., Figure 1.

- Thermal fogging of FGMO requires no preparation apart from filling the fogger oil tank
- Always read the instruction manual and labels on the fogger before use
- Read propane gas cylinder label instructions before connecting to fogger
- Do not use the fogger for insecticide use
- Used foggers are not recommended for use
- Electric thermal foggers are not suitable for use in treating bees
- Ensure fogger is at correct operating temperature before use
- Apply fog with discharge nozzle 100 to 150 millimetres from bee entrance. Fog temperature at the above distance will simulate brood temperature
- Always hold fogger with heating coil barrel level to ground (Figure 2)
- It may be necessary to raise hives, e.g., onto pallets.

### Application rate

- 2–4 full pump strokes per hive super determined by hive strength
- Allow 4 seconds between each pump stroke to maintain fogger-operating temperature for dry fog delivery. Count 1001, 1002, 1003, 1004 between pump strokes
- Turn fogger off if not in continuous use to prevent overheating of the FGMO fog
- Fog may lose effectiveness if overheated
- Do not fog bees in tight winter cluster: best time to fog is when field bees are in active flight.

### Frequency of application

- Fog every 7 days as a stand-alone treatment.

### Duration of treatment

Food Grade Mineral Oil is a soft treatment for all season use that is not reliant on threshold levels and therefore monitoring of mite levels on a regular basis is recommended.

## 2. Emulsion soaked cords

(Figures 4 & 5)

Replace at 21–28 day intervals.

**Caution: Do not use emulsion in fogger!**

### Preparation

#### Ingredients:

- 1 litre of Food Grade White Mineral oil
- 1 kg of clean yellow beeswax
- 1 kg of honey (free of AFB)
- 100 x 8 mm diameter natural cotton cords 1 metre long

#### Instructions:

- Heat Food Grade Mineral Oil to boil in metal or ceramic container
- Add beeswax and stir until it melts
- Add honey and stir
- Remove from heat source
- Add cords, stir and allow to cool
- Once cooled, emulsion is ready for adding to hives.

### Application of cords

- Apply 2 or 3 emulsion soaked cords per hive super
- Apply cords across top bars in a figure "s" (Figure 4)

#### Or:

- Cords may be applied in a suitable pull out tray (Figure 5)
- Emulsion prepared without the cords with measured amount into tray or on card **over top bars may give satisfactory results**

**Note:** The use of cords as a slow release mechanism has been found to be the most successful method in extending the treatment period up to 4 weeks.

- Recycle with emulsion soaked cords every 3–4 weeks to prevent build up of propolis on the cords
- Fogging and application of emulsion soaked cords simultaneously every 3–4 weeks have been found to give the best results. Efficacy may vary between hives.
- The above methods are recommended for use in conjunction with screened bottom boards, to capture the live mites that fall during stimulated grooming from reattaching themselves to the bees.

**Continued from page 13**

Plexiglas instrument holds sampling tubes that filter out benign chemicals such as water or tree resins in a series of tubes, leaving the volatile chemicals to be picked up inside a few pen-sized capsules, which are taken back to the lab for analysis.

Bromenshenk says this vapor-sampling system was developed while the researchers worked for the U.S. Army during the mid-1990s. They were studying hives near military landfills and urban areas, checking for trace elements of heavy metals, volatile organic materials and radioactive substances. They used the hives to check for 300 materials, with 80 that were prioritized.

At one site in Maryland, Bromenshenk says, they used bees to check a military landfill site containing carcinogenic solvents and other waste. Local townspeople held regular meetings to keep tabs on the site. But the bees found the greatest health risks to the local community were often outside the fenced military compound — coming from sources such as a big auto-repair shop, which evidently had a history of dumping out the back door, and heavy highway traffic on nearby roads.

“The community members were chasing the hot spot they knew about and were blissfully unaware of the fact the real health risk was probably sitting right next door to them,” Bromenshenk says.

The UM researchers often take bees into potentially dangerous areas. They sampled Washington’s toxic Hanford nuclear site, and at one point worked with Croatian scientists studying fallout from Russia’s Chernobyl plant, as well as other sites that contained even more toxic chemicals. They needed an automated system to detect whether their bees were dying, since whatever kills bees will probably harm people. So by 1996 they had developed their first electronic beehive.

UM computer specialist Robert Seccomb says, “The electronic beehive is a combination of sensors and electronics to measure just about any darn thing we want to measure inside a beehive. We have infrared detection that counts the number of bees coming and going from the hive. If it’s warm and not raining, we can get over 100,000 runs out during the day, easily.”

During the warm months when bees are active, bee counts from an electronic beehive can be accessed at <http://beekeeper.dbs.umt.edu/bees>. This hive actually is located inside Bromenshenk’s campus office, and a pipe lets the bees fly outside UM’s Health Science building.

Seccomb designed the bee-counting software, as well as the electronic beehive’s artificial neural network, which automatically detects any abnormal bee behavior such as the insects not returning home.

The chief architect of the most recent electronic beehive is Steve Rice, director of the electronics department at UM’s College of Technology. He says their hives include a smart-hive module, which measures everything from temperature and outside, as well as sampling devices that can be turned on and off. Rice says the first prototype resembled a spaghetti

pile of wires and required a shed full of computer equipment to operate. Continual refinements have reduced the space needed for the equipment, “and everything could now fit in an 8- by 8- by 8-inch box.”

He says smart hives can be programmed to have set upper or lower limits for contaminants. When a limit is reached, the hive will automatically take a sample, sending the information back to the lab.

Henderson says the team’s bee technology makes hives into an inexpensive environmental monitoring system that can find everything from arsenic-polluted sediments to anthrax. He says bees can monitor a polluted area much more thoroughly and cheaply than a typical engineering firm. The electronic hives also could be used to protect agricultural bees.

Bromenshenk says one of their smart beehives is like having an air sampler with a mile-wide nozzle. If there are any pollutants within a 2-mile radius, the bees will detect it. But then about five years ago, the UM group was asked by the federal Defense Advanced Research Projects Agency if bees could find the exact source location of something for which they were looking.

This would require tracking and mapping the bees, Bromenshenk says. At first they tried attaching tiny microchips to the backs of the insects, but the chips were too heavy. It also would be incredibly time-consuming affixing chips to many bees.

It was at that point they learned of a National Oceanic and Atmospheric Administration lidar system used to track fish. Lidar sends out laser light pulses that are scattered back by things it hits, such as hard objects, dust and bees. The time between the outgoing pulse and the return signal is used to measure the distance from the bees to the lidar. It was this system the UM scientists eventually used to map a minefield.

“As far as we know, there is no technology out there that has as much sensitivity as our bees for locating such things as mines or unexploded shells,” Bromenshenk says. “The bees also are much safer to use, since they won’t set off a mine like a human or dog would.”

Unexploded land mines are a major worldwide problem, and the potential for UM’s bee research has garnered international attention. Bromenshenk says they have done scores of interviews with media from the *National Enquirer* and the *Wall Street Journal* to Animal Planet, the BBC and *Der Spiegel*.

**Continued on page 16**

## **BEEKEEPING EQUIPMENT**

*Two Pender 72 Frame Radial Extractors in very good working order.*

*Reasonable offer accepted.*

**Phone Paul Bartrum  
03 614 7790**

BK242

Continued from page 15

But one question remains: How do the researchers train bees to hunt for what they want found? Why would a bee hunt for land mines or toxic waste and not the nearest blossom?

That, Henderson says, is a trade secret. In fact, it's one of the backbone technologies of Bee Alert Technology Inc., a University-spawned company the researchers formed to market the science they have pioneered. The fledgling firm already has earned a defense department Small Business Innovation Research grant for pilot work to study whether its business concept is sound. If it is, much larger grants could be forthcoming. "We could market smart beehives, systems for hunting land mines, every aspect for use with agriculture — any aspect of this that has a marketable or practical use," says Bromenshenk, a third-generation Montanan. "And we would like to see this technology nurturing our state. We want to see Montana firms; we want to see Montanans as employees.

"And helping protect people around the world from pollution and land mines wouldn't hurt either."

- Cary Shimek



Reprinted from Research View, a publication of the University of Montana, Spring 2004. This article can be viewed online at <http://www.umt.edu/urelations/rview/spring04/honey.htm>

[Editor's note: Dr Jerry Bromenshenk was a guest speaker at the 2005 NBA Conference. He and his wife, Gail, are pictured below. Photo is by Frank Lindsay.]



Please ring Ken Clements on:- 0800 4 PROPOLIS  
(0800 477676)  
Fax: (07) 533-1118 Email: [ken.clements@comvita.com](mailto:ken.clements@comvita.com)  
or deliver to our factory - Paengaroa Junction, Te Puke

**PROPOLIS — PROPOLIS — PROPOLIS — PROPOLIS**

**Payment Terms**

Single payment on Propolis purity results. Our aim is to have payment in your hands within three weeks of receipt. If sending Propolis for the first time please include your GST number, or advise to say you're not registered.

**Phone to arrange**

**FREE REMOVAL FROM MESH MATS**

**SCRAPPING AND MESH PROPOLIS REQUIRED**

**SOUTH ISLAND SUPPLIERS**

Freight forward your propolis to Te Puke by Post Haste or Tranzlink.

Contact Ken for details.

BK19

# Huge bee losses force apiarists to avoid Flats

Huge bee losses on the Poverty Bay Flats over the past two years remain unexplained, with the possibility of a link to a squash seed treatment all but ruled out.

With beekeepers adamant they will take their bees off the Poverty Bay Flats, growers of squash, Gisborne's biggest summer crop, and other growers requiring pollination by bees, are in a tough situation for the 2005 season.

Bayer CropScience scientist Dr Juergen Keppler from Germany met with local beekeepers and squash growers last week following media reports earlier this year suggesting a link between the systemic insecticide treatment imidacloprid and bee deaths.

This followed massive losses of bees from hives in Lavenham Road, Ngakaroa Road, the main road at Ormond, Te Karaka and Puha in the 2004 season.

Further big bee losses in the same areas this year left beekeepers no option but to take their bees off the Poverty Bay Flats, beekeepers said at the meeting.

The varroa mite has hit the region hard, with the feral bee population almost non-existent now, so growers on the Flats would be left without pollinators.

Beekeepers believed the imidacloprid, which acts systemically through the plants and kills sucking insects as well as other pests, was getting through to their bees.

But because the bees started dying in April, the possibility of them being affected by squash was ruled out because all the squash in this district has finished flowering by February.

The consensus at the meeting was that there was no question the bees had been poisoned: the question was by what?

Beekeeper Paul Badger described returning to his hives and finding a pile of dead bees in front of the hive, with one of the few remaining bees stumbling out of the hive and dying as he watched.

The only link between the poisoned bees was they were all in flying distance of the Waipaoa River, which seemed an unlikely source of poison, said Mr Badger.

Williams and Kettle FruitFed's Tim Geuze suggested there could be a link to a spray used in citrus orchards, possibly also within the range of where the bees had been poisoned.

Ian Stewart, a Tolaga Bay beekeeper, questioned whether the imidacloprid remained in the soil and then was picked up by subsequent crops.

Dr Keppler said there would be residual amounts of imidacloprid in the soil and they would become more firmly attached to the soil matrix through natural binding.

"Aged soil residue of imidacloprid are less biologically available and do not pose a risk to the environment," he said.

Trials had shown there was no uptake into the next crop and even with repetitive application did not accumulate in the soil.

The use of imidacloprid as a seed treatment using Gaucho and as an insecticide in spray form as Confidor has been alleged to cause bee losses all over the world since the mid 1990s.

As a precautionary measure, the use of the chemical on sunflowers in France was suspended in 1999.

In May 2004 the use of Gaucho in maize was suspended in France following more bee losses. Dr Keppler said this was a politically driven suspension.

Experiments done both by Bayer and independent scientists in various countries, climates and soils, involving varying bee colonies and sizes, concluded imidacloprid was a low risk to bees.

While Bayer concluded the risk was low, they could not confirm there was no risk, said Dr Keppler.

Studies involving bee health, beekeeping practices and other factors like environment and climate, which could affect bee health, were under way in five different countries. Dr Keppler said these and a huge five-year bee study in Germany, involving 1000 bee colonies, hoped to record the bee population development in Germany.

It was hoped a pointed analysis of bee losses or even a forecast of possible bee damage or population losses was achievable from this study.

**- Debbie Gregory**

*Reprinted with permission from The Gisborne Herald, 12 July 2005.*

*[Editor's note: Dr Juergen Keppler was a guest speaker at the NBA Conference in July 2005.]*

## HONEY EXTRACTOR

4 Frame, Electric, Stainless Steel, Reversible.

**\$800**

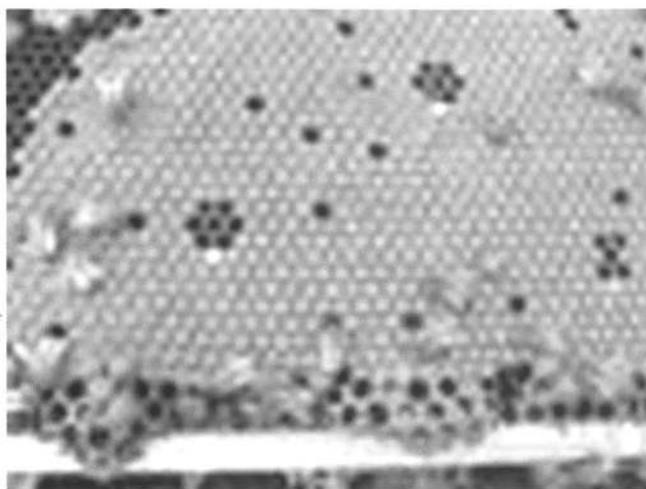
**Ph: 07 863 7141**

BK244

# Selecting varroa-resistant bees (part 3)

Bob Russell

Last season whilst working with selected hives I made a number of observations for further study in relation to varroa resistance. In the second week of October 2004, during a careful brood inspection, I noted unusual behavior when lifting a brood frame out of a hive. A cell was being uncapped by several bees, which in my presence dragged the pupa out with an adult mite attached. On observing the frame it was evident that a number of other cells had been uncapped and cleaned out also. This hive had passed its hygienic test by the pinprick method along with other selected traits the previous season.



**Viable brood & Hygienic test. Photo: Bob Russell**

In the second week of January 2005, whilst checking a newly capped brood frame for varroa infestation, I carried out a little experiment. After finding a phoretic mite on a larva that I had uncapped and removed from its cell, I laid the larva down with mite attached, surrounded by bees on the brood frame and waited to see what would happen. The mite mounted the first bee that approached the larva. The initial mounting was not detectable to the eye, but the final positioning of the mite under the front of the bee's wings was. One could immediately see the stress the bee was under as she went into a dance similar to the wagtail, attempting to dislodge the mite with her vigorous to-and-fro motions whilst other bees watched without assisting her in her dilemma. After several attempts to dislodge the mite, she flew at speed in a direct line out from the hive.

On 20 March this year I noted what I thought was a swarm leaving its hive, which had been established in a swarm trap some seven weeks earlier from an incoming swarm of unknown origin on 31 January. Apart from initially inspecting it and adding frames once the hive was settled in, I did no further checking of this swarm hive, being one of 30 captured in this way for the season as part of an experiment. What was unusual was that I'd seen the bees leaving the hive and making a direct flight until out of sight. On opening the hive only a handful of bees remained. A partial frame of brood with all stores taken, crawling bees outside the hive and heavy varroa infestation in the remaining brood cells was conclusive evidence it had absconded. I had believed absconding bees due to varroa was a myth until I experienced this occurrence.

Alois Wallner of Randegg, Austria has been selecting and breeding varroa-resistant bees for 20 years now from selected breeder hives without treatment for up to five years. In his 178-page book *VARROA-RESISTENT* (published in German), he says that beginning the process of selecting for varroa resistance is not easy. His guess in 1990 after five years of selection was that about 95% of the carnica species have poor capability to kill varroa mites. In a recent article in *The Australian Beekeeper*, the authors note, "Resistance of bees to Varroa is not specific to any race. Hives resistant to *Varroa destructor* exist but chemical treatments mask their occurrence." Alois Wallner has not lost hives to varroa since 1988, by following his method of detecting varroa-resistant hives and treating those that are not resistant with formic acid before any economic damage occurs.

Wallner says the death of a colony starts with the infestation of the brood. He developed a method by trial and error for early detection of brood infestation, at the same time selecting hives with low varroa infestation to be further tested for what he discovered and named as the varroa killer factor (VKF). It stands to reason that varroa damaged to the extent as in the photos in my previous article (July 2005) will not add to the varroa population, and in most cases would die from their injuries in a very short time.

In my previous article I said I would investigate the possible relationship of damage to mites in relation to non-reproduction (infertility) in the capped cell. Some of these possibilities are whether infertility may be caused by the lesser injuries from the VKF that does not result in the mortality of the varroa mite before entering the cell, but may inhibit the mother mite's ability to move the egg from the laying position, hold in the correct position whilst sticking it onto the cell wall, or prepare the feeding site for the protonymph.

Earlier this year I made a request to the Institute of Zoology, university research & Department of Apiculture, Federal Dairy Research Institute in Liebefeld-Berne, Switzerland, for work done between 1990–1994 entitled 'A look under the cap: the reproductive behaviour of *Varroa* in the capped brood of the honey bee', by Gérard Donzé, Peter Fluri and Anton Imdore. Peter Fluri organised this invaluable requested work to be transferred onto DVD and permission has been granted to place a copy in our National Beekeepers' Association library. Narration at this time is in German and French.

Alois Wallner derived from his work that for practical purposes, that the development of brood infestation increases at a slower rate in colonies that are able to kill varroa mites. He found that a special relationship exists between the number of damaged mites to total mite fall on a screened bottom board over a 10-day period. This relationship is best shown by the graph on the following page. Note that the graphed lines run parallel to each other.

Only hives that maintain low infestation (0–5% current day in Wallner colonies), measured by uncapping 20 newly capped worker cells, removing the larva with forceps on a frame free from drone brood periodically over several months, will be



**Varroa Killer Factor graph. Photo from VARROA-RESISTENT, Alois Wallner.**

subjected to the varroa killer test. Uncapping newly capped brood allows a safety margin for treatment on hives found with higher infestation to be treated or replacement of the queen from selected resistant stock before reaching economic damage levels (syndrome). Selection needs to start early in the season to minimise the chances of infestation damage.

Selecting and breeding for improvement of the desirable properties and requeening of those with undesirable properties has to be completed before the varroa re-invasion period. Alois Wallner stresses the importance that the desirable properties have to be measurable and he covers the rules of heredity. In 1865 and 1869 Gregor Mendel published his observations of the 'laws' of heredity.

Wallner says only by paying attention to hereditary rules will it be possible to develop a varroa-resistant bee. The higher ability to inherit motherly properties was recognised. Selection measurability is absolutely necessary. Selection without breeding does not result in an improvement of desirable properties. The recognisable and desirable properties of resistance have to be measurable in the descendants of the selected colonies. Only colonies with a genealogy record can become breeding colonies: those records must show achievement for at least one year.

I hope this short series provides an incentive for others to become involved in selecting and breeding for varroa-resistant bees from their own beestock. A 51-page English translation of Alois Wallner's book *VARROA-RESISTENT*, together with



**NZ bees without and with heavy infestation. Photos: Bob Russell**

reproduced photographs to match the text, will be donated to our National Beekeepers' Association library shortly.

### References

- Wallner, Alois. 1994. *VARROA-RESISTENT. Meine Methode der Auslese und Züchtung varroa-resistenter Bienenvölker.*
- Donzé, Gérard, Fluri, Peter and Imdorf, Anton. A look under the cap: the reproductive behaviour of *Varroa* in the capped brood of the honey bee. *American Bee Journal*, July 1998. Available online through the Swiss Bee Research Centre at [http://www.apis.admin.ch/english/pdf/Varroa/Fortpflanzung\\_e.pdf](http://www.apis.admin.ch/english/pdf/Varroa/Fortpflanzung_e.pdf)
- Kefuss, John, Taber, Steve, Vanpoucke, Jacques. Breeding for varroa resistance: how we do it. *Australian Beekeeper* 106(10): 45, April 2005.
- Markthaler, Gerhard. A safe method of detecting *Varroa*-resistant colonies. *American Bee Journal* 144(10), October 2004.

### Acknowledgements

Thanks are due to Jack Griffes, founder of the Honeybee Improvement Program (HIP), for providing the 51-page English translation script of Alois Wallner's book *VARROA-RESISTENT*.

I am most grateful to Alois Wallner of Randegg, Austria, author of *VARROA-RESISTENT*, for his kind permission to reproduce his photos in this series.



# Ceracell Beekeeping Supplies Ltd

HONEYCOMB FOUNDATION MANUFACTURERS  
SUPPLIERS OF QUALITY BEEKEEPING EQUIPMENT

24 ANDROMEDA CRESCENT, EAST TAMAKI, AUCKLAND, NEW ZEALAND  
P O BOX 58 114 GREENMOUNT, AUCKLAND.  
PHONE: (09) 274 7236, FAX: (09) 274 0368, EMAIL: ceracell.bee.supplies@xtra.co.nz

## **Varroa Control**

### **Apistan**

The World standard for Varroa Control always in stock and available at competitive prices!

### **Apiguard**

A Thymol based natural product that is suitable and recommended for Rotational Treatment with synthetic Pyrethroids.

Available at very competitive prices contact Trevor for further information.

### **Formic Acid**

We still stock formic in 190kg + 25 kg lots

**Ceracell Beekeeping Supplies**  
**the one stop shop for Varroa control!**

BK193



# About the Apiary

As the weather warms, bee activity increases. Already some parts of the east coast in both islands have had the odd day when the temperature has reached 20 degrees C. Has the winter finished? So far, apart from a few bad frosts we can't consider it's been a cold winter. Perhaps it's still coming but then again maybe not, as there are quite a few young lambs running around now. In my garden Five Finger (*Pseudopanax arboreus*) is flowering and there are a few catkins on the Pussy Willow (*Salix fragilis*), so looks like we are going to have an early spring. Beekeepers around the country are reporting that brood rearing in their hives is well under way, which for some is quite early.

On a warm day visit your hives and just stand to the side of the entrance and watch the comings and goings at the entrance. Are the bees bringing in pollen — a sign that brood is present? Are there lots of dead bees in front of the hive? Have they got pollen on their legs? These bees have been chilled and were too cold to walk into the hive. Provide an extra landing strip for them so those landing short can walk into the hive. Piles of dead bees without pollen is a sign of noseema — replace most of the brood frames before autumn.

Is there debris at the entrance? Chewed cappings could indicate you have a mouse in the hive, or it's being robbed out. Have a quick look and close down the entrance to prevent the mouse from reentering at night. One of my hives had slivers of wood at the entrance. I found a rat had chewed into the hive through a soft part of the super, so I laid more baits. Hence, a quick glance at the entrance before opening a hive can tell you a lot.

My hives are a mixed lot. Some have been working all winter, brood in four frames and these now have the bees covering two supers, while some in the colder areas are only the size of a 4-frame nuc, with a brood area the size of your fist in the middle. These strong hives will have to be watched. They are likely to use all their honey stores before the early willow flow and will probably need feeding, and are likely to swarm in October because they are so strong. I'll mark these and split them before they can swarm.

So it's a good idea to check the weight of hives about now to determine whether or not your hives will need supplementary sugar feeding. If you don't, you are likely to find your very strong hives have died from starvation. What is also not appreciated is that when a hive runs short of food, the first thing to happen is that the bees will cannibalise the eggs and young brood. This will put a break in the brood rearing and check the hive's development, which shows up when the flow starts with fewer bees in the field. Whatever you do, once the bees start brood production make sure that it continues at a good rate. This means that the bees need ample stores of pollen and honey. Hobbyists are in a good position here. Urban areas have ample pollen from all sorts of ornamentals that grow and flower right through the year, but hives out in the rural area don't have a great selection and sometimes will run short of pollen. Many commercial beekeepers feed pollen supplements to overcome this shortage.

There is a quick check called 'hefting' that will tell you whether or not you'll need to investigate further. It's very

simple: stand close in behind the hive and reach down to the top handhold. Using the handhold, try to lift the hive with one hand. It shouldn't move if it has plenty of honey.

If you can lift the back of the hive up slightly off its stand, then investigate. Remove the roof and mat/cover board/split board and peer down between the frames of the top super. Do you see capped honey in more than three frames? If not, apply a little smoke to the entrance and over the tops of the frames and remove an outside frame. If you are like me and have moved the broken lugged frames to the outside, ready for replacement in the spring, then ease out the next frame in after slightly prising them apart to crack the propolis. Pick a frame that hasn't many bees on it, as you don't want to roll the queen when you're lifting out the frame.

Then it's just a matter of breaking the propolis seal on the adjoining frames and lifting them out individually to check the amount of stores present. The point is to maintain three full frames of honey in the hives right through the spring: this is the amount of honey a strong hive will use in a week when the bees can't fly. If you haven't got more than this, you will need to start feeding your hive. Some hobby beekeepers hold over a few frames of honey to feed their hives, while others depend upon sugar feeding. If you have full frames of honey, put these in close to the edge of the cluster, but it might also be a good idea to replace the outer frames with a feeder at the same time. If you don't have a frame feeder there are lots of alternatives; for example, you can use an inverted Agee jar with half a dozen tiny holes in the lid. If you have nothing at all, a plastic bag of syrup with a thin pinprick hole on the top edge will do. Place the sealed bag of syrup on the top of the frames. Prick the middle of the bag and lightly press down so that a pool of syrup is held on top of the bag. Put a tiny dribble over the edge so the bees follow the syrup trail to its source. The weight of the bees on the bag will force the syrup out until it's just about completely empty.

*Please note:* You should use only your own honey to feed back to your hives, and only then when you know the area you keep in is totally free of AFB. Otherwise, it's safer to stick to sugar feeding.

Mix a 2 to 1 sugar-water mix, i.e., take a container and fill it 7/8ths full with white sugar. Pour boiling water into the container until the water level is near the top and stir. Wait until the sugar syrup cools (it should be warm, about 25 degrees C) and pour into the feeder, then add some dry pig fern or gutter guard or sticks so the bees won't drown going in and out of the syrup. Dribble a little across the top of the frames so the bees have a sugar trail to follow back to the feeder. Most commercial beekeepers feed 10 to 15 litres at a time every three to four weeks until the start of the honey flow. If you haven't left enough honey in the hive, you may have to do the same.

On my strong hives, I add two scoops (using an old 2-kg honey pot) of raw sugar to the top dry sugar feeder as a just-in-case provision. The bees will use this when no other sources are available.

When opening the hive for the first time after winter, another task is to check for condensation. A little condensation under the hive mat is acceptable but the top frames and sides of

*Continued on page 23*

# 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

### NEWSFLASH

— 8 Week treatment now approved in N.Z.

— showing no signs of resistance

— no residues detected

— can be used to alternate with Apistan & Apivar if required

### So why would you use anything else?

We believe that Bayvarol is now New Zealand's most popular Varroa treatment.

#### Current prices

20 to 96 strips	\$1.87 + GST each
100 to 796 strips	\$1.75 + GST each
800 to 8800 strips	\$1.57 + GST each*
9600 plus strips	\$1.35 + GST each

\* For orders of one or more cartons, enquire from us to find out how to join in with a bulk purchaser and receive your strips at the best possible price.

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, contact Stuart Ecroyd**

**Free Fax: 0800 233 929 or email: [Bayvarol@beehealthy.co.nz](mailto:Bayvarol@beehealthy.co.nz)**

**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](http://www.beehealthy.co.nz)



[www.ecroyd.com](http://www.ecroyd.com)

P.O. Box 5056 Papanui, Christchurch, New Zealand • 6A Sheffield Crescent, Burnside, Christchurch  
Phone: (03) 358-7498 • Fax: (03) 358-8789 • Free Fax 0800 233 929 • Email: [stuart@beehealthy.co.nz](mailto:stuart@beehealthy.co.nz)

the supers should be dry. If they are a little wet, add more ventilation by placing a small twig on the rim of the super — you should do this if you are feeding hives as the bees need to reduce the water content.

### Fixing things

It's been raining off and on for a week now so activity is restricted to home. I've had a few fix-it days. The weed eater cut out during the summer and wouldn't start: it lost its spark so I put it aside for a rainy day. After stripping it down, I removed and washed out the switch with metholated spirits, then metered it to prove it was working. As I was putting it together again I noticed that the wire from the switch had worn through the insulation against the frame. A strip of insulation tape and half an hour later it was going again, just in time to get the apiary sites cleaned up for spring.

I'd also put aside a lifter that I use to lift the supers up to a level where it's easy to put frames on to the uncapper guides. My problems started after I got over enthusiastic with a water blaster. When everything dried out, I found that the spring that holds the load had rusted to the shaft and no amount of encouragement with WD40 spray helped. So this has been stripped, cleaned of rust, re-oiled and put together again and surprise, surprise, it's working again.

After these successes, should I carry on to replace a few more bearings that will need replacing next year or quit while I'm ahead? The weather over the next few days will determine this, or perhaps I should get on with waxing the frames I brought at the conference dinner auction.

I've got the blocks of wax out of the cupboard; have an old electric fry pan and paint roller ready to start. All that is required is another half-day of rain to roll the molten wax on to the both sides of the frames and these will be ready to be put on when the main flow starts. Another tick on the 'jobs to do' list.

Some advice for hobbyists thinking of switching over to plastic frames: don't mix them with drawn wax frames in an attempt to get them drawn out early, because the bees prefer to work natural wax frames before plastic. The bees will only build on these when they have to and will often draw out ribbons of drone cells between the frames. Hold them for the main flow, then force the bees to draw them out. Once drawn, the bees will accept them and you can use them wherever you wish as replacement frames.

### More on wasps

I was hand smacked for suggesting in my article in last month's magazine that we should use jam as bait. It took years to get jam out of the possum baits to stop bee kills and also in some areas where there's nothing flowering, the bees will actually be attracted to the jam. So perhaps we should stick to the fish-based cat food.

The marking on the common wasp can vary from the drawing in the July issue, so I came across a queen common wasp under the roof of a hive and photographed it for you. Being a common wasp that (in our area at least) doesn't attack beehives, it was left to overwinter. German wasps, however, don't fare as well.



Queen common wasp.

Another little tip passed on by Tony Roper (AgriQuality, Christchurch). We all know that when Carbaryl is mixed to bait, it becomes unattractive to wasps. Tony's suggestion was to make a moat of powder around the bait so the wasps have to walk through it, picking up enough poison on their bodies to kill off the nest.

Another suggestion for beekeepers in grain-growing areas is to use Actellic dust. I'm not sure if it's registered to kill insects in this way (it is used to control weevils in grain). I am advised that a teaspoon placed into a nest kills the wasps off within half an hour.

### Suggestion from conference

Gorse and broom are disappearing as farmers bring every bit of land into production. Gullies are being cleared that used to provide valuable bee food. One beekeeper's suggestion is to plant the upright variety of Rosemary (*Rosmarinus officinalis*). This provides an early nectar and pollen source, the cattle don't chew it and it doesn't set seeds, so won't spread and become a nuisance. So ask your farmers and perhaps the windbreak behind your hives will eventually be a Rosemary hedge.

### Things to do this month

Feed hives where necessary. Make up frames and wax them in preparation for the flow. (Hobbyists should wait to put foundation on just before the frames are put into the hives, as the wax will expand when it warms and can cause the foundation to sag).

Clean and check grass-spraying gear. Check stored supers. Prepare everything for the new season's work. Some beekeepers will have already started feeding pollen to stimulate drone brood production in preparation for queen rearing. Check your queen-raising equipment and have everything ready for September. North Island beekeepers: check varroa levels and work out when best to treat your hives.

- Frank Lindsay

# Letters to the Editor

## Assistance sought for SFF project

I am coordinating a Sustainable Farming Fund project, 'Integrating NZ Flax into land management systems' and am keen to link with any related initiatives in the beekeeping industry.

The project is seeking to link both environmental and potential economic values of NZ Flax, across a range of land management types; anyone interested in hearing more about the project could contact me at nzflax@wise.net.nz or phone 06 3777 111.

Flax flowers have copious nectar, and I believe it makes a rich, dark honey. Would you know of any beekeepers who produce flax honey or are familiar with bees using flax? I would be most interested in any information.

Many thanks

Liz McGruddy

Landventures Ltd

## Roy Patterson Trophy winner says thanks

I wish to express my gratitude to the NBA Executive for the generous cash gift that was presented with the Roy Patterson Trophy this year. I believe that the Beekeeping Innovation Competition held each year at conference is a great way to share our ideas with others. Entering something, no matter how insignificant, helps keep the competition active and encourages us to really think about why we do something in a certain way. There is always a reason behind every action you do and behind the construction of every piece of equipment. When you put your entry in for next year, be sure to include a set of simple notes describing what it is, and all the reasons why you think it has merit to win the competition. Your idea will not appeal to everyone, but some will pick up on the good points, and hopefully be able to use them to enhance their own method of farming bees.



John Dobson receiving the trophy from Jane Lorimer. Photo: Frank Lindsay

The seminars and conference were well attended and very successful. My thanks go to the Canterbury Branch for their commitment to making it an event not to miss. I really enjoyed the opportunity to meet and chat with so many people. Hopefully we will see more entries in the Beekeeping Innovation Competition for the Roy Patterson Trophy next year in Hamilton. Have an enjoyable and prosperous season!

John Dobson

Beeline Ltd, Hastings

## Why is NZFSA classifying bee products as animal products?

Reading the NZFSA article written by Jim Sim (*July 2005, pages 9-10*) left me wondering why he is so determined to class honey and pollen as animal products. I doubt if it is the revenue potential so perhaps it is to just cover up a blunder.

We know that animal products such as meats, fish, eggs and milk products are completely changed in form and content from the original foods. More to the point these foods have to be cooked or frozen to ensure harmful bacteria cannot give food poisoning.

Fruits and vegetables are quite different: although they can be decomposed by fungi, they do not as a rule harbour dangerous bacteria.

Honey and pollen still retain the fruits and vegetable nature even after enzyme activity and can keep indefinitely if kept dry. In fact antibiotic in natural honey could be thought of as the opposite of the animal products listed above.

The problem is that bee products were listed as animal products for convenience rather than taking into consideration the unique feature of honey and pollen. Our products do not fit into the neat compartment that the Animal Products Act presents.

I feel rather annoyed that the red herring of bees not being animals was introduced as the first point. Is Jim insinuating that beekeepers are dumb? Or is he just treating us that way? The Code of Practice appears to be designed for a 5 year old. No allowance for common sense.

The costs involved with the RMP have been minimalised by Mr Sim. An audit cost of \$800 might seem minimal to someone who thinks \$80 an hour reasonable, but for a small beekeeper experiencing a poor season, perhaps resulting from MAF activities, such charges are quite large. Perhaps not enough to put someone out of business. Time spent during wet weather is normally not wasted time and is never made up later on. All beekeeping is not spent with hives in the field.

The bureaucratic costs are not insignificant and I sometimes wonder if the requests from other countries for our 'Official Assurances' are not in fact resulting from initiatives promoted at this end by the NZFSA. With other NZFSA discussions related to the Domestic Food Review, I doubt whether those wishing to supply the domestic market will be exempt for long from the COP and RMP types of regulation. Perhaps we are seeing empire building on a grand scale?

By the way, amateur beekeepers would find using the kitchen floor less effective than an extractor for obtaining their crop.

Yours

Gary Jeffery BSc

Mountain Beech Apiaries Ltd

## Jim Sim responds....

The matters we discussed in the July issue were raised by beekeepers at recent industry meetings and it is very important to clear up any misunderstandings as we move into a new regulatory environment.

Continued on page 26



# Ceracell Beekeeping Supplies Ltd

HONEYCOMB FOUNDATION MANUFACTURERS  
SUPPLIERS OF QUALITY BEEKEEPING EQUIPMENT

24 ANDROMEDA CRESCENT, EAST TAMAKI, AUCKLAND, NEW ZEALAND

P O BOX 58 114 GREENMOUNT, AUCKLAND.

PHONE: (09) 274 7236, FAX: (09) 274 0368, EMAIL: ceracell.bee.supplies@xtra.co.nz

## FOR ALL YOUR BEEKEEPING EQUIPMENT NEEDS

QUALITY MANUFACTURERS OF BEESWAX FOUNDATION  
SUPPLIERS OF QUEEN REARING EQUIPMENT

VARROA CONTROL TREATMENTS

HONEY HOUSE EQUIPMENT

PLASTIC FOUNDATION

PROTECTIVE GEAR

EXTRACTORS

WOODWARE

SMOKERS

PUMPS

SUITS

+



\*We have available spare parts for your MENCARELLI or LEGA pumps, and are able to overhaul your damaged or worn out pumps. Please contact Trevor @ Ceracell.

Varroa Control

Apistan Available at All Times, Thymol based Apiguard Available Now!

BK245

### Animal Products Act

The decision to regulate export bee products under the Animal Products Act 1999 was made a number of years ago because it provides a suitable framework for issuing official assurances (e.g., export certificates), whereas the Food Act under which they are currently regulated does not. Only premises processing, packing or storing bee products for export require an RMP.

The New Zealand Government is not prepared to issue official assurances without suitably robust systems being in place to support the declarations made. Export markets demand credible systems to support certification and the integrity of New Zealand government-to-government assurances must be protected. The export of more than \$15 billion of food products per annum depends on it.

If businesses don't wish to have an RMP they can continue to supply the domestic market where two-thirds of New Zealand honey is consumed. That said, some of the major supermarket chains are requiring all their suppliers to have either an RMP or a registered Food Safety Programme. This is an industry-driven initiative rather than being an imposed regulatory requirement because safety and quality of product is seen as increasingly important by customers. The domestic food review is currently considering whether such food control programmes should be in place across the food industry.

### Bee Products Code of Practice

The Code of Practice and template RMPs have been put together by NZFSA in collaboration with an industry working group. These provide a cost-effective, simple and practical and scientifically based means of assisting beekeepers to comply with the law. Because the code is largely outcome-based it provides for more flexibility than the current prescriptive food hygiene regulations. It's a smart industry-driven approach to compliance with legislation that minimises costs on industry. NZFSA has also taken considerable time and effort to research and draft the documents and to run the RMP workshops to help beekeepers get to grips with the new system.

There is no requirement to follow the code of practice or use a template. However, designing one's own RMP from scratch, demonstrating it's valid and having it independently evaluated will likely cost additional time and money. It is unfortunate that your respondent didn't take the opportunity to provide comment on the draft code of practice when it was out for consultation, nor offer to trial its use as some other beekeepers have done.

### Verification

I would like to stress again that at this point in time we don't know what the verification costs will actually be, but the question is asked regularly when we speak to beekeepers so we have attempted to give a ballpark figure. It may well turn out to be less than \$800 per visit. It needs to be recognised that such a figure needs to reflect the actual cost. A recent survey has shown that some Local Authorities do not recover the full costs of premises inspection. NZFSA needs a nationally consistent robust verification system. NZFSA will also audit the verifiers to ensure they are doing their job.

In conclusion, I'd like to reiterate that NZFSA is committed to working closely with industry to make the implementation of RMPs go as smoothly as possible.

- **Jim Sim**  
Senior Programme Manager  
Animal Products

## Eighth Asian Australian Apicultural Conference

Greetings!

You are invited to attend the Eighth Asian Australian Apicultural Conference. It will be held in Perth, Western Australia 21-24 March 2006.

We encourage you to submit a paper or poster for presentation at the Conference. Please submit your abstract in English to Ben Oldroyd at: [boldroyd@bio.usyd.edu.au](mailto:boldroyd@bio.usyd.edu.au) Visit the website to view the guidelines on submitting your abstract. The deadline for submitting abstracts is 15 November 2005.

For more information or to register, please visit [http://www.beekeepingwestaus.asn.au/about\\_c.html](http://www.beekeepingwestaus.asn.au/about_c.html)

Best wishes

**Carolyn Marrell**  
Debrett's Conference and Event Management  
T: 08 9386 3282 F: 08 9386 3292 E: [carolyn@debretts.com.au](mailto:carolyn@debretts.com.au)  
W: [www.debretts.com.au](http://www.debretts.com.au)

## Comvita Ltd – Natural products success story

Comvita Ltd, a Te Puke company that's created a multi-million dollar business based on natural bee products, has won the 2005 Food and Beverage Exporter of the Year Award at the 2005 New Zealand Trade and Enterprise Export Awards, presented in Christchurch on 11 August. A fast-growing publicly listed company, Comvita increased annual export earnings by 47% in 2004 to \$14.6 million, its success fuelled by an ambitious expansion plan that has seen it diversify beyond its traditional bee products and embark on an internationalisation strategy.

NZTE CEO Tim Gibson said the outstanding achievements of Comvita and the other Export Award winners on the world stage should make all New Zealanders proud, adding that they were deserving of the same adulation as our sports' heroes.

The Export Awards' judges said the Bay of Plenty enterprise had successfully established Comvita as a premium brand internationally. "Comvita has focused on developed a strong brand and has fought hard to win business in the very competitive natural products market. A strong market strategy implemented over the past few years has seen the company mature and move to take greater direct control of the distribution and marketing of its products."

To read more please visit: <http://www.marketnewzealand.com/mnz/news/story.aspx?SectionID=4559&ContentID=13033>

*[Editor's note: this press release has been abridged].*

## From the colonies



### Auckland Branch

Ceracell Beekeeping arranged a very informative, short-notice workshop on 8 July presented by Dr Alexandros Papachristoforou from Greece. He spoke on the use of Apiguard, a thymol miticide for the treatment of varroa, and about beekeeping conditions in Greece. Dr Papachristoforou was a speaker at the pollination specialty group meeting at the July conference in Christchurch.

Some thoughts on commercial suburban beekeeping in Manukau and Auckland this month. A landscape of volcanic craters, old suburbs, frost-free microclimates and the people keep city beekeeping interesting. Endless tree and flower species thrive here, with useful new weeds arriving periodically, including the tall mangroves that inhabit our many tidal inlets, and moth plant.

For the short term at least, the absence of sick beehives in the community is a blessing. Largely due to the effects of varroa mites and wax moth, the surviving breed of hobbyists seem like good keen beekeepers, many female.

We provide full-year 'serviced rental hives' with home honey to sweeten the deal. We do teach as we service hives, and green thumb people motivated to beekeeping by the need for bees rather than love of bees, remain customers and let us do our thing. We monitor beginner beekeepers for one further year, by phone, after helping them get started.

Espresso coffee breaks between individual hive sites adds to costs somewhat, though we manage. It is varroa that is the monster here, thriving in our humid subtropical climate. Brood and bee activity is nonstop. Karaka poisoning is a major worry, and as Auckland International Airport is close by, plus thousands of incoming shipping containers, it follows that hives professionally operated are safest.

Commercial bees help Auckland's fruit and flora a lot. According to Einstein, four years without bees and our ecology would collapse. At promotions or shows people regularly tell us "There are no bees in my trees".

Auckland's surrounding country regions are diverse in climate and character. As we can get caught in traffic, sticking to your side of town keeps things simple.

The main task for August is to prepare early pollination hives. Inside the hives brood frames average about 4 or 5 almost full with substantial stores and drones, though not many. This season has required no supplementary feeding at all, though we've had to take honey off a few hives to maintain the queen's laying space, thus helping to avoid swarming reactions in the colony. This is especially important now with carnica blood lines. Feral swarms must be our greatest vector for the varroa mites. I know mine come back from somewhere.

- Kerry McCurdy

### Hawkes Bay Branch

It's the middle of winter and about as wet and miserable as I have ever seen it; I hope it improves by spring. Quite a few members from Hawkes Bay attended the NBA conference in Christchurch, which was well-run and very informative, I for one am looking forward to trying out some of the things I learned there.

Due to poor returns, many apple growers in the region are facing severe hardships. Some apple blocks are being removed altogether, which will have some effect on pollination.

- John Berry

### Hawkes Bay DECA course

On 30 July John Berry conducted another DECA course and test. Thirteen candidates fronted up at Arataki Honey to be led through the notes and projected pictures of the course. John is a past master when it comes to explaining all the possibilities, having spent many years observing others making mistakes and learning from them.

After two hours during which the only diversion was a few questions, there was a break for a cuppa, before the pens were out and the testing was on.

There were still a few questions that proved to be more of an exercise in English comprehension than practical disease recognition, but the papers were gathered and sent off to Mary-Ann Lindsay, with all the candidates hopeful of passing.

- Ron Morison



John Berry



Hopeful candidates. Photos: Ron Morison

### **Southern North Island Branch**

A reminder that our Spring Field Day will be held on Saturday 10 September at Tutaenui Hall, just north of Marton, starting at 10.30 am. The day will be held wet or fine. The tentative programme includes: hive lifter demonstration, how Carniolan queens are going in our area, preparing for spring, hive demonstration for hobbyists, and other topics. The final details will be completed at our next meeting after the NZ Food Safety Authority seminar on 4 August.

- Neil Farrer

### **Canterbury Branch**

Thank you to everyone who attended conference and making it the success that it was. A special thanks to the speakers who all gave their time freely and managed to enlighten us all in their respective fields.

Last but not least, a big thank you to the sponsors. Without your support, this marvellous annual event wouldn't be possible. So to all beekeepers out there, remember who supported our conference when you come to make those buying or selling decisions this season, and in turn show your support!

Congratulations to Hawkes Bay on winning the branch trophy, and to John Dobson on winning the Roy Patterson Trophy. The auction raised \$2,150.00 for St John's Ambulance.

Now that Conference is over, it is time to take stock and utilise what is left of winter. Actually winter has been so mild this year one would be excused to believe that it hasn't arrived yet. Perhaps we are due for an easy one ('yeah, right').

Best of luck for the coming season.

- Brian Lapcaster

## **Trees and Shrubs of New Zealand**

### *Geniostoma ligustrifolium*

**Maori Names:** Hangehange, Papa

**Common Names:** Maori Privet, Pigwood

A small shrub up to three metres high with shining pale green leaves four to seven centimetres long, found in the North Island and in Marlborough.

The flowers are small and greenish and grow in great abundance on the shrub, flowering from August to October depending on locality.

*Geniostoma ligustrifolium* is a reliable spring nectar source, producing up to two supers of honey in a good season. But there is a downside: the flower scent is very strong and resembles that of a pigsty, and the extra light amber honey tastes as foul as it smells.

The Hangehange also produces a plentiful supply of greenish yellow pollen.

The Maori used the leaves in cooking eels or fish, roots or tubers, or berry kernels, giving them a desirable flavour and colour when added in layers with the food in a steam oven.

The bark was pulped and steeped in water to dye flax or Kiekie fibre black. Bark water also was drunk to treat "the itch".

- Tony Lorimer



*Geniostoma ligustrifolium*

### **Front Cover Captions, NBA Conference, Christchurch, July 2005.**

(Photos: Frank and Mary-Ann Lindsay)

1. Organising committee member Linda Bray at reception
2. Chris Taiaroa and Bryan & Barbara Clements
3. Berry Family, Hawkes Bay
4. Moira Haddrell & Fiona Kerry
5. NBA President Jane Lorimer & Heather McBrydie of HortResearch
6. Display knight with veil
7. Francis Burt, Annette Berry & Karen Berry
8. Murray Reid (AgriQuality) & Jerry Bromenshenk (USA)
9. Some of the Wairarapa group
10. Organising committee, Canterbury Branch
11. Mrs Papachristoforou, Dr Alexandros Papachristoforou, and Peter Burt