ISSN 0110-6325

The New Zealand BeeKeeper

MAY 1997
VOL 4 . No. 4

The Official Journal of the National Beekeepers Association of New Zealand (Inc.),
P.O. Box 3079, Napier, New Zealand. Tel. (06) 843-3446, Fax: (06) 843-4845.

A Hawke's Bay bumper crop!

If undelivered please return to:

National Beekeepers Association of New Zealand (Inc.)
P.O. Box 3079, Napier, New Zealand.

POSTAGE PAID
PERMIT No.
384
HASTINGS, NZ.

NATIONAL EXECUTIVE BEEKEEPERS' ASSOCIATION OF N.Z. (Inc.)

1997 Subscriptions: N.Z. $38.00 (GST Incl). Overseas Airmail US $38.00. Economy mail US $31.00.

BRANCHES

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

FAR NORTH
Bob Banks
Taupo Bay, Northland.
Tel. (09) 406-0692
Bruce Stevenson
Kemp Road, Kerikeri.
Tel (09) 407-7190
Fax (09) 407-7194

NORTHLAND
John Gavin
PDC, Titoki, Private Bag, Whangarei.
Tel/Fax (09) 433-1893
Mrs Edna Hoole
Sheddock Apiaries, R.D.1., Paparoa,
Nth Auckland.
Tel/Fax (09) 431-7348

AUCKLAND
Brian Alexander
Woodhaugh Apiaries, R.D.3.,
Kaukapakapa.
Tel. (09) 420-5028
Jim Thompson,
125 Queen Street, Pukekohe.
Tel. (09) 238-7464
Fax (09) 232-8429

WAIKATO
Stephen Lee
103 Goodfellow Street, Te Awamutu.
Tel. (07) 871-3486
Fax (07) 871-3489
Tony Lorimer
'Kahurangi-o-Papa', R.D. 3., Hamilton.
Tel. (07) 856-9625 Fax (07) 856-9241

BAY OF PLENTY
Dale Gifford
P.O. Box 225, Te Puke.
Tel. (07) 533-1419
Fax (07) 533-1118
Sheree Silson
Kiwicoast Apiaries, 69 Lunds Road,
R.D. 2, Katikati.
Tel/Fax (07) 549-1532

HAWKE'S BAY
Colin McLean,
Bees Landing,
240 Onehunga Road,
Bay View, R.D. 2,
Napier.
Tel. (06) 836-7199
Ron Morison,
6 Totara Street, Taradale.
Tel/Fax (06) 844-9493

POVERTY BAY
Peter Burt,
27 Murphy Road, Wainui,
Gisborne.
Tel. (06) 868-4771
Barry Foster,
695 Aberdeen Road, Gisborne.
Tel/Fax (06) 867-4591

SOUTHERN NORTH ISLAND
Mr P.J. Ferris,
R.D. 11, Opaki, Masterton.
Tel: (06) 378-7632
Frank Lindsay,
26 Cunliffe Street, Johnsonville,
Wellington 6004.
Tel/Fax (04) 478-3367

SOUTH ISLAND

NELSON
R.C.F. Lambie,
Anatoki Apiaries, Long Plain Road,
Takaka.
Tel (03) 525-8322
Michael Wraight,
Braeburn, R.D. 2., Upper Moutere,
Nelson.
Tel. (03) 526-7708

MARLBOROUGH
Will Trollope,
Box 28, Tua Marina, Blenheim.
Tel (03) 570-5633
Jeff Hook,
R.D. 4., Blenheim.
Tel. (03) 578-2640

WEST COAST
John Glasson,
34 Shakespeare Street,
Greymouth, Westland.
Tel/Fax (03) 768-4793
Sandy Richardson,
Napoleon St., Ahaura, Westland.
Tel. (03) 732-3724

CANTERBURY
Don Bell,
Frasers Road, Annat, Darfield 8170.
Tel (03) 318-3869
Brian Lancaster,
Haldon Rd, R.D. 2, Darfield.
Tel/Fax (03) 318-6966

SOUTH CANTERBURY
Peter Smyth,
Templer Street, R.D. 22, Geraldine.
Phone (03) 693-9889
Noel Trezise,
Woodbury Road, R.D. 21., Geraldine.
Tel. (03) 693-9771

OTAGO
Blair Dale,
P.O. Box 23,
Middlemarch, Otago.
Tel. (03) 464-3786 Fax (03) 464-3796
Bill McKnight,
42 Parsonage Road, Lawrence, Otago.
Tel. (03) 485-9268

NORTH OTAGO
R.B. Rawson,
23 Aln Street, Oamaru.
Tel. (03) 434-5242
Algie Lawrence,
11 Main Street, Weston, Oamaru.
Tel/Fax (03) 434-5476

SOUTHLAND
Shaun Lawlor,
C/- 100 Kakapo Street, Gore.
Tel/Fax (03) 208-3422
Don Stedman,
40 Louisa Street, Invercargill.
Tel/Fax (03) 218-6182

The New Zealand BeeKeeper is published eleven times per annum; February to December. All copy should be with the Editor by the 1st day of the month of publication except for December when copy should be received by 20th November.

Notes from the President

Nick Wallingford

On 17 April three members of the NBA Executive presented and spoke to our submission on the Biosecurity Act Amendment (No 4) Bill. We appeared before the Primary Production Select Committee, chaired by Mr Eric Roy.

Our submission and the verbal presentation were well-received by the members of the Committee. Rather than write a set of president's Notes' for this issue of *The New Zealand BeeKeeper*, I will provide a copy of the briefing notes we used for the talks we gave. I would like to commend Richard Bensemann and Terry Gavin for their sincere and professional delivery. Their responses to questioning by the Committee revealed their knowledge and concern and did a lot to promote beekeeping in the eyes of the MPs on the Select Committee.

I believe it is through this sort of activity that the NBA continues to effectively represent the interests of the industry in the legislative forum.

Introduction, scene setting (N Wallingford)

- Diversity of beekeeping reflected in beekeepers here — age, geography, hive numbers, products/services
  - * Terry Gavin has worked as full-time queen breeder
  - * Richard Bensemann involved in large scale honey production and packing
  - * Nick Wallingford a hobbyist, in the middle of an area of kiwifruit pollination services
- History of pest/disease regulation
  - * Apiaries Act 1906
  - * Apiaries Act 1969
- Why we feel obliged to make a submission
  - * Our industry and interest is in beekeeping, not in producing pest Management Strategies!
  - * Few industries still interest in making use of Biosecurity Act due to costs and complexity — our industry has not been able to avoid it because of nature of American foulbrood
  - * Particular interest in agricultural security, because of our enviable pest/disease status

Why AFB needs to be controlled (T Gavin)

- Bacterial disease that kills the colony's larvae
  - * Doesn't harm humans
  - * Not 'curable' - once the hive is infected, it will die
- Mostly spread by beekeepers transferring equipment and bees robbing dead colonies
  - * Moving frames and boxes a necessary part of bees management
  - * If a hive dies of AFB, other bees will take the honey left in it to their own hive, infecting them
- New Zealand has chosen to inspect and burn, rather than feed antibiotic drugs to hives
  - * Drug feed masks the symptoms, doesn't cure AFB
  - * Australian experience with antibiotics indicates we would prefer to not use them, but if European foulbrood were introduced, we may not have much choice
  - * Dealing with AFB the way we do gives us market advantage - clean, green, one of the only countries that doesn't feed antibiotics

Biosecurity Act taken as an opportunity to deal with AFB (N Wallingford)

- Industry vision to try to eliminate rather than simply control
  - * Certainly ambitious
  - * Reasonable chance of succeeding

Development of our PMS (R Bensemann)

- We feel we have to do it
  - * Government used to fund and deliver the control programme - over the last 10 years that has been dismantled piece by piece
  - * Without effective AFB control, industry development would be reversed
  - * Costs of production would increase
  - * Effects would be uneven across country - some areas would not be possible to keep bees commercially
- We are choosing to do it
  - * It is what the industry wants the NBA to do
  - * We think we can, given the right vision and tools, eliminate AFB or come so close to it that large areas of the country will be effective free of it
- We have faced difficult and unnecessarily short timeframes
  - * Original Act gave five years, but slow interpretations of the Act's meaning and errors in its drafting put us in impossible position
  - * Extension of Apiaries Act to October 1998, the maximum allowed, still leaves us struggling to put a PMS into place
- Common sense element in the use of the Act seems to be lacking - it isn't delivering for us what we were told we would be able to get form it

The history of our agricultural security (N Wallingford)

- The 'conservative' approach
  - * Through 1950s-60s though products and bees could be imported under permit, they weren't allowed
  - * Permit system now taken from technical specialists and centralised in Head office. The people who know the threats often don't get consulted in the permitting process.

How do bees and bee products threaten us? (T Gavin)

- Live bees
  - * Mites, EFB, potentially bad genetic material
  - * Easy to understand the 'vector' of how the pest/disease would be introduced
- Bee products
  - * Harder for most people to relate to as a 'vector'
  - * Pollen, honey both can carry EFB. When container is thrown out, bees scavenge the bits remaining to take back to their own hives.

Agricultural Security (R Bensemann)

- Freedom from pests/diseases prevalent overseas
  - * Three types of mites spreading through the beekeeping world
  - * We don't have European foulbrood, while even Australia has it.
  - * The Africanised honey-bees now moving up through North America can endanger lives.
- We want to remain pest/disease free
  - * Keeps cost of production down
  - * Easier to get access to markets
  - * Provides us great opportunity to

Continued on page 4

Front cover... *Acknowledgement: Photo, Peter Berry*

The New Zealand **BeeKeeper**

THIS ISSUE

export package bees and queens

- A continuing set of 'reviews' have resulted in the loss of confidence that bee diseases will be responded to as they would have in years past
  - * Surveillance
  - * EDPR (the response to an exotic outbreak), moves to free up our importation's (sometimes just to be doing it, without even having an application to import)
- Loosening trade import restrictions driven by 'free trade'
- Once lost, never regained

Summary of our concerns (N Wallingford)

- As a small producing industry, the Biosecurity Act and this Bill have not provided us a proper vehicle for controlling the main endemic bee disease.
- The MAF Regulatory Authority have not had sufficient technical expertise to deal with a smaller PMS such as our own, resulting in delays and expense.
- We will not be provided with even the tools of the Apiaries Act that the Biosecurity Act replaced. How can we be expected to do an appropriate job?
- Changes in the Bill allowing for even more charging for processing and reviews will mean the Act will simply not be used as expected, apart form the 'big' PMSs.
- The continued watering down of our attitudes to imported risk goods will put additional pressures on border protection that we fear will result in the importation of the bee pests and diseases devastating beekeeping overseas.

Honey for the treatment of Infections

by Dr Peter Molan (Department of Biological Sciences, University of Waikato, Hamilton, New Zealand)

Rediscovery of an ancient medicine

The use of honey as a medicine is recorded in the most ancient human writing, some Sumerian clay tablets estimated to be 4,000 years old. It is also recorded in Egyptian papyri dated from 1900 to 1250 BC, and is mentioned in the *Veda*, the sacred scriptures of Hinduism, thought to be about 5,000 years old. *The Holy Qur'an* and the *Talmud* also speak of honey as a medicine. Hippocrates (460-357 BC) used many of the Egyptian prescriptions. He found that honey "cleans sores and ulcers of the lips, heals carbuncles and running sores". Celsus (circa 25 AD) used honey for many different purposes: as a laxative, as a cure for diarrhoea and upset stomach, for coughs and throat maladies, to agglutinate wounds and for eye diseases.

Through the Middle Ages honey continued to be used in medicine, but little was known about how it worked — it was not until just before the beginning of this century that bacteria were found to be the cause of infections. Although there are several reports in medical journals in the 1930s of honey being effective in clearing wounds of bacterial infection, it was not recognised in these reports that it had been established in laboratory work in 1919 that honey has antibacterial activity. It was not until the mid-1940s that more intensive laboratory studies were becoming available for the treatment of infections, and honey was displaced from use in medicine.

Despite the advent of antibiotics, honey has continued to be used in folk medicine, and it is from this pool of knowledge that the re-introduction of honey into modern medicine has come. There have been numerous reports in medical journals of this folk remedy being used as a last resort on infected wounds, burns and ulcers that were not responding to antibiotic treatment, with remarkable effectiveness. This effectiveness is being recognised in an increasing number of reports. An editorial in the Journal of the Royal Society of Medicine in 1989 expressed the opinion that "the time has now come for conventional medicine to lift the blinds off this 'traditional remedy' and to give it its due recognition".

Recent research relevant to wound infection

In almost all reports since the earliest research on the antibacterial activity of honey, it has been recognised that honey varies in the potency of its activity. Despite this, none of the reports in the medical journals mentions any selection of the honey used. A recently published paper in the Journal of Pharmacy and Pharmacology reports work that was carried out at the University of Waikato to investigate how much variation there is in the antibacterial activity of honey likely to be used medically. Commercial apiarists supplied 345 samples of honey from 26 different floral sources for the study. The samples of honey were tested against *Staphylococcus aureus*, the most common wound-infecting species of bacteria. The activity of each sample was compared with that of a reference antiseptic, phenol (carbolic). It was found that the activity varied from a level that was the equivalent of 58% phenol to a level that was below the limit of detection (2% phenol). One third of the samples tested were of this low level of activity.

The results of this research show the importance of selecting the honey used for medical purposes. Although all honey will stop the growth of bacteria because of its high sugar content, when the sugars are diluted by body fluids this antibacterial components (primarily hydrogen peroxide generated by the glucose oxidase enzyme in the honey) then become important. Considering that carbolic disinfectant is usually used with a phenol concentration of 4-5%. it is evident that selected honeys can remain antibacterial when extensively diluted by body fluids.

Another finding in this research was that hydrogen peroxide was not the only antibacterial substance involved in some types of honey. When testing samples of the honeys with catalase added to remove enzymically the hydrogen peroxide, it was found that only two of the 26 floral types of honey contains significant levels of this additional antibacterial activity. In one of these, vipers bugloss honey, the level of activity was quite low. In the other, manuka honey, the additional antibacterial activity was in some samples quite high.

This additional antibacterial activity was considered to be important enough to warrant further investigation. As a project for her recently completed MSc thesis, Dawn Willix compared the antibacterial activity of an average-level manuka honey with that of an average-level honey activity due to hydrogen peroxide, testing them on seven different species of bacteria chosen as the ones most commonly involved in wound infection. The percentage nine (by volume) of each type of honey needed to prevent completely the growth of each species of bacteria was found to be:

	Manuka honey	Other honey
Escherichia coli	3.7	7.1
Proteus mirabilis	7.3	3.3
Pseudomonas aeruginosa	10.8	6.8
Salmonella typhimurium	6.0	4.1
Serratia marcescens	6.3	4.7
Staphylococcus aureus	1.8	4.9
Streptococcus pyogenes	3.6	2.6

Although some species are more sensitive to the action of one type of honey than they are to other, on average there is little difference. The most notable point is that these "average' honeys can be diluted nearly tenfold yet still completely halt the growth of all the major wound-infecting species of bacteria. Also notable is the finding that an "average" manuka honey will still halt Staphylococcus aureus when diluted with 54 times its volume of fluid: this is not the most common wound-infecting species, but is notorious for developing resistance to antibiotics.

Stomach ulcers

In the traditional medicine of some parts of the world honey has also been used to treat dyspepsia and stomach ulcers. There are numerous reports of this treatment being used successfully in clinics in Russia in modern times, and a recent report of a clinical trial in Egypt

Letter to the Editor

If you write a letter to the Editor, or have an article you want printed as an article, can you clearly mark it as such. ***Thanks, Ed***

Dear sir

Import concerns

I have been disappointed to receive calls from the media who are responding to beekeeper concerns about the importation of bee products. It is not appropriate to learn of such concerns this way if we have not already made the opportunity to discuss them rationally. In one instance, I was asked for "my side" of the issue because the reporter already had "the beekeepers side." It is not a case of "sides." We have import standards that set the requirements to be met before importations can proceed.

If any beekeeper is concerned about an imported product, please contact your nearest MAF Apiculture Advisory Officer and if necessary, contact me. We are here to help protect your industry from the introduction of disease. But do not be surprised to see foreign products here, because under our international obligations, we can only apply technically justified restrictions to imports. We can not stop other countries from exporting to us just to prevent foreign competition in our domestic market.

There is no ban on importing bees or bee products. Rather, the disease risks of each product are assessed and based on this assessment the product is either released unconditionally; or held, until for example, negative results have been received for laboratory tests, before a Biosecurity Clearance can be given; or entry is refused.

The current import health standards were developed by MAF several years ago. While they were subject to risk analysis at that time, these standards are due for renewal and I have initiated that process. The risk analysis process will follow current methodology and will be done in full consultation with the NBA. Any concerns about the current standards will be addressed.

I can also advise that I have secured funding for some research into *Melissococcus pluton* which causes European foulbrood. We aim to determine the heat treatments that must be applied to ensure that *Melissococcus pluton* is destroyed. This will become an important safeguard that we can use in the revised import health standards for bee products.

Since I have been involved with the international trade in bees and bee products, I have been impressed by the excellent working relationship that I have been able to develop with the National Beekeepers Association. This was enhanced when I attended last year's conference in Wanganui, and I am looking forward to attending the next conference in Nelson.

Jim Edwards, National Manager
International Animal Trade,
MAF Regulatory Authority,
PO Box 2526, Wellington

Continued from page 4

which established that this traditional remedy is in fact effective. However, there has been no explanation of how honey works in this treatment, which has prevented the treatment from being considered seriously by many in the medical profession.

In the last few years it has been recognised that dyspepsia and stomach ulcers are frequently caused by infection of the stomach by a species of bacteria, *Helicobacter pylori*. The possibility that the healing effect of honey on the stomach may be through its acting on this bacterium was suggested by Niaz Al Somai at the University of Waikato. In collaboration with microbiologists at the Waikato Hospital he tested strains of *Helicobater pylori* isolated from biopsy samples of stomach ulcers, using the same two honeys that had been tested on the wound-infecting species of bacteria. It was found that the honey with hydrogen peroxide activity did not prevent the growth of cultures of Helicobater pylori when added at concentrations up to 50%, but the manuka honey completely halted growth of the bacterium at a concentration of 5%.

A clinical trial is now being organised to find out if manuka honey has the same effect on the bacterium in the stomach as it does when it is on agar plates. There is much interest in this possibility because conventional therapy for stomach ulcers is far from satisfactory. Drugs which prevent secretion of acid in the stomach may allow an ulcer to heal but it frequently re-appears. Only if *Helicobater pylori* is eliminated is a lasting cure achieved, but it is a very difficult infection to clear. A combination of antibiotics and bismuth is required, and unpleasant side-effects often result. There is also the consideration that a very large amount of money is spent on the pharmaceuticals currently used to treat stomach ulcers. If honey is shown by clinical trial to be a reasonable alternative it would be a much cheaper option, although manuka honey is likely to become a lot more expensive if effective honeys from other floral sources are not found!

Honey trials

Wellington, April 21 - New Zealand honey is being tested in the fight against antibiotics-resistant "superbugs."

Two types of honey — clover and manuka — have been used in laboratory trials at Wellington's Communicable Disease Centre, associate professor Peter Molan, of Waikato University, said in a statement.

In studies which were completed this month the honeys were tested against seven multi-resistant staphylococcus aureus bacteria, and were successful in killing all seven strains, he said.

Manuka honey had been used in stomach ulcer research, while the clover blend honey had high concentrations of hydrogen peroxide (a natural antibacterial agent).

Dr Molan, co-director of the New Zealand Honey Research unit, said the work to date had been in the laboratory, not on actual wounds.

The next stage was to develop clinical trials. The Honey Research Unit was examining the logistics of trials being held in New Zealand, but as there were few cases of superbug infection here, the trials might have to be carried out overseas.

Dr Molan said manuka honey's antibacterial compound was more stable than that found in other honey types, which meant it would be used in future developments.

New Zealand produced around 300 tonnes of manuka honey annually.

Dr Molan was awarded an MBE in 1995 for his research into the healing properties of honey.

His research into the use of manuka honey against the bacteria that causes stomach ulcers was published in the Royal Society of Medicine Journal.

Courtsey New Zealand Press Association

Library News

Once again no additions for the library have turned up. We must be in the doldrums. A request for a video tape about exotic bee diseases has been made to the Department of Agriculture in Australia. Also an enquiry about the possibility to purchase an instructional tape about the EZI Queen and Royal Jelly systems. No replies as yet.

As the librarian and his better half intend to be away from home for about six weeks, 23 June - 7 August borrowers are advised to please request any item they need during that period before the 20th June so that it can go into the mail in time.

Marketing

Tradenz looks to working with New Zealand honeys to increase international success
New Zealand honeys go under the microscope
What's happening with honey prices.
International publicity for Waikato clover
Innovation Awards... time to champion your champion...
How dare I say New Zealand packers not innovative
And my honey of the month... thanks Max Lori!

Tradenz looks to creating a honey Jag

New Zealand's honey exporters will have the opportunity at Conference this year to look at the development of a JAG... that's Tradenz-speak for Joint Action Group. Tradenz has already worked with a number of other industries in establishing Jag's... the end result has been a major upskill of those industries and highly successful added-value export marketing! It's great news for the honey industry and every beekeeper: because the export price in effect dictates the price of honey sold on the domestic market as well. It's also a compliment to this industry and the core value of the products it produces!

New Zealand honeys go under the microscope

Many of you have now met (well, spoken to) Sandee: my partner here at the NZ Honey Advisory Service. Sandee's been rounding up samples of New Zealand's finest honeys and getting them ready for the most comprehensive analysis ever undertaken of our national honey crop. Annoyed that she hasn't rung you? Good... because you can do something about it!!! You can phone, fax or write to her and your honey can be part of the analysis.

We need a minimum of six samples of each of the main honey types... and we would like those samples to be representative of that honey throughout New Zealand... so the more we get the better our sample base is. We know this wasn't a good year for some honey varieties... but that doesn't matter... because the analysis programme will be an ongoing one and each season we'll be able to average the results... slowly building up a composite picture of each variety... and the results can then be used to create opportunities for the beekeepers!

We'll also send the results of the analysis back to the beekeepers who supplied the samples... so you'll get $200 plus worth of information... FREE! (having said that: I suppose we'd better say that if we get, for example, 2000 beekeepers offering samples we'll have to reserve the right to choose... or we'll use up the marketing budget on this one exercise. So first in... first to benefit.

Bill Floyd

Let Sandee know: your name, contact details, type of honey you produce, and that you're happy to send us (at no cost to us) 1kg of the honey, (Sandee'll send you a brief questionnaire to fill out about the honey). Your sample, if selected, will be divided into 4 x 250gms: one of those will be used to test for antibacterial activity (manuka and non-manuka type); one to test for chemical biocompound and mineral composition; one for pollen/ colour conductivity; and the other to establish a Sensory Evaluation profile (flavour/mouthfeel).

So far we have 15% of our target underway... so we'd love to hear from you.

What's happening with honey prices

Over the years I've made projections about honey prices... to date they've been lucky (in other words more often right than wrong)... and the simple facts are these: New Zealand consumes around 7000 tonnes of honey a year... exports have now reached 3000 tonnes. The average production over the last six years is 8700 tonnes... and the summer just gone maybe average, probably below average production. So, sales last year must have included soaking up some reserves: that's irrefutable.

We also know that total international production isn't meeting demand. And so, the law of supply and demand suggests that honey buyers may need honey sellers more than the other way around... which usually means prices rise... but there's a lot of factors that come into establishing prices... from negotiating ability to cash-flow needs of some sellers. We're also an industry that is fiercely independent and individuals set their own prices for their products regardless of the 'bigger picture'.

The latest International Honey Exporters' organisation Report quotes "buyers looking for lower prices'... wow... that comes as a surprise! I thought they'd say... "buyers hoping to pay more" so, beekeepers... it's over to you; instead of taking what's offered I'm not suggesting that you're unrealistic... but ask the buyer what he or she is doing with the honey... and what they're doing to add value... and create a meaningful relationship with them... if they're not interested in that: look around! it's you who owns the resource.

International publicity for Waikato clover

We sent out a media release last month about the successful research at the Communicable Disease Centre: "Waikato clover and active-manuka kill drug resistant superbugs".

I was thrilled to see that the publicity has gone international: with Peter Molan being interviewed on Australian radio and it being picked up by the international Press. Some stories have abbreviated the information to say, simply, "New Zealand clover"... but don't worry Waikato... where possible we'll push its regional ancestry!

Innovation Awards... time to champion your champion!

Are you selling honey to someone who is being innovative and successful with it! Whether they're using it as a plant rooting hormone replacement or a meat marinade ... an anti-staling ingredient for bakery or a skin emollient ... tell us so we can enter them in this year's Innovation Awards. It's good publicity for your own customer ... and great PR for you with them. But we need you to tell us about them by 12 June!

How dare I say New Zealand packers not innovative!

Yes I did ... actually I said "not innovative enough". Because I suspect only half a dozen packers have a Marketing plan... have an R&D or Brand Plan... and the end result is that honey's sitting in the supermarket like a lot of me-too's... and price is all that matters! Not good for the packers and not good for the beekeepers! And watch out "me-too packers and brands" because the supermarkets are starting to cull the clones... you need a reason to be on the shelf, and it's not to gather dust... and your beekeeper suppliers hope you're not there not just because you're prepared to be the cheapest.

... And my honey of the month?

Marvellous, soft marshmallowy texture with a citrus, almonds and vanilla aroma (I always like the honeys with that hint of vanilla). Not too sweet on the palate... and the vanilla comes back to you on the aftertaste... lovely stuff... and one of the honeys that's now part of our data base... a clover/nodding thistle blend from Max Lori. pity I could only sample a very small amount and have to keep the rest for the data base... (I wonder if Max'll send me some... it has to be the perfect crumpet-honey!... I'd even pay for it!).

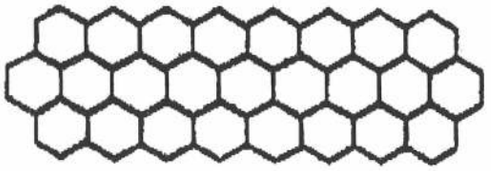
Regards Bill Floyd, Marketing Committee

Attention Beekeepers

Research has found that regular replacement of poor combs with new foundations promotes increased honey yields

New PLASTICELL Foundation

Our new PLASTICELL Foundation is better than any other plastic foundation on the market, it's had to stand up to close scrutiny, the kind of scrutiny expected of someone who's been an innovator in the Beekeeping Industry for over a hundred years. — Dadant & Son Inc., USA.



We've got the best

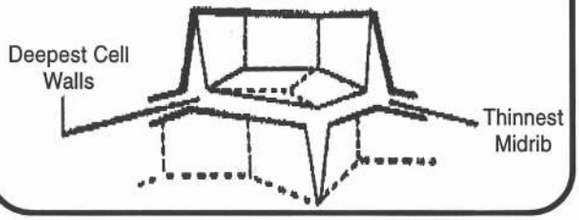
YOU'LL SEE YOU ARE GETTING MORE FOR YOUR MONEY

* PLASTICELL is injection moulded to tight Dadant standards
* Less expensive or no more expensive than other plastic foundations on the market
* Available coated or uncoated PURE beeswax coating*
* Maximum honey production with or without a wax coating
* Uniform cell dimensions throughout the foundation
* Deeper cell walls for better bee acceptance
* No excess plastic where it's not needed
* No stretch cells
* No bulky cell edges — No wall loss
* No excessive midrib plastic waste

**Coated sheets not available in New Zealand at time of printing.*

Take a Closer Look...

PLASTICELL INJECTION MOULDED TO PERFECTION



Consider the advantages...

- The strength yet economy of a standard* wooden frame
- You can quickly and economically change back to beeswax foundation anytime if desired (eg comb honey)
- Have only one frame type yet two foundation options.

**4mm groove required in the bottom bar.*

Build Your Future on Dadant Quality Foundation

The Foundation you can trust for perfect combs everytime

Prices:

PLASTICELL Foundation	**$1.50 each + GST per 100 sheets** **$1.40 each + GST per 1000 sheets**
Kitset frames for PLASTICELL	**$76.53 + GST per 100** **$699.56 + GST per 1000***
Assembled Frames for PLASTICELL	**$119.11 + GST per 100** **$1089.56 + GST per 1000***

See page 9 for SPECIAL PRICES

Ecroyd Beekeeping Supplies Ltd

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

P.O. Box 5056 Papanui, Christchurch, New Zealand || Phone: 64-3-358-7498 || Fax: 64-3-358-8789 || 26B Sheffield Crescent, Burnside, Christchurch

From the Colonies

Some of our members are busy shaking bees, for the two fold purpose of reducing bee numbers so as to conserve winter stores and as a cash flow, the strong bee numbers in the hives are making up for the poor honey crop on other sites and generally, reports are very satisfying.

We see that the March IHEO reports that the National crop is average and I guess that compares well with local reports, yet a lot are reporting below average crops, so thankfully, others must be doing better. All report however, erratic returns from site to site. Let's hope for a good sugar crop.

Our Field Day must be classed as very successful, by the response of the almost 100 who attended. Hopefully, reports will be presented at our AGM on finance so that we can uncross our fingers.

Our four speakers for the day were first class, and if Rob's video camera worked as well as his catering efforts, we may be able to share these with you through John's Library.

At the Drury Jolly Farmer on the 4th March, we met with president Nick and his six assistants, for what most of our chaps felt was an excellent way of getting to know the work these fellows do for us. Some viewed them as being beekeepers just like us, with similar problems that needed to be sorted, but on a national scale, rather than the Branch level. Our recommendations to other Branches — ensure you have a good muster and prepare those hairy annual questions to put to them.

Our Easter Show stand, using the Bill Floyd display, and manned by members of the Branch, Franklin and Auckland Bee Clubs, was a busy four days.

Fatiguing sure, but one could relax in the sun and watch the events in the showring next door, if exhaustion overtook you, or one could move to the back of the crowd and learn all about bees from those who know all. ***Jim***

Hints from Wilf

Requeening on those occasions when you have a queenless hive and a spare queen, but no cage or any means of introducing her. Smoke fury out of the brood chamber, till the bees eyes must start to run. Take out a well occupied frame of young brood and lay on top. Smoke your queen, then drop her in among the nurse bees. If she is accepted, return to the hive. If not, more smoke. Works as good as half drowning the queen and dropping her in.

WAX MOTH PREVENTION. When storing frames in winter, Wilf used to place a sheet of newspaper between each super. He swears by this method, believing the printers ink was disliked by the moth. There is of course, the possibility that today's ink has changed, but I intend trying it this year.

Terry, Gavin, Pat and friends at the 1996 Queen-bee Producers meeting

Beekeeping tutor arrives

by Trevor Ayson

A New Zealander with a PhD in bumble-bees is returning from Australia to become Telford Polytechnic's new apiculture tutor.

Dr Woodward replaces Nick McKenzie, who is leaving to work in Canada after four years. Mr McKenzie was a graduate of the course eight years ago.

Telford Rural Polytechnic's new apiculture tutor Dr David Woodward, left, and his predecessor Nick McKenzie check the quality of some honey.

Dr David Woodward has a PhD in entomology from Massey, and studied bumble-bees and their colony development for his thesis.

He has worked as a research scientist and has spent the past seven years as a South Australian state apiary adviser.

"When the vacancy arose I thought it would be a good challenge, as I was looking for a job back home in New Zealand."

Married to Sally, also a Kiwi, the couple have three Australian-born daughters Lucinda 7, Jacqueline 6, and Angela 3.

Three students were now enrolled in the 12-month on-campus beekeeping course, with another 30 students studying by correspondence, Mr McKenzie said.

As well as training beekeepers, the unit extracted about eight tonnes of honey and one tonne of comb honey annually from its hives, as well as pollen products and royal jelly.

About 80 percent was exported. The rest was sold in Balclutha.

"Photograph and article courtesy of Trevor Ayson, Newslink, Balclutha."

Acknowledgement Newslink

MID WINTER WOODWARE PROMOTION

We are offering special prices on Alliance Quality Frames, both kitset and assembled, and Alliance Quality Storeys in kitset, for the months of May, June and July. The primary purpose is to assist in relieving the massive pressures on production that generally occur during the last few months of the year, and to transfer that work load to a time that is traditionally a lot quieter.
We therefore offer you a price incentive to purchase your requirements now. This will also give you the opportunity to have your storeys and frames ready to go prior to the new season.

FRAMES: *(Kitset)*
Usually $659.56 + GST per 1000. All sizes, all types
NOW **$590.00** + GST per 1000

FRAMES: *(Assembled & wired)*
Usually $1009.56 + GST per 1000.
NOW **$790.00** + GST per 1000

FRAMES: *(Assembled with plastic foundation fitted)*
Usually $2489.56 + GST per 1000.
NOW **$2190.00** + GST per 1000

STOREYS: *(Kitset)*
Full depth, first grade, commercial type:
Usually $10.62 each + GST
NOW **$9.80** each + GST

3/4 depth, first grade, commercial type:
Usually $8.80 each + GST
NOW **$7.50** each + GST

NOTES:
- ★ Minimum purchase of 1000 frames for special price to apply. For quantities of 2000 or more, please contact us for even better prices.
- ★ Minimum purchase of a total of 100 storeys for special prices to apply. For quantities of 200 or more, please contact us for even better prices.
- ★ Payment is strictly at the time of ordering, prior to dispatch, or at the time of collection.
- ★ We have arranged some very competitive freight rates. Please contact us for a firm quote including freight prior to sending payment.
- ★ Special prices are valid until 31st July 1997.
- ★ For grooved bottom bars for plastic foundation add $40 + GST per 1000.

TO ORDER: Contact your local EBS stockist or EBS directly

E B S

Ecroyd Beekeeping Supplies Ltd

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

P.O. Box 5056 Papanui Christchurch, New Zealand ‖ Phone: 64-3-358-7498 Fax: 64-3-358-8789 ‖ 26B Sheffield Crescent, Burnside, Christchurch

BEEWAY

Toll Free EBS Orderline 0800-33-5056

EBS ORDERLINE: TOLL FREE: 0800-33-5056 (CHRISTCHURCH)

Superstud bees help in Trade Aid project

Producing rainforest honey is a tricky operation, writes Pat Baskett

Artificial insemination is pretty straightforward — in larger animals, at least. But imagine the mechanics of semen removal and insemination in bees.

Bee semen is collected at an apiary in Kaitaia and sent to Honiara in the Solomon Islands where it is inseminated into about 100 queen-bees to boost the production of honey, pots of which are sold in Trade Aid shops.

It's called a rainforest honey and is the only honey available here which isn't New Zealand-produced. Dark and very runny, it tastes like maple syrup.

Honey importation is strictly regulated in New Zealand to prevent contamination of our hives with European foulbrood disease. We have the American variety of the disease but not the European, and the Solomon Islands is one of the few countries in the world which is free of both.

The New Zealand Government has had an aid project running in the Solomons for about seven years, providing expertise on setting up hives in villages where opportunities for earning cash are limited — other than selling timber rights to logging companies.

Ministry of Agriculture and Fisheries apicultural advisory officer Paul Bolger, who's based at MAF's Pukekohe office, was in the islands for four months last year. He says that a native stingless bee lives in the rainforests but it doesn't thrive in boxes and it isn't very productive.

"When local people come across nests they devour the honey but there's only ever a spoonful or two."

European bees were introduced by missionaries at the turn of the century. Bolger describes them as a black and vicious variety which foxed the locals when they tried to get at the honey because they hadn't expected to be stung. Our aid project has helped them set up hives and establish a marketing co-operative.

Because the islands are free of disease, semen, rather than the bees themselves, is used. Kept cool, it remains viable for a couple of weeks. Insemination is a messy business, Bolger says.

"It's requires a fine attention to detail and a small enough syringe."

It's also hazardous, with a high morality rate and a failure of many queens to lay properly. But production from about 3500 hives in several islands is high, with two or three harvests of honey a year, because the forests are full of flowering trees and plants all year round. Hives in coastal villages will have honey made from the nectar of coconut and mangrove trees.

The honey is very liquid because the humidity of the tropics gives it a higher water content than New Zealand honey-19 percent as compared with our 17 percent. this makes it less concentrated, but no less tangy. It has a strong, malty flavour which makes it particularly suited to cooking and marinades.

Our own producers needn't get their knickers in a twist about competition. Transportation costs and the relatively small quantities involved — about 40 to 50 tonnes annually, of which eight to 10 are sent to New Zealand — mean that its price of $4.95 for 500g will keep it out of reach of most honey-on-toast addicts. You can taste some at the Trade Aid shop in Karangahape Rd.

Acknowledgement NZ Herald

Notes for beginners and others

Why is it that so often terrible poor old combs can be found in the broodnests of hives, in many instances the property of the hobbyist or small part timer. One would think that those colonies would receive all possible loving care. Apparently not so. Reasons for this are several, one of them I am sure is the cost of sheets of comb foundation. Bought in small quantity (10 sheets) one is about 80 cents per sheet of full depth medium brood out of pocket. That is $8.00 for a super holding 10 frames. This is probably an unavoidable outlay for him or her who is starting out on the path of beekeeping, establishing colonies in new equipment.

However after one or two seasons there is no reason at all to blame the price of foundation for the non-replacement of combs.

Too many people are apt to waste a valuable resource by just dropping or throwing away all the bits and pieces of wax they could, and should, gather throughout the season when working their hives. It is so easily done, especially when you have a box or tin with you to put those scrapings into. Also it is much more hygienic, for spreading the stuff on the ground may well mean spreading American foulbrood spores if these happen to be present.

Is it worth the bother when managing only a few hives? Save a match and buy a farm is an old cliché, alter it to save the wax scrapings and get foundation it becomes very credible indeed.

A hive offers several sources of beeswax which a good beekeeper should gather and put to good use.

Firstly we have those cappings from the combs which have been extracted (see March '97 issue of this mag). These will produce a top grade light coloured block of wax.

Secondly all those bits and pieces, called scrapings. These may come from the tops and at times the sides of the top bars, the inside of supers, bits of brace and burr comb and from excluders and crown boards. This material will produce a cake of wax darker in colour but still of good quality.

Thirdly there are the culled combs. As they have been built by the bees using wax, this wax is recoverable but those old dark combs also hold a considerable amount of cocoons shed by the many generations the cells have housed, pollen and propolis. Efficient rendering of combs is practically impossible for the small beekeeper as it requires special equipment to produce plenty of hot water and/or steam and a proper wax press. The wax form this source is dark and of the lowest grading when it comes to selling it. However after the correct treatment it too can be turned into perfect comb foundation. What to do with these old combs we leave till next month.

One can expect to gather something like 400 to 500 grams of wax per colony each year. There are approx. 17 1/2 sheets of f.d. med. brood foundation per Kg, 400 gr. then presents 7 sheets. This is about two x the number needed if an average renewal policy of three to four combs per broodnest is practiced annually.

So, no matter how you look at it, there is good economic sense in laying your hands on every bit of wax where possible, it is good beekeeping practice.

One way of dealing with the dry cappings and scrapings is very simple and easy. Put the stuff into a bag, send it up to a firm specializing in rendering and producing wax foundation. Place your foundation order and if the amount you forwarded is sufficient for filling the order plus, you may find that conversion costs and freight have also been covered. Good, you are not 80 cents per sheet of foundation out of pocket. Why not take it a step further and turn these cappings and scrappings into neat and clean blocks of wax. If dealing with relatively small quantities it does not need any financial outlay to speak of. All that's required is a large second hand pot, heat and some ice cream containers or such like for moulds, some muslin or panty hose (old) for strainer cloth, four clothes pegs, some rubber bands or string and a handful of small sticks. A high pot or vessel is better to work with than a wide shallow one such as a jam pan. Don't take something made from copper, brass, black iron or zinc for those metals will discolour the wax, enamelled, stainless steel, galv. iron and tinned steel are OK. As bees wax is very flammable, an electric stove or hot plate is less risky than an open flame. Still, having a fire extinguisher nearby is always good policy.

Now fill the pot 1/4 to 1/3 with water and heat it till it will melt the wax. The melting point of beeswax is 65°C. Don't go any higher than 90°C, that is below the boiling point of water. Drop in the cappings or scrapings adding gradually more till there is a fair amount of molten wax in the pot floating on the water below.

In the meantime have the moulds ready with a double layer of straining cloth fastened over them with the clothes pegs. Pour a cup of hot water into the mould first and then ladle the liquid wax into the mould through the straining material. When full do the next one etc. Place a rubber band or string round the containers before the wax cools and put a small stick between the band or string so that the side of the container is pushed a little inward. When cooled sticks and bands are removed, the sides of the mould can be sprung outwards and loose from the wax cake. First drain off the water and then with a sharp knock on a plank or bench remove the cake from the mould. Any particles which have passed through the strainer will have settled on the bottom of the wax cake and can be scraped off. Result, a nice clean block of wax. When filling the moulds it is a help if there are say four sitting together on a board, easier to move. It is important that the cooling process should be slow, so cover them. Rapid cooling causes cracking, liquid wax contracts when solidifying. The centre of the blocks will harden last so don't be too much in a hurry to remove them form the moulds, they may break and you'll have a mess.

There are a few snags. Don't use Mother's good cooking pot or bowls or you'll finish up in the dog box for a day or two (speaking from experience) and cover the bench or any working surface to safe guard it form any spilled wax. It is best to keep the peace.

The beauty of these blocks of bees wax is that they don't deteriorate and they seem to be a lot less attractive to the wax moths.

So you see that it is absolute false economy not to replace those poor combs as the bees will provide all the wax needed for a continuous comb renewal programme. And more than is required. Besides filling the foundation requirements these wax blocks can be turned to good use. You may like to turn your hand to making candles, polish or some cosmetics. All extra dimensions to your chosen hobby. Or the surplus can be sold for cash. At present top grade bees wax will fetch something like $6.00 per kg. Sell the top grade and earmark the darker wax for conversion into foundation is the usual and sensible practice.

INCREASE YOUR KNOWLEDGE OF

THE FASCINATING WORLD OF

A Telford Rural Polytechnic course of study will enhance your awareness of the many diversities in beekeeping. Applications are invited for our Certificates in Apiculture which may be studied by:

One year of full time study in house

Two years of part time study by correspondence

For those wanting to study full time, Telford's one year Certificate in Apiculture will provide you with the practical skills and theoretical knowledge needed for a career in the beekeeping industry.

ENROL NOW!

1997 Enrolments currently being accepted.

Our correspondence course may be commenced at any time and is ideal for beekeepers already in full time employment, or hobbyists who want their hives to perform as well as any professionals.

We also can create programmes tailored to your individual needs.

DON'T DELAY — CONTACT US NOW FOR FURTHER INFORMATION

TELFORD RURAL POLYTECHNIC

Te Whare Wanaka O Puerua

FREEPOST 73901
The Apiculture Secretary,
Telford Rural Polytechnic,
Private Box 6, Balclutha, New Zealand.

Telephone: 64-3-418-1550 Fax: 64-03-418-3584

OR USE OUR TOLLFREE NUMBERS

0800-805-657 OR 0800 TELFORD

A beekeeper at the age of 10

by Brian Worthington, Staff Reporter, Hastings

The many facets of a honey-bee's life from its social structure to producing honey, has fascinated people since the beginning of time.

The mystique of the bee grabbed the interest of 10-year-old John-Paul Bevin, Taradale, who tells how he became a beekeeper.

"One day I thought I might do a project, he said. "I thought long and hard as to what I should study. I liked honey so I thought I might do a bee project. That is what I did and it took nearly two weeks.

"When it was finished, Dad said he knew someone through work," he said.

This was the executive secretary of the New Zealand Beekeepers Association. His name was Harry Brown.

"Dad asked Harry if he would come around and look at my project," he said. "Harry came and said: This is a good project."

"I knew he was pleased with it because he had a smile on his face," he said. 'I felt lucky to have Harry in my house to see my project because hardly anyone saw projects I had done (except my mum and dad that is) because I am home-schooled."

Mr Brown put John-Paul in contact with beekeeper Ron Morrison, who said he would take him out beekeeping.

"Finally the day came. Ron came at about 9am. He gave me a boiler suit, veil and I brought some gumboots. We headed out at 9.15am.

"First we went to White St to look at three of Ron's beehives. The whole garden was crowded with bees, bees, bees. I had to use a smoker to calm the bees down," he said.

Smoke helps approach

A smoker runs by pine needles or sacking and flame. It is used when approaching the hive. A puff in the entrance brings out the bees on the floor board (the bottom of the hive).

When removing the top of the hive, a little puff on the flames make the bees head down.

"Just before you finish you give a little puff on the top nine frames so the bees on top won't get squashed when you put the lid on," he said.

"I became interested in bees and now I have my own beehives. I have got 45,000 bees altogether," he said. "But remember this is only a start. Soon I will have over 50,000."

"When I got the second hive I went with Ron to get the swarm. The swarm was only a little one with only 15,000 bees."

"If you know about bees, you should know that a queen can lay just over 1000 eggs a day. A queen can live for six years, but over those years she gets weaker and weaker until the six years are over. Then she lays her last grub and dies."

John-Paul Bevin *Photo: Courtesy Hawke's Bay Herald-Tribune*

"The workers feed the grub with lots of royal jelly and when that grub hatches the royal jelly makes her strong and abdomen longer, and she lives longer," he said.

Usually in a normal honey-bee's life they live for only nine weeks from the time they are laid.

After a worker bee is laid as an egg it stays in its cell for three weeks as the egg develops into a larvae which is fed by the workers until pupal stage followed by emergence as a young bee.

Then it hatches and begins the second stage of its life as a cleaning bee. A cleaning bee cleans out cells so that the queen can lay her eggs in them. Then the worker bee becomes a nurse and feeds baby grubs in the hive as a scout bee.

Its job is to look for flowers, come back to the hive, then do the tail-waggle dance on the honeycomb. This dance indicates to the other field bees what direction to go, how high, and how far it is to the flower.

The last job of the worker bee is as a field bee, which goes to the flowers, gets the nectar, brings the nectar back to the hive and stores it in a cell.

The nectar is worked on by the bees to reduce the water content and produce honey. This third stage of a worker bee's life lasts three weeks.

"I collect honey by taking a frame full of honey (the honey cells have a wax covering which have a special colour about them) out of the hive and shake the bees off (sieving them). I replace the honey frame with a whole new frame," he said.

"I take the frame inside and put it into a basin, the same size as the frame, and start to scrape the honey from the frame (to the flat foundation)."

"I pour the honey from the basin into a sieve (wax and all) so that the honey drips through the sieve into a bucket leaving the wax behind. This can take up to a couple of days."

"Then I pour the honey from the bucket into honey pots and seal them with a lid. Lastly I put my special label on the container."

A thrill for mum

John-Paul's mum, Teresa, says she is absolutely proud of her son.

"I'm so thrilled for him because it's a great boost to his confidence."

"I was a bit concerned about having bees around the yard at the start but I am used to them now. I am always aware that they are out there when I am hanging out the washing and tend to pull my collar up."

"Moving around the garden required some replanning to avoid the bees flight path to and from the hives but there have been no real problems," Teresa said.

Acknowledgement Hawke's Bay Herald-Tribune

Preparing frames for spring

by Ron Morison

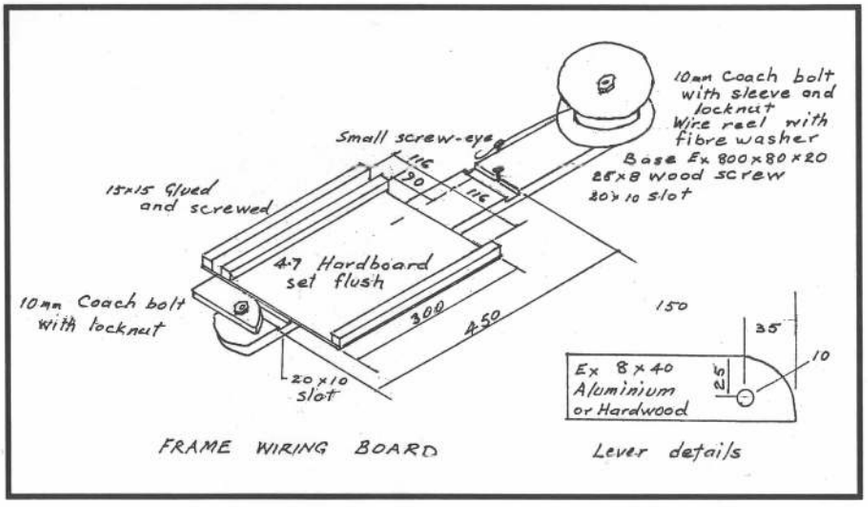
Every beekeeper knows the best way to do things and every beekeeper does things differently!

Here's some thoughts on preparing frames for the hobbyist's spring build up. Firstly new foundation must go in, in the spring, for best results and it is worth spending some time getting a "user friendly" wiring frame.

Through trial and error the frame sketched has proved to meet my needs. Only critical dimensions have been indicated so feel free to make modifications. The resistance on both the lever and the wire reel can be adjusted to suit the operator. When rotated through 90 degrees the lever clamps the frame against the screw head allowing the wire to be fed through the holes in the frame, the spacing of the cleats centring either full depth or 3/4 frames. Feeding the wire through the small screw-eye stops it unwinding from the reel — most of the time!

No matter how few frames are to be wired, it is essential to be in a comfortable work position. This device can be clamped or screwed to a workbench, of suitable height in a well lit situation. Of course if one has a dedicated bench, the obvious refinement is a foot controlled compression fitting.

After feeding wire through the tensioned frame the ends can be wound around a small tack or double stapled with 6mm staples. I prefer fixing on the outside of the end bars rather than on the edge for easier scraping of used frames.



Having fixed the wires I use an old electric blanket control to heat the wires for embedding the wax. This gives a volt drop of nine volts on the low setting, so it is more gentle than a car battery, unless a resistance is added to the circuit. Pulling wires for cutting out comb honey can be facilitated by the high setting.

By compressing the frame and pulling the wire sideways at one end one can improve the tension on an old frame, without the need for complete rewiring. Of course a tack or staple is needed to retain it.

Spend a bit of time now making something like this to ease the burden of wiring your frames for next spring.

BeeFax

Vol. 2, No. 7 May 1997

SAWFLY UPDATE

"Willow" is not a word that normally appears on honey jars in New Zealand supermarkets. However, for honey bee colonies the various willows (Salix spp) provide vital nectar and pollen for spring build-up. Recently I've been asked by a number of beekeepers about the potential affects of the newly discovered willow sawfly on this all-important feed source. So here's an update on the pest.

The willow sawfly (*Nematus oligospilus)* was first found in suburban Auckland in February of this year. A survey by MAFQual showed that it was already widespread throughout the Auckland city area, which made successful eradication unlikely. So far, the only confirmed find outside Auckland is from Rotorua. It is hoped that a survey next spring will give a clearer picture of sawfly distribution.

The natural range of the sawfly is from western Europe to the Himalayas, where it tolerates a wide variety of climatic conditions. It has also become established in the UK, North America and, more recently, southern Africa. Concerns in New Zealand are largely based on the South African experience, where severe damage to willow plantings occurred within a few of years of sawfly establishment.

Little is known of the life cycle of the pest in New Zealand, although so far all specimens found have been female. Females can reproduce without mating, in much the same way as queen bees produce drones. The sawfly overwinters as a late-stage larva inside the pupal cocoon, pupates in spring, and emerges as an adult two weeks later.

Egg laying begins almost immediately. The eggs develop into greenish caterpillar-like larvae similar to those of the white cabbage butterfly. The larvae are specific to willows in their feeding, although they have been recorded as moving on to nearby poplars when all available willows have been stripped.

Given that most willows flower early, the actual temperature that triggers emergence could be crucial for beekeepers. It seems likely that sawfly numbers will not build up to significant levels before flowering. However, that may make little difference if the willow is so severely damaged the previous summer that it doesn't flower the next spring anyway.

How much effort should go into controlling the sawfly? DOC, and some regional councils with blocked waterways view willows as a nuisance weed. The opposing view (held by most beekeepers) is that the benefits provided by willows, including shelter, stabilisation and amenity uses outweigh their disadvantages. The latter view seems to be winning out, and the possibility of introducing a biological control agent from Europe is now being considered. Several parasitic wasps are known to attack the sawfly, although any introduction will probably be several seasons away.

[Sources: Dr. Jocelyn Cowley, MAF Qual, Lynfield; Dr. Jo Berry, Landcare Research, Mt. Albert]

- Paul Bolger, AAO, PUKEKOHE

CHANGES TO EC EXPORTS LIKELY

Over recent years, the pressure to free up international trade and reduce tariffs has increased significantly. Tariff barriers have been removed. But at the same time more regulations have appeared with the stated purpose of protecting the importing country from pests and diseases.

In many cases it can be argued that the regulations have been thinly disguised replacements for the previous tariff barrier, as for example when a country which already has a particular endemic disease which is not subject to any reporting or control insists that imports should be free from that disease. New Zealand exporters are only too familiar with these problems.

The SPS agreement, which came out of the most recent GATT round of trade negotiations, has set the ground rules for the use of sanitary or phytosanitary (SPS) requirements so that they do not become unjustified barriers to trade. Our beekeeping industry has already seen some changes to requirements as countries review what is justifiable under the new rules. We can expect to see more in the future.

RETAIL HONEY PRICES SURVEY

In response to readers telling us that they would like to see more market information in *BeeFax*, last year we began an on-going survey of supermarket prices . Each AAO around the country visits two supermarkets and records the retail price of a 500g pot in whatever form (liquid, creamed and squeeze) for three categories (clover blend, bush blend and manuka). The results are averaged and presented along with the range (lowest and highest prices).

We hope you will find this information useful in your own beekeeping businesses. Remember, though, that the prices listed are only indicative, and do not necessarily represent the average situation for all retailers in any given area.

The survey will be repeated in the August and December issues. What follows are this month's survey figures, as reported on 29 April:

Centre	Clover/Blend Ave/Range	Bush Blend Ave/Range	Manuka Ave/Range
Whangarei	$2.67/$2.46-$3.30	$2.43/$2.19-$2.65	$4.66/$3.69-$6.65
Auckland	$2.86/$2.27-$4.08	$2.68/$3.25-$2.33	$4.79/$3.15-$7.95
Hamilton	$2.82/$2.07-$3.43	$3.33/$3.33-$3.33	$4.25/$3.79-$4.62
Tauranga	$2.83/$2.25-$3.82	$3.18/$2.36-$4.66	$4.93/$3.75-$7.02
Palmerston N.	$3.03/$2.29-$3.78	$2.69/$2.51-$2.99	$4.76/$3.66-$7.89
Blenheim	$2.83/$3.35-$2.59	$2.96/$2.40-$4.40	$5.22/$4.25-$7.75
Christchurch	$2.96/$2.39-$3.55	$2.83/$2.29-$4.30	$4.09/$5.55-$7.75
Dunedin	$2.71/$2.20-$3.06	$3.25/$3.25-$3.25	$4.47/$3.95-$5.55
Average (April 1996)	**$2.84 (500g) ($2.48)**	**$2.92 (500g) ($2.63)**	**$4.65 (500g) ($4.56)**

Next Month: MAF Qual's New Zealand Honey Crop Estimate

The European Community is currently reviewing its requirements for a wide range of animal products. Among these are **apicultural products**, which are defined as "*honey, beeswax, royal jelly, propolis or pollen, not intended for human consumption or industrial use*" [EC directive 92/118EEC Article 2 1.(g) - also known as the "Balai"directive]. Further on in the directive it is explained that 'not intended for human consumption or industrial use' means "*products intended for use in apiculture*".

Does this make it all clear? Not really. Take beeswax, for example. While it is obvious that foundation sheets exported to a bee supplies company would come under this category, what would be the situation for crude beeswax exported to a European trader? Often the exporter does not know whether this wax is going to be made into foundation or lipstick!

One can argue that whatever it ends up as, it is being exported for *industrial use* and is therefore excluded from these provisions. Whether this argument is accepted or not depends ultimately on the interpretation placed on the directive by officials in importing member countries of the EC (consider the current disagreement over whether spreadable butter is butter).

One of the major planks likely to underpin all of these new regulations will be the requirement to trace product back to its origin, and to make statements about the disease status of the apiaries of origin. Beekeepers involved in exports of honey to Germany will know all about this already.

It is therefore highly desirable that all beekeepers who wish to export product in the future develop good systems of inventory control and batch identification. This means being able to prove to an importing country, for instance, that drum 97/31 came from apiary number 56 and was indeed from the 1997 crop. While this may seem easy for honey, consider the problems in tracing beeswax for manufacture into foundation.

Many beekeepers (eg, organic honey producers) already have such traceback systems in place. For some, however, major changes to extraction procedures and record keeping will be required to ensure that access to major export markets is available in the future. Those who are not sure how to set up suitable systems should consult either their regular exporter or AAO for guidance.

- Ted Roberts, Apiculture Export Certification Manager, PALMERSTON NORTH

PLUG THOSE GAPS

Many beekeepers, and most queen bee producers, use one super hives containing multiple nucleus colonies. The advantages of using multiple nucleus hives are many and include a) reduced apiary size

for the number of colonies present, b) time-saving when putting out cells, catching queens and balancing colonies with bees and brood, and c) savings in the amount of equipment required to establish nucs.

The advantages of the multiple nucs certainly outweigh the disadvantages, but there is one particular pitfall to consider. This article looks at that problem and its solution. The solution may seem simple, but finding the cause can sometimes be the hard part.

How often have you gone to a multi-nuc hive expecting to find a queen in nearly every nuc, but instead find that many of the nucs are queenless? The box contains two or three nucleus colonies, for instance, but only has one mated queen. You then spend a lot of time and energy balancing the nucs with bees and brood only to go back the next time and find the same result.

In my experience, this situation is less common in summer and in good weather than in early spring or when the weather is unsettled. Quite often the beekeeper will put the result down to a bad batch of queen cells, or the cells becoming chilled before they were put into the nucs, or perhaps bad weather and poor matings.

As it turns out, however, a major cause of this decline in queen production in multiple nucs stems from the equipment itself, and the instinct of bees to communicate. To explain why, we need to first understand a little bit about how bees communicate and in particular the role pheromones play in this communication.

Pheromones (or chemical messengers) play a crucial role in the honey bee colony. Pheromones are perceived by specialized sensory cells in bees called chemoreceptors and are detected as odour or taste. Pheromones exert their control over insects (and animals) in both subtle ways, such as physiological development, and in obvious ways, such as behaviour.

The pheromone (E)-9-oxo-2-decenoic acid (9-ODA) is reported to inhibit both ovarian development of workers and queen rearing by workers. Another pheromone, (E)-9-Hydroxy-2-decenoic acid (9-HDA), produced by the queen, is reported to work in conjunction with 9-ODA in suppressing queen rearing. However, the presence of a mated queen is more effective than the presence of both 9-ODA and 9-HDA in suppressing queen rearing, which indicates that additional pheromones are involved in this suppression. Whatever the chemicals involved, it's obvious that mated queens, by the production and release of pheromones, suppress queen rearing within the colony.

But how does this relate to losses in queen bee production in multiple nucs? The point of multiple nucs is to separate a large box into multiple compartments by means of a division board, with each compartment containing a **separate colony**. But how separate are your colonies and are the division boards pheromone and bee-proof? If they are not absolutely separate in terms of pheromone transmission, then each colony will be affected by the pheromone influence of the adjacent colonies. You should check (in particular) the corners where your division board touches the floor board, and around the edges where the lid touches the division board. If any gaps are present, then you do not have **totally** separate colonies.

Pheromones can travel from one colony to the next through gaps, even if the gap is only the thickness of a piece of paper. Pheromones are effective even in very low concentrations and can travel through those gaps either via air circulation or bees touching tongues through the gaps. This may result in a drastic and sudden drop in queen production.

In the summer, the effect of pheromone transmission through gaps is minimal. Only when conditions (weather and nutrition) decline, does the problem of gaps really become obvious. Anyone who has run two-queen hives in which a queen excluder separates the queens (as opposed to two-queen hives containing two colonies separated by a division board) will know that as conditions decline the colony is likely to revert to one queen.

The same holds true for nucleus colonies separated by a division board. If gaps at the edges of the division board are present, pheromones may be transmitted between the nucleus colonies, which inevitably results in the loss of queens in adjoining nucs.

A simple solution exists for the problem of gaps. Two products, windscreen sealant and silicon, are extremely useful in sealing these gaps. They seal the gaps while allowing movement (contraction and expansion of the joints). They also don't act as an adhesive, so they still allow easy removal of the division board if necessary. It is important, however, that these materials are applied while the colony is empty as the bees will remove the sealant if it has not cured.

- Robert Rice, AAO, LINCOLN

GADGETS AND GISMOS

[*This month: Murray Reid tells us about a nifty way to cut up smoker fuel, and ways to cut costs in the home office, too*]

Impact Wrench Kit

You may or may not be a fan of The Warehouse, but they stock a product that looks more than useful. It's an impact driver that should make easy work of taking the nuts off a car wheel. The unit comes with a light, achieves 130 ft/lb torque

(whatever that means in practice) and has 4 different sized sockets. Oh, and you also get a pair of gloves, too. Not bad for $89.99 retail!

No More Missed Faxes

Don't you just hate it when you are trying to send a fax and it won't go through because the machine is busy or out of paper. It always seems to happen when you have to go somewhere and can't hang around to redial, and who hasn't had their own machine run out of paper? Do you know how many faxes you may have missed?

Well, Telecom may have the solution for you. They call it Fax Advantage and introduced it last year. Fax Advantage diverts faxes to Telecom's Message Exchange when a customer's line is busy or there is no answer. The Message Exchange stores the fax, then resends the fax every five minutes for the next 30 minutes.

After half an hour, Message Exchange continues to send your fax at regular intervals for up to five hours or some other time frame chosen by you. If there is still no joy, Message Exchange will notify you by phone or pager. Message Exchange can hold and deliver free up to 30 pages from its memory, with a 9 cents/page fee (excluding GST) after that.

A normal fax line costs $60 per month to rent. Fax Advantage costs $69.42 — so for an extra $9.42 you should never miss a fax or have the hassle of trying to connect to another faulty or engaged fax machine.

Cutting Sacks for Smoker Fuel

Most beekeepers still seem to be able to find old sacks or scrim to burn in their smokers. However, cutting the sacking into "burn-sized" pieces is a universal chore. I've used an axe and chopping block, knives and scissors, sheep shears (blade type) and even the circular saw. The saw worked fine, but would give OSH a coronary, and was very dusty. I even turned the blade around and that worked okay too — still dusty, but at least it didn't grab the sack so violently.

However, the neatest and cleanest method has to be that used by a local Waikato beekeeper. He uses a saw bench with a smooth blade called a knife edge blade. You will have to get these from a specialist saw doctor. The trick with these is to:

- Keep the blade sharp with a Carborundum stone
- Don't fold the sack too thick — one fold is enough
- Use a hand tool like a cement float to push the sack past the blade (this is essentially a flat piece of wood with a handle)

The float must be made of wood. Gluing a thick piece of very rough sandpaper on the bottom will help it grip to the sack better. Or you could paint or varnish it and dust with sand while still wet. You need to hold the float very close to the blade and push quite hard to keep the sack compressed down and moving past the blade. Another advantage of the knife edge blade is that there is little dust and sack fluff to get all over the workshop or up your nose. Like all saws, you should use a safety guard and protection for your ears and eyes.

Printer Ink Cartridge Refills

Who hasn't been shocked when it comes time to renew the ink cartridge in your computer or fax printer. "What do you mean, $45 for that little thing!" Prices for new cartridges do seem to be coming down, but it's much cheaper to get them refilled or even do it yourself. I seem to get 3-5 refills from an HP cartridge before it wears out.

I use Cartridge Refills Limited, PO Box 391, Waikanae, phone 0800 241 212. Murray and Eleanor Hopping run Cartridge Refills and offer a very good service. They can clean and refill your cartridges for about $32 for most Canons and Epsoms, and $37-45 for HPs. They give you a test report on each cartridge, too. Colours are no problem and cost around $20-35 per colour. Their prices include GST, packaging and courier back to you and a courier bag to send in your next cartridge. They can service all the main brands of printer apart from those mentioned above.

Refills for "do-it-yourselfers" cost around $25-$30 for Cannons and Epsoms, and $32-$40 for HPs. The kits include 40-70 ml of ink, head cleaning solution and a syringe to fill the cartridge, plus instructions. I seem to get around,three refills from the refill kit for an HP51626A.

Tamper-Evident Caps

Further to the article on tamper-evident tops for jars in the March 1997 issue of *BeeFax*, Spotless Plastics NZ Ltd now offer tamper-evident caps for 28 and 38 mm containers. There are screw-on or push-on models and they are plug sealed. The tops are also available plain or printed with a wide range of colours and inks. Spotless Plastics are at 30 O'Rorke Rd, Penrose, Auckland, free phone 0800 242-648 or ph 09 579-0934 fax 579-7167.

BeeFax is a publication of the National Apiculture Business Unit, MAF Quality Management. Editing and production is by Cliff Van Eaton, MAF Qual, Private Bag 12015, Tauranga. Copy is written by Cliff Van Eaton, unless otherwise indicated.

Communication regarding back issues and fax distribution to David McMillan, MAF Qual, Private Bag 50034, Mosgiel, phone (03) 489-3809, fax (03) 489-7988.

Random Thoughts — Beekeeping

Today's random thought is about the sadness in beekeeping

by Ham Maxwell

Today has been a sad day in my beekeeping, as I found four hives with no life left in them, yet only two weeks ago all four were alive and well. At the time of wintering down all had been left with adequate food stocks, virtually a full super of honey and frames of pollen. It has been my policy to leave more than enough food in the hives as the weather in our area is so inclement that the bees have a rough time at the end of winter.

Periodic checks throughout the winter period showed nothing amiss, the movement of bees at the hive entrance gave no concern once the annual occurrence of throwing out the drones had passed. Naturally the hives were not opened in the cold weather when the bees had clustered in the top two supers. If the weather was warm on inspection day then the lid would be raised for a brief period to check on the clustering, and if thought necessary the food frames were moved adjacent to the cluster. Past experience has seen the bees starved out and yet only two frames away there is a full frame of honey. In the clustering period there is little movement when the hive is opened and every effort is made to avoid disturbing or breaking the cluster. By passing a bare hand over and sensing heat immediately above the cluster it is possible to gauge if the bees are up to the expected state for the time of year. Little or no heat indicates something wrong, usually lack of food.

Winter is the time that the hive becomes attractive for all manner of other occupants, cockroaches, spiders, beetles and of course mice. Large sections of the hive become literally unused and any intrusion by pests goes unnoticed by the bees because they are tightly bunched in the cluster and don't want to be disturbed. Mice generate their own smell in the hive and it is usually pungent enough to make itself known when the lid is lifted. A visual inspection also will show a "mess" filling the spaces between the outer frames and toward the rear of the super, often the driest place for the nest to be built.

Another pest to look for is the queen wasp wintering over in the space under the lip of the hive lid. Usually very sluggish in their movement over the winter period means that they are easily slain by the observant beekeeper.

The hives in question had passed all the attention normally given to them over the winter, and with the advent of an early spring some flight by the bees was noticed. Not every hive will begin to develop a foraging pattern on the same day early into the spring, but nevertheless it is a good indicator of the health of the hive. It is possible for the beekeeper to miss a weaker flight pattern at this stage of the season, particularly if the majority of hives in the yard are weakened by a severe winter. However all the hives in the yard in question had been gone through when a particularly warm spell in the weather pattern occurred. Honey frames were moved as thought necessary and the hives closed up. Very little brood was evident and all appeared normal for the time of year.

Nature is fickle, there is nothing else to be said. Having lulled the bees and the beekeeper into a state of contentment, the weather then closed down, reverting to midwinter specials for a prolonged period. Rain, wind, hail and cold temperatures were the order of the day for about three weeks. Trying to get into the yard without a four-wheel-drive machine was impossible. Trudging in from the road was not out of the question, but who wants to hike through the rain and then start lifting the lids on the hives? The bees would not be amused at your solicitude and would resent the injection of rainwater to boot. Stay home and assemble supers and frames, ready for that "boomer" season yet to come.

When the weather finally cleared enough to gain access to the yard not too much was found to be amiss. Again food frames were moved inward toward the cluster and some movement was evident from the bees. Wet frames from last season were placed in some of the hives together with some partially filled frames held over for spring revival. I left the yard with some optimism that the worst was over, as most hives had started showing signs of brood being laid down. Not a lot, but at least a start. A few dead bees at the entrances, but nothing startling. A little pollen was being taken into the hives, a sure sign that spring was rapidly approaching. With other yards to be looked after it was just on three weeks before I returned to find four hives with no food, just hundreds of little bottoms protruding from the cells, and no live bees. Very few bees were piled up on the baseboard, and one despatched them in quick order. Having to clear up the mess they left behind was not a pleasant task with badly chewed up combs and masses of grasses to get rid of.

Why did my bees die out? All that remained in the combs was a little pollen. All honey cells were empty, and the few brood cells left were capped but the brood had died with no bees to maintain the temperature needed. Was the hive robbed out by other stronger hives? Lack of dead bees around the entrance did not confirm this. Why then did they starve over such a short period, and particularly when extra food had been introduced only a short time ago? Naturally I took this problem with me to the next club meeting, and a problem shared is a problem halved, so in the general business section of the meeting I raised my problem. Lack of pollen, should have fed pollen supplements, weekly inspection necessary at this time of year, sugar syrup feeding should have been commenced, too many winter inspections, these were the comments from fellow club members. I am still no wiser as to what went wrong, but at least I can try to fit the solutions offered to the situation.

One member recounted a similar situation with only one week between visits to the hive. It seems he loaded the hive with what he thought was an ample supply of sugar syrup only to return a week later to find all the bees dead. The general consensus of robbing of the hive was the considered opinion of those present at the meeting. The dropping of excess sugar syrup at the hive entrance will be enough to start the robbing syndrome from adjacent hives. Perhaps this was the solution to my problem, who knows? The bees left no final note for me to read.

Such are the vagaries of beekeeping. Winter chill would hardly remove the honey from the cells, but if the majority of bees died following a cold snap then adjacent hives could have robbed out the remaining food. The merciless nature of the honey-bee toward its sisters never ceases to amaze me, but then that is the trend in nature, the strong survive at the expense of the weak. Looking on the positive side, the hives must have been weak and endeavouring to carry them through to another season would have been a waste of time, effort and money. Three of the four were due for new queens this coming season anyway, and as I have already picked up two very nice sized swarms this last week, they will get the new queens.

So the moral is to keep looking in a forward direction, try and learn from any mistakes to the extent that those mistakes will not be consciously repeated. If, as a beekeeper you fail to keep learning then it is time you got out of beekeeping. Learn to overcome the sadness of finding a hive has "snuffed it", never fail to try and analyse the reason for the failure, but above all never lose the optimism that the forthcoming season will turn out to be the best ever.

Experience the Nelson Region

Sun and blue skies all year round, beaches and forests and mountains side by side, art and craft wherever you look, fun and crazy things to do, a thoroughly relaxed lifestyle, cruisy cafes and fine restaurants, the fresh seafood, fruit, wine and naturally brewed beer... this is Nelson.

Nelson Region Overview

The Nelson region has long been for creative people, who have expressed that creativity in a multitude of ways. There are artists that work in many different mediums — ceramics, painters, sculptures, glass blowers, wood workers Artists and craftspeople were initially drawn here by the availability of raw materials, such as the Nelson clays. These ceramic artists and others have stayed to form a diverse industry that has a distinctive Nelson flavour. They turn out functional and creative art pieces, generally as sole operators, from stunning locations tucked away in corners of the countryside.

The physical beauty around us and the Mediterranean climate (consistently rates as New Zealand's sunniest spot!) are undoubtedly major factors. There is inspiration in getting up in the morning and being energised by your surroundings, whether it be the sea, mountains, native forests, karst landscapes, lakes or rivers.

With 70 hectacres under vine in 1995, Nelson ranks as one of New Zealand's smallest wine regions. Yet with about 40 registered grapegrowers and a flurry of recent vine planting, Nelson is one of New Zealand's fastest growing wine regions.

Nelson is largely white wine country. Sauvignon Blanc, Riesling and Chardonnay, the three most common varieties account for nearly two-thirds of all plantings, although Pinot Noir and Cabernet Sauvignon are also established.

The Nelson wine trail winds through some scenic country, enabling visitors to sample wines of world class quality in spectacular vineyard settings.

Nelson accommodation is as unique and varied as the activities — to suit the needs of the most discerning through to the most budget conscious traveller. Larger hotels offer all the services expected of a large city hotel but the relaxed personal style of the region. Choose from a wide range of home-hosted experiences; farms or orchards. There are wonderful choices of boutique accommodation to suit the traveller looking for both value and exceptional style — from luxury lodges, colonial upmarket bed and breakfast to restored century-old cottages.

Nelson is differentiated from other regions by its overall positioning as a boutique, lifestyle destination based on four main themes:

Natural Nelson

There are three national parks all within ninety minutes of each other yet offering totally different experiences — Abel Tasman National Park is a coastal wonderland of sea, sky, rocky headlands and golden beaches. Nelson Lakes National Park offers skiing and watersports and a wide range of lakeside tracks and tramping trials. The newest and second largest national park, is Kahurangi National Park, a magnificent 400,000 hectacres of wilderness.

Artistic Nelson

Nelson culture boasts a vibrant arts and crafts scene. Home to over 300 full-time artists who work in many different mediums; skilled painters, potters, wood workers and weavers. Our region is also home to arts events such as the New Zealand Wearable Arts Awards.

Lifestyle Nelson

Kiwis who enjoy the good life have been coming here on holiday for years! Superb seafood like scallops, mussels, crabs as well as all sorts of fish, boutique wineries, hop growing and small local breweries, hillsides smothered with pipfruit orchards and berry fruit, and roadside stalls to buy the produce from. Add small, quality cafes to eat at, excellent lodges and character bed and breakfasts, the highest sunshine hours in the country and some of the best beaches and you have a recipe for a great lifestyle destination.

Adventure Nelson

A relatively new image for Nelson, but one that's growing fast — All sorts of adventure experiences form the softest to the hardest, and mostly based on the natural, unspoiled environment. Sea kayak or walk the Abel Tasman National Park, whitewater raft the Buller River, Tandem skydive where the climate gives the country's highest jump days, experience a bungy higher than Skippers Canyon and new attractions like 'The Swing' or a 4WD motor biking through native bush, walk the Heaphy, take a 4WD Safari along Farewell Spit, cave under the Marble Mountain — Nelson is an adventure!

The Nelson region is located at the northern tip of the South Island of New Zealand and comprises of five distinct areas:

Nelson City

Take a friendly New Zealand small city, add a big helping of artistic energy and a generous sprinkling of the cultures of the world, and you'd have Nelson. This special mix of practicality and cultural richness is never better seen than at the Saturday morning market in the town centre. Here you'll find everything from organic vegetables to cast iron hat stands. The city is dotted with art and craft galleries which are open 7 days a week, cafes and restaurants which specialise in the fresh local produce.

The city (population 40,200) has a compact commercial centre, based on the primary produce of the region including forestry, horticulture and fishing.

Nelson, named after Admiral Lord Nelson was first settled by Maori who called it Whakatu. They found fertile land, plentiful food from the sea, rivers and forests, a sheltered coastline and a favourable climate. Nelson became New Zealand's second city by Royal Charter signed by Queen Victoria on 27 September 1858.

Nelson is home to the New Zealand Wearable Art Awards, a spectacular annual event of people by people and portrays the vast creativity, skill and imagination of wearable art.

Motueka/Abel Tasman

The Abel Tasman is a coastal wonderland of sea, sky, rocky headlands, lush native bush and golden beaches. You can walk the coastal track (three to four days total, guided or freedom) or explore by cruise boat, water taxi or sea kayak, where you have the added bonus of face to face encounters with marine wildlife and birds. The Abel Tasman National Park is New Zealand's smallest national park (22,350 hectacres) and has the country's only coastal walking track of its kind.

Marahau is its southern entry point, where you'll find accommodation of all types and the base for sea kayaking (guided trips and independent hire), seal swimming, horse trekking, the national park interpretive centre. Both Marahau and Kaiteriteri Beach, famous for its three safe golden-sand beaches, are the main departure points for cruise and water taxi vessels.

The main town of the area is Motueka, a rural centre of 12,000 at the mouth of the Motueka River. This is a relaxed, friendly settlement, with small cafes and galleries. There are two ways in which to drive between Nelson City and Motueka either via the wonderful coastline or via the inland route. Both routes offer rich fruit growing areas lined with apple orchards; take the time out to stop at one of the many roadside fruit stalls.

Golden Bay

Imagine an area with endless variety, where golden beaches, alpine valleys and tranquil fishing rivers share a close proximity with the sea. This is Golden Bay!

After a scenic descent via the region's majestic "marble mountain" gateway, you'll drive through gentle pasture land, pause awhile in the town of Takaka and on to vistas of windswept sea cliffs, glaciated mountain ranges and the most placid beaches imaginable.

Many Maori hilltop settlements were already ancient when Abel Tasman, the first European to see this land, anchored here in

1642. Later the bay was to become the gold capital of the young colony of New Zealand.

The main town is Takaka (1000 approximate population), but you will find cafes and entertainment venues of style and character dotted around the district. Painters, potters, silversmiths and weavers are among the many artists and artisans who have been drawn to the creative ambiance of Golden Bay.

Natural features of the bay include the crystal clear freshwater springs at Waikoropupu (Pupu) Springs, the Anatoki Eels, Farewell Spit and limestone caves.

Te Waikoropupu Springs are locally known as Pupu Springs. The rushing glass clear water of the Pupu Springs has made headlines as the clearest in the world.

The Farewell Spit Nature Reserve is a unique geographical feature which extends the smooth crescent shape of Golden Bay a further 35 kilometres into the sea. The bird sanctuary and wetland of international importance can be explored on one of Golden Bay's popular 4WD eco tours. The base of Farewell Spit is the site of frequent whale strandings.

Other Golden Bay delights include; Whahariki Beach where you can walk amid a gallery of rock formations, and Westhaven Inlet which is the second largest estuary in the South Island, as well as being a beautiful landscape it is an important fishing and wildlife area.

Over millions of years, water has formed a variety of explorable cave systems within the greater Golden Bay area, accessible caves include Ngarua Caves, Rawhiti Cave and the Te Anaroa Caves. One of the most dramatic features in the area is the huge vertical shaft of Harwood's Hole, the deepest straight drop in New Zealand.

Murchison

Lake Rotoiti is the start of the Buller River's impressive journey through the mountains to Westport and the Tasman Sea, a journey you can follow much of on the main highways through to Christchurch and the West Coast. The mighty river, and its tributaries, offer some of the best whitewater kayaking and rafting in the country and are well stocked with brown trout.

The district is dominated by rugged escarpments, bush clad ranges and offers beautiful unspoiled lakes, sparkling streams, fast flowing rivers with awe-inspiring rapids and waterfalls between tranquil stretches of water.

Murchision is now the only sizeable settlement in the Buller (population 570), which once supported thousands of gold miners — their relics make interesting exploring.

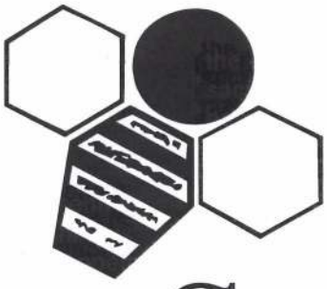
Nelson Lakes

South of Nelson city, the northern-most peaks of the Southern Alps rise in Nelson Lakes National Park. This 102,000 hectacre park is centred on two beautiful alpine lakes, Rotoiti and Rotoroa, both surrounded by steep mountains and fringed to the shore by dense beech forest. There are a great variety of fresh water habitats in the park. A significant feature of the park is all five New Zealand species of beech are found here.

St Arnaud is an alpine village on the shore of Lake Rotoiti, one of the two major lakes in Nelson Lakes National Park.

In winter, St Arnaud Village offers ice skating and two beautiful ski fields, Rainbow Valley Ski Area and Mount Robert Skifield. Rainbow Valley Ski Area has great skiing, snowboarding, sunny slopes and magnificent views over the beautiful beech forests of Nelson Lakes National Park and out to Tasman Bay. Mount Robert is a club ski field, as well as ski touring and alpine climbing for the experienced.

Conference is in Nelson — 21st to 24th July
Contact Margaret on (03) 525-8322



BeeLine Supplies

Suppliers to the Beekeeping Industry
583 South Road, Lookout Point, Dunedin

Hours for Warehouse: Monday, Wednesday, Friday — 10am to 4pm
For orders and quotes telephone Brian and Heidi on (03) 488-0151
Fax: (03) 487-9878, After Hours: (03) 487-9898
Christchurch Agent: Trudy, phone (025) 787-400, After Hours: (03) 349-9945

Honey Supers

Buy direct from the manufacturer
All sizes and quantities available

Specials on 100 Supers and 1000 Mahurangi Kitset Frames

Full depth $1650.00 plus GST delivered South Island.
3/4 depth $1500.00 plus GST delivered South Island.

MAY SPECIAL

GLOVES

(Ventilated with Gaunlet)

3 pair for $95.00 delivered - Includes GST
Normally $44.00 a pair.
LIMITED STOCK

Remember we can supply all your beekeeping requirements.
A full wax conversion service available.
South Island agents for Ceracell Beekeeping Supplies.
South Island for Mahurangi Hiveware.

31st FNOSAD Congress

I attended the 31st Congress of FNOSAD (Federation Nationale des Organisations Sanitaires Apicoles Departmentales), held this year in the Departement of Bouches du Rhone in the village of La Ciotat, March 21-23, 1997. The meeting is held every year in a different venue; this year's theme was "En apiculture, que faire pour bien fare." I am presently not clear about the translation, however, it has to do with keeping healthy bees as most of the meeting concerned what are called here, "sanitary issues," surrounding apiculture. In addition to talks there were exhibitors, including Brian Sherriff from the United Kingdom.

Most impressive was the exhibit by the French equipment manufacturer, Thomas. It consisted of a modified trailer with a complete extracting and packing facility inside. The Thomas team parked the trailer, opened the sides, deployed an awning and removed a number of stainless steel holding tanks for display. They turned on the power and the machines permanently mounted to the trailer started pumping and running. In addition, a video monitor of the operation was also available on the side of the trailer. Thomas forty-eight page slick paper catalog is something to behold. Many things can be found here that are not routinely present in U.S. suppliers' catalogs, such as several kinds of foundation mills. Thomas is located on the Loire river near Orleans in the Department of Loiret, south of Paris at BP No. 2, Fay-Aux-Loges, tel. (33) 05-38-59-56-20, fax (33) 05 38 59 28 28. See them on the web by consulting http://ourworld.compuserve.com/homepages/APISERVICES.

Predictably most of the discussion at the meeting had to do with Varroa mites and their resistance to fluvalinate and Apistan treatments. The latest issue of the Revue Francaise D'Apiculture (No. 571,. March 1997, pp 115-117) contains an article by Jerome Trouiller, University of Udine (Italy). According to Mr Trouiller, data over the last three years of research attempts to shed some light on the appearance of resistance.

1. Spontaneous appearance of resistance is a rare phenomenon the author states. The site of the resistance was first in Italy (probably Sicily). Data beginning in 1991 shows a step by step spread of resistance from southern to northern Italy. The Alps appear to be an effective natural barrier (resistance has yet to appear in Switzerland or Austria). It is logical that the phenomenon has appeared in Slovenia and in southern France where the Alps are not very high. The roles of beekeeper movement and climate have probably also affected the process. Spread of resistance has probably been enhanced by robbing and drifting adults and importation of queens.

2. The author further states that Apistan has not gone bad as a product; it still functions well (99% control) in areas where resistance has not appeared. There is no such thing as partial resistance by mites and data shows that in six different European countries where tests have been made Varroa continues to be controlled. In Austria, where Apistan has been used since 1989, the treatment is still functional, as it is in most of France. Use of Apistan contrary to the labeled procedure could accelerate the resistance. All beekeepers are urged to follow the labeled instructions. In areas where resistance has not appeared, there is no reason to use alternative treatments.

3. The resistance so far is in the south and east of France, according to the article, and it came by way of queens imported from Italy in the Maine-et-Loire region. In the Cote d'Or it resulted from migratory movement from the southeast. Migratory sources appear to be through the Garrone and Saone valleys. Many rural areas are not affected by migration and thus, it is thought that resistance will spread very slowly through the country. A map accompanying the article shows only 14 departments affected so far. As I have been told in my meetings here with beekeepers, however, the area of Provence-Alpes-Cote d'Azur is very much affected. The article concludes that use of Klartan (European relative of Maverik) in or near areas of resistance is a huge risk as some beekeepers in Italy have lost hundreds of colonies in this manner.

Treatments available in 1997 to beekeepers include Apistan in areas where resistance has not appeared, according to the article. If resistance is suspected CNEVA (see letter dated February 28, 1977) and the company distributing Apistan called Swarm can be contacted to determine if it is present. Beekeepers who migrate long distances are also urged not to use fluvalinate or Apistan. The issue of what beekeepers should use instead, however, is not addressed. As I have related in an earlier letter, this is leading to a situation where every beekeeper is developing his own treatment regimen. Finally, the article suggests that it is possible for resistance to disappear over time if use of fluvalinate is discontinued.

One alternative material now being sold and advertised heavily at the FNOSAD meeting is Apivar which is a plastic strip impregnated with an active material called amitraz. Some beekeepers may remember that a similar product called Miticur was headed for the market in the U.S., but abruptly withdrawn in 1993. A company called Laboratoires Biove, Rue de Lorraine, 62510 Argues, tel 3 21 98 21 21, fax 3 21 88 51 95 is distributing this material (http://ourworld.compuserve.com/homepages/APISERVICES).

There was an animated discussion with the regulatory people of the veterinary service (CNEVA) concerning materials to use. Two are registered and have labels or AMMs, Apistan and Apivar. There appears to be an interesting battle brewing between the distributors of these two products. In a reprise of the CNEVA meeting in Sofia-Antipolis (see my letter of February 28, 1997), beekeepers asked questions about the efficacy of a wide variety of materials including Apivar and "extemporaneous treatments" and the possibility of getting many of the latter labelled in France. Of special concern was the fact that treatments now used in Italy are not yet legal in France. Officials stated that efficacy and residue data had to be gathered before these treatments could be used.

Both formic and oxalic acids are being used as alternative treatments according to Jean-Daniel Charriere from Liebfeld in Switzerland who gave a talk on the issue. However, although effective for hobby beekeepers, Dr. Charriere says his advice is generally not applicable for most commercial beekeepers because of the number of treatments necessary and the fact that before treatment is applied, an economic threshold of mites must be determined (one mite per day natural fall in July, five mites per day natural fall in August). His integrated control technology also includes trapping mites in drone brood in the spring, something not practical in most commercial operations.

According to Dr. Charriere, oxalic acid's mode of action is not known. It could be by contact or systemic. Like most organic acids, control is better when there is no brood. It is present in honey naturally and is not a wax contaminate. However, it is extremely hazardous (must wear a mask) and laborious to apply. In summary, Dr. Charriere said oxalic acid might open the door to a new "organic" market, but cautioned beekeepers to carefully choose their treatments and not think of them as miracle cures. Dr. Charriere can be contacted at Station Federal de Reserches Laiteres, Section Apiculture, Liebefeld, Schwarzenburgstr. 161, CH-3003, Berne, Switzerland, Fax (41) 31 323 80 11, email: Jean-Daniel.Charriere@fam.admin.ch.

Two students from the French National Institute of Agricultural Research (INRA) also gave presentations of their work trying to see what mechanisms can be found in Apis mellifera which make bees tolerate some level of Varroa infestation. Several have been found in Apis cerana, the original host of Varroa. They include

Continued on page 24

Continued from page 23

temperature differences in drone brood that perferentially attracts Varroa, grooming behavior both from adults and infested brood, and varying reproductive success of female mites. Another major focus of this research is to find a chemical signal within the Varroa population which would tend to keep it in check. The role of aggregation and attractive pheromones (kairomones) may be key ingredients in this search.

Thanks to Dr Tom Sanford, Professor and Extension Apiculturist Entomology-Nematology, University of Florida, Box 110620 Gainesville, FL 32611-0620. Temporarily at: 23 Blvd. de la Republique No. 8 13100 Aix-en-Provence, France ph 33-04-42-93-16-47
email: mts@gnv.ifas.ufl.edu

History and Time Line:

1. First detected in Florida and Wisconsin in late 1987.

2. Emergency detection and control program begins in 1988—seminars given statewide.
   a. Detected using ether-roll method; most used method—one-step; immediate results.
   b. First treatment based on emergency label for wood strips soaked in Mavrik.

3. Emergency label for Maverik rescinded; Apistan receives emergency-use label to be used only under compliance agreement, 1988.

4. Florida extension apiculturist (Dr. Tom Sanford) makes video on detection and control using Apistan, 1988, with funding from APHIS (Animal Plant and Health Inspection Service); still available for free from the University of Florida (send blank tape for a copy of VT 249, Varroa Mite Detection to Ann Hanson, IFAS Information, University of Florida) Bldg 116, Gainesville, FL 32611.)

5. Apistan gets general-use label, November 1990.

6. Miticur (based on amitraz) withdrawn from market in October 1993.
   a. Legal action by beekeepers because some bees died; full details not known
   b. Company (Hoechst-Roussel Agri-Vet Co.) no longer supports labeling product. c. Result is that only one treatment has a legal label (Apistan)

7. Many beekeepers in Florida and elsewhere begin to use two (2) treatments per year
   a. In the fall; very important (winter bees need protection; a switch from Drone to worker bees happens.
   b. In the Spring; this lowers the mite population at beginning of the active season.

The U.S. labeling process:

1. Must be data that material works—accepted by FDA, EPA bureaucracies.

2. Must be data that residues are acceptable in food supply by FDA, EPA bureaucracies.

Subsequently, I have been told that efficacy is not as important as residues for these bureaucracies.

3. Data is expensive to gather.

4. Usually only companies have resources to collect this data.

5. Market must be present for profit motive for companies to spend money on research.

6. Company becomes legally liable for treatment based on their product—a disincentive.

7. A small government program called IR-4 (minor uses) may collect data; slow, costly, often political; must also have a firm interested in distribution.

8. The wording on the label is the law
   a. Must follow words exactly as on the label
   b. Must have copy of label in possession

Subsequent information concerning the above is quite complex with reference who is liable for what depending on how a product is marketed to the public. The IR-4 program requires state input—registration in states also is costly. Again, the key is determining whether some commercial enterprise can be convinced of the viability of the market.

Concerns of U.S. Beekeepers, Regulators and Consuming Public:

1. Illegal treatments may persist
   a. Maverik (flluvalinate) on wooden sticks and paper towels.
   b. Tactik (amitraz) on wooden sticks and paper towels
      I. Have surfactants and emulsifiers that make these chemical soluble in water and, therefore, also in honey.
      II. Not as controlled a release as plastic; fluvalinate in plastic is not water soluble.
   c. Apistan strips left in all year round
      I. Enhances mite resistance? Suspected, not definitely known.
      II. Illegal treatments may lead to:
   a. Fluvalinate resistant mites
   b. Contaminated honey

Present Situation:

1. Apistan still works; only legal material available.
   a. May be used continuously
   b. Treatments with Maverik and Tactik may continue.

2. Formic acid being tested; resources scarce; no money to be made; Canadians doing this research; started by Germans and now continuing in the U.S.
   a. Dangerous to bees and beekeepers
   b. Not easy to administer doses
   c. Several treatments necessary — doesn't get to mites in sealed brood.

3. Informal experimentation going on with all kinds of materials
   a. Oils of essence
      I. Are they effective — no definitive good information yet on this subject; jury still out.
      II. Question remains about effectiveness on mites in brood cells.
      III. Can these be labeled? Will any company support such a product in U.S.?
      IV. Is readily available anywhere.
      V. Profit motive required.

Thanks to Dr. H. Shimanuki of USDA-ARS Beltsville Laboratory for reviewing the above and providing supplementary information. The errors that persist in this document remain mine. As always, I welcome any subsequent information/concerns about the information presented here.

Much of what I said appeared to have a familiar ring to those present; many of the above principles also apply to obtain a legal label in France called Authorisation de Mise en Marche (AMM). The one big difference here, of course, is that resistance to fluvalinate treatments is present. It is controversial as to how this occurred. Possible scenarios include stock importations from Italy and/or what are called here "extemporaneous" treatments. One curious thing for me is that in Israel, where Mavrik treatments on plywood have been used for years, no resistance by mites has been noted. Another wrinkle is the genetic component of the mites found in certain areas; the possibility exists that a narrow or broad mite gene pool may retard/enhance resistance development. Research at the last meeting of the National Honey Producers Association in Memphis, Tennessee revealed that a much broader base of genetic material has been found in U.S. Varroa (especially Florida).

One coincidence I found here was that Varroa in France was apparently also discovered in both the north and south of the country as it was in the U.S.

After the presentation, we went around the room and each beekeeper recounted his/her treatment for Varroa mites. Most striking was the fact that no two were the same. It appears that resistance to fluvalinate has led to literally every beekeeper deciding what treatments to use and when.

Pollen Production:

A discussion followed on pollen production. I was surprised to learn only

one design was shown at the meeting. Only one beekeeper present had heard of the Ontario Agricultural College Pollen Trap. I have undertaken to provide beekeepers here with the one published as modified by Dr. Elbert Jaycox when he was at the University of Illinois. If list readers have other resources, they would be willing to share on the topic please let me know. Other concerns included the best way to clean, store and market pollen to the consuming public. There was little talk about using pollen in either substitute or supplement for feeding bees, something I have long been interested in. In my trip to Ets Thomas Fils (see letter dated February 31, 1997) did find technology available for collecting and preserving pollen.

Again, French beekeepers appear to be in the forefront in publicizing their products to the consuming public. The professional syndicate (association) of beekeepers of the Department (Province) of Var has developed a page concerning honey and bee products for the regional agricultural Council de Var in the publication titled: ìProduits des terroirs du Varî (products from the lands of Var) passed out at the FrÈjus meeting. Besides hive products, this slick publication discusses the wine, cut flowers, olives, chestnuts and their products, black truffles, goat cheeses, and vegetables produced locally. It lists the special kinds of honeys I have mentioned previously in these chronicles (see letter dated February 22, 1997) and other products beekeepers in the region also produce including black nougat ProvenÁal honey candy, honey spiced bread and hydromel (honey wine or mead). These beekeepers have also contemplated putting up a web site through a professional developer which features a virtual trip through the Var, visiting a number of beekeepersí operations along the way and electronic kiosks with the same sort of information to be placed in tourist offices and other public buildings.

Tom Sanford

Thanks to Dr Tom Sanford, Professor and Extension Apiculturist Entomology-Nematology, University of Florida, Box 110620 Gainesville, FL 32611-0620. Temporarily at: 23 Blvd. de la Republique No. 8 13100 Aix-en-Provence, France ph 33-04-42-93-16-47
email: mts@gnv.ifas.ufl.edu

Bumble-bee pollination demand grows

Demand for bumble-bee pollination in glasshouses is growing and New Zealand's top bumble-bee producers, Zonda Resources in Hastings, are looking at the use of their hives in outdoor crops such as red clover seed.

General manager Warren Hobson said the cost of raising bumble-bees for pollination of commercial crops outside had traditionally discouraged their use, along with the relatively short life-span compared with honey bees.

Mr Hobson said there had been trials overseas on apple and kiwifruit orchards using bumble bees.

"But the cost of one hive to cover a 1500-square-metre hot-house was a lot different from 10 to 12 hives to pollinate one hectare of kiwifruit," he said.

Mr Hobson said the bumble-bee industry was limited to a certain extent by the market, but there was room for possible expansion in several areas, including the hot house market. Some hot-house growers used an electronic vibrator to stimulate the trusses, or sprayed the flowers with a hormone to pollinate the plants.

The busiest time for supplying hives was in August-September, and Zonda was now sending out 2000 hives each year. Hives are guaranteed to have at least 80 bumble-bees which last from only four to eight weeks of active life in a green house.

Zonda produces the short-tongued Bombus Terretris which originates in England, because tomatoes and capsicums have short flowers. A long-tongued bumble-bee, Bombus Ruderatus is ideal for pollinating red clover, but the company did not have a market in that direction so far, but did not discount the possibility of use of the hives in red clover seed production.

The short-tongued bumble-bee could still pollinate red clover by biting a hole in the flower stem, he said.

He said most of the larger commercial hot-house growers, especially around Pukekohe, South Auckland and Whangarei were their biggest customers.

A single bumble-bee is capable of pollinating 450 flowers an hour, taking an average of eight seconds to harvest pollen from one bloom before travelling to the next one. Its wings vibrate at 200 cycles a second, which is the frequency tomato flowers prefer.

Hand-held electric vibrators only operate at 30 cycles a second. Bumble-bees fly and forage in mist, rainy weather and at temperatures just a few degrees above freezing in which a honey bee would not leave home.

Glass-houses pollinated by bumble-bees yield more than 20 percent more fruit than those where hand and chemical pollinating techniques are used.

Acknowledgement Hawke's Bay Herald-Tribune

Mr Hobson... trials overseas on apple and kiwifruit orchards

Employers can help prevent chronic back problems

Acute low back pain is common although in most cases people make a full recovery. But a small number do go on to develop chronic back problems, which are difficult to treat and costly for employers and taxpayers.

Christchurch School of Medicine clinical psychologist and research fellow Nick Kendall says employers are in a unique position to help employees help themselves.

"Employers are working alongside the employee. They have a critical role to play in helping to prevent an episode of acute low back pain from developing into a long-term chronic back problem.

"Many employers have expected people to go to a doctor and physio and return to work as good as new. It doesn't happen like that.

"People need a period of rebuilding until they can manage normal activities again. It's best if they carry on with treatment while they're in the workplace, so they rebuild as quickly as possible."

The evidence shows that the longer people stay off work, the less the chance of them ever returning. It makes sense to prevent the gap opening up, as once it's open it's difficult to bridge.

Mr Kendall says employers can also help their employees by modifying their work environment and providing selected duties for a limited period of time — usually days or weeks.

It helps if the employee can stay at work for even part of the time, so they maintain relationships with their supervisor and co-workers. It means they don't have to go through the whole business of coming back cold to the workplace.

"Encouraging an employee to deal with acute low back pain takes time and effort, but it's worth it from the employer's point of view because of the investment they've put into training the employee and the experience rating costs, which they carry for five years if the person doesn't come back to work," says Mr Kendall.

The thinking on how to treat acute low back pain has changed over the years. Ten years ago, bed rest was the favoured treatment. Today, international evidence suggests that people make a better recovery within two to four weeks if they have a positive attitude and stay active. Simple pain relieving drugs and manipulation may help but bed rest is not recommended for longer than two days.

In January this year, ACC and the National Health Committee (NHC) published two guides for treatment providers, to help them appropriately manage patients with acute low back pain and to prevent them form developing costly long-term problems. A booklet for the general public will also be released this year.

Many countries now have guidelines for acute low back pain but New Zealand is leading the way, including psychosocial risk factors as well as physical risk factors in diagnosis and treatment. Mr Kendall says the goal is to prevent patients developing other symptoms, like distress, low mood, reduced activity, social difficulties, family or relationship problems and work loss.

"One of the key messages in the guides for treatment providers is that they can help patients by making a good assessment, explaining the situation clearly, reassuring patients that they will get better and encouraging them to stay active."

Contact: *Margaret Youmans, ACC, phone (04) 460-7747 or Dr Rob Griffiths, NHC, phone (04) 496-2469.*

Acknowledgement Business Development News

Your human rights

New Zealand has laws which say it is illegal for people to be treated unfairly or insulted because of their race, colour, ethnic or national origins.

Everyone in New Zealand is protected by these laws, even if they are not a resident or citizen.

So what can you do if you think this is happening to you?

The Citizens Advice Bureau has information about your rights and also about what agencies there are to help you.

One such agency is the Race Relations Office, which investigates formal complaints or gives you advice and information.

To make a complaint through the Race Relations Office, you can make a phone call or write a letter or report.

Your Citizens Advice Bureau can give you the address, or you call the Race Relations Office free on 0800 808 440. If you wish, someone else can make the complaint on your behalf.

When a complaint is made, it is checked to see if it's appropriate for the Race Relations Office.

If it is, both sides - that is, the person making the complaint and the person or organisation being complained about - will be given equal reasonable opportunity to respond.

Others such as witnesses who might be able to help are requested to give information too.

When the investigation is finished, some or all of the following things could be agreed:

- An apology.
- A promise that the behaviour will not happen again.
- Payment of compensation.
- Payment for loss of dignity.
- The person or organisation complained about might be encouraged to attend training on race relations or anti-racism.

Complaints made to the Race Relations Office are the private business of the people involved.

The Race Relations Office does not give details about complaints to newspapers or to anyone else not involved.

If you need more information, want to talk about your concerns or need help with a problem, make Citizens Advice Bureau your first call.

We're under "C" in the phone book — or call the Race Relations Office toll free on 0800-808-440.

Both services are free and confidential.

Acknowledgement Infoline

Woodlife II

by Colin McLean

Most Bee boxes rot from the inside out, a bit like your teeth, this usually happens either through condensation on the inside or damage caused to the outside of the box by e.g. a hive tool in the corner, allowing water to get in.

As most people use untreated pine for Bee boxes, some form of additional protection is needed. Many commercial beekeepers dip their equipment in hot paraffin wax. This still leaves the smaller beekeeper with a bit of a dilemma when they may not have access to a paraffin plant. What can I use to give my Bee equipment longer life?

Woodlife II seems the ideal product to satisfy this gap. There are some large commercial beekeepers such as Kintail Honey, David Yanke and Steve Weenik who use Woodlife II, usually by dipping their equipment in it. Ask them what they think of it!

Bee boxes are expensive, buy a kitset and you spend as much on nailing and painting (including your time) as the cost of the box - so they're worth looking after.

Woodlife II is a water based preservative and water repellent (sounds like a contradiction, doesn't it?). It not only protects against rot but it limits the absorption of water into the timber, this can have the effect of lengthening the life of the paint. It is a product that is easy to use, safe and effectively protects your box provided you do everything else right as well.

Dip or paint your boxes with Woodlife II before you assemble them and use a waterproof glue (if you have some) and some decent sized 60mm galvanised flat head nails, 8 on each end and another 6 on each side, angled in from the side to nail into the end of the box (make sense?). This tightens it up and stops any 'racking' which can break the seal of paint and let water in.

Then give your bee boxes a coat of oil based primer and a couple of coats of either an acrylic or enamel paint, just remember though if you ever decide to paraffin dip your boxes in the future - acrylic paint will bubble and burst like you're cooking an omelette!

Apart from your bee boxes and other gear, Woodlife II is ideal as an additional treatment for timber (including CCA treated timber) in areas exposed to moisture such as laundries and bathrooms, or outside areas of your house where use of Woodlife II can extend paint life - such as on window sills or fascia boards, its water repellent and antifungal properties make it a good key for either acrylic or enamel paint.

The cost of Woodlife II is comparable in relation to other products on the market, its ease of use, safety and easy storage make it worthwhile using - and lets face it, if you value your time as much as I do, doing a job right the first time is worth it in the long run.

Oh - and by the way - Woodlife II is safe for the bees too!

RECIPES

Delicious Honey Recipes presented by Miss Gwendelyn Guthals 1996 Missouri Honey Queen

Gwendelyn Guthals, Missouri

About our Honey Queen

Gwendelyn Guthals is a freshman at the University of Missouri-Columbia, majoring in agricultural economics. She resides on a farm near Gower, Missouri, with her mother, three sisters and brother. While at school, she is involved in Marching Mizzou Flag Corp, the Baptist Student union, and Mizzou 4-H. Gwendelyn plans on attending law school and specializing in agricultural law. She currently holds the title of 1996 National Beef Ambassador. She has been active in 4-H for 11 years and has held several major offices.

As Missouri honey Queen, Gwendelyn will be promoting honey and beekeeping throughout Missouri. She is available for speaking engagements. Please contact Sharon Gibbons if interested in allowing Gwendelyn to help promote honey in your area.

Pediatricians and other physicians recommend honey as a safe and wholesome food for adults and children over one year of age, but advise against the feeding of honey to infants less than one year old.

Entrees

Honey Nut Stir-Fry

- 1 lb pork steak or loin or boneless chicken breast
- 3/4 cup orange juice
- 1/3 cup honey
- 3 tablespoons soy sauce
- 1 tablespoon cornflour
- 1/4 teaspoon ground ginger
- 2 tablespoons vegetable oil, divided
- 2 large carrots, sliced diagonally
- 2 stalks celery, sliced diagonally
- 1/2 cup cashews or peanuts
- Hot cooked rice

Cut pork into thin strips; set aside. Combine orange juice, honey, soy sauce, cornstarch and ginger in small bowl; mix well. Heat 1 tablespoon oil in large skillet over medium high heat. Add carrots and celery, stir-fry for about 3 minutes. Remove vegetables; set aside. Pour remaining 1 tablespoon oil into skillet. Add meat; stir-fry about 3 minutes. Return vegetables to skillet; add sauce mixture and nuts. Cook and stir over med-high heat until sauce comes to a boil and thickens. Serve over rice. *Makes 4 to 6 servings.*

Barbecued Spareribs

- 4 lbs. spareribs
- 1/2 cup chopped onion
- 1 garlic clove
- 1 1/2 cup catsup
- 2 tablespoons vinegar
- 1/2 teaspoon salt
- 1 teaspoon prepared mustard
- 1/2 teaspoon black pepper
- 2 tablespoons thick steak sauce
- 1 cup honey

Cut spareribs into serving portions. Simmer in enough water to cover, plus two teaspoons salt, for 1/2 hour. Mix the remaining ingredients and cook over low heat for 5 to 7 minutes. Drain spareribs and place in shallow baking pan. Pour barbecue sauce over ribs and bake in 350° oven for 45 minutes or until tender. Baste every 10 minutes with sauce.

Salads and Dressings

Waldorf Chicken Salad

- 1/4 cup honey
- 2 tablespoons Dijon-style mustard
- 1 tablespoon poppy seeds
- 1/3 cup lemon juice
- 1/2 teaspoon grated lemon peel
- 1/2 cup vegetable oil
- 2 cups, cubed cooked chicken or turkey
- 2 apples, cored and diced
- 1 cup diced celery
- 1/3 cup toasted sliced or diced almonds
- 1/4 cup minced spring onions
- 12 dried apricots, sliced (moist pack preferable)

Stir together honey, mustard, poppy seeds, lemon juice, lemon peel and oil in a large bowl. Add apricots and let stand for 30 minutes. Add chicken and toss lightly. Refrigerate until ready to serve. To serve, add apples, celery, almonds and green onions to chicken mixture, toss to coat. *Makes 6 servings.*

Sweet-Sour Honey Dressing

- 4 strips bacon
- 1/4 cup honey
- Salt
- Bacon drippings
- 1/3 cup vinegar
- Pepper

Dice and fry the bacon in a skillet. Remove the bacon and save. Add the honey, vinegar and a dash of salt and pepper to the bacon drippings. Heat to boiling. Add the bacon. Pour over prepared salad greens and toss.

Vegetables

Honey Kissed Winter Vegetables

- 2-2 1/2 cups pared seeded 1/2 inch winter squash cubes
- 1 turnip, pared and cut into 1/2 inch cubes
- 2 carrots, pared and cut into 1/2 inch slices
- 1 small onion, cut into quarters
- 1/4 cup honey
- 2 tablespoons butter or margarine, melted
- 1 teaspoon grated orange peel
- 1/4 teaspoon ground nutmeg

Steam squash, turnip, carrots and onion on rack over 1 inch of boiling water in large covered skillet about 5 minutes or until tender. Drain. Combine honey, butter, orange peel and nutmeg in small bowl. Drizzle over vegetables and toss to coat in heated serving dish. *Makes 4 to 6 servings.*

More recipes from Gwendelyn in June issue

Traditional approach proves to be the key ingredient

by Richard Worrall

Tradition may not find players in the flourmilling industry but taking an old fashioned approach is the key to success for Hislops Wholefoods in Kaikoura.

Hislops Wholefoods has been milling and selling organic wheat and rye flour since World War II, when the business was founded by Ivan Hislop, father of present owner, Paul.

Last year between 15 and 20 tonnes of flour was milled, which is sold through outlets in the top of the South island and lower half of the North Island. Flour is also sold by mail order.

Flour is milled using an imported stone mill with grinding stones quarried from Norway and the Pennines in Northern England. Hislop says to the best of his knowledge this is the only natural stone flour mill still operating in New Zealand.

The only concession to modernity is an electric motor which powers the mill turning the stones at 90 revolutions per minute.

While archaic in many ways, he says their old fashioned milling operation still offers advantages over modern roller mills.

"We feel our mill is a more natural milling process because the temperature generated by the stones is much lower than a roller mill. It is whole grain or whole proportions."

The flour produced has a nutty flavour and Hislop says the mill produces a more textured flour than the Zentrafan mills and superfine roller mill flours.

The mill has a capacity to produce about 70kg of wholegrain flour an hour, although at present the mill isn't kept running full-time.

Hislop says this situation reflects, in part, a lack of promotion by themselves but more significantly a shortage of organically grown grain.

"Most of our flour comes from farmers in Marlborough and Canterbury but last year we had to use grain from Australia to make up a shortfall while waiting for the New Zealand harvest to come in."

Flour is sold either in bulk or in packs ranging from 3 to 20 kilograms, which, as an added nostalgic touch, are old style cloth bags.

As a further diversification, Hislop Wholefoods has opened a cafe in Kaikoura as a showcase for its organic flour and other vegetables grown on its BioGro certified farm.

Acknowledgement Food Business

Around the World

Biggest paper: A Chinese newspaper has issued a publication at 1590 times its original size, which it says is the world's largest newspaper. The edition of the *Xian Evening News* measures 28.83m long and 19.45m wide and is made of canvas.

"Every character in the headlines is as large as a washbasin, and even characters in the text are as large as bowls," a reporter said.

☆ ☆ ☆

Hardbitten crim?: A prisoner who tried to bite off a pair of uncomfortable handcuffs appeared in court today accused of damaging them with his teeth. Michael Lippet, 18, was conditionally discharged for a year by Tewkesbury Magistrates and ordered to pay £16 ($NZ38.23) compensation for the damaged cuffs.

☆ ☆ ☆

OJ biggest bore: Winner of the US Boring Institute's annual most boring celebrity title is (yawwwn!) OJ Simpson, for the second year in a row.

The yearly skewering of the media-over-exposed also includes OJ lawyer Johnnie Cochran, Michael Jackson, Hugh Grant, Jim Carrey and Elizabeth Taylor — and major league baseball.

☆ ☆ ☆

Irish embrace Playboy: Ireland is opening its arms to Playboy for the first time in 36 years, ending a ban on the magazine in a move which comes on the heels of its divorce referendum and decriminalisation of homosexuality.

The magazine is on sale in Irish newsagents for the first time since 1959 when the Irish Censorship Board banned it as obscene. The ban was lifted in September after a year-long campaign by the publishers, who said there was no rational reason for the ban.

A Playboy executive said the magazine had "breadth and stature".

☆ ☆ ☆

Bookworm: An Oxford University academic has been jailed for two years for stealing rare books worth in total more than £140,000 ($NZ335,088.55) in order to pay his mortgage.

Oxford academic and radio broadcaster Simon Heighes, 33, described as a leading expert on baroque music, admitted in Oxford crown court that he stole 78 books and manuscripts from college libraries, including a first edition of Sir Isaac Newton's *Principia Mathematica,* valued at £67,500 ($NZ161,560.55).

Ancient wonder drug research promising

Green tea — the wonder drug of the ancient Japanese and Chinese for its life-enhancing qualities, is now being suggested by modern medical researchers as a possible cancer preventative.

New Zealand is not excluded from this research. Industrial Research, in Lower Hutt has recently conducted studies into the antioxidant effect of green tea extract.

Preliminary findings from the IRL research look very promising.

Tea drinking first became popular more than 4000 years ago in China when Emperor Shen Nung discovered green tea. The Chinese believe that "it is better to drink green tea than medicine."

The Japanese are also large consumers of the beverage.

According to Nelson research-based nutritional manufacturer, Tasman Extracts, the health-giving benefits of green tea were the subject of over 70 scientific papers published last year.

"Modern research indicates the substance obviously has a broad efficacy in preventing disease," Tasman Extracts spokesperson Grant Washington-Smith says.

It was the compelling nature of this research, coupled with significant international demand for green tea products, that prompted Tasman Extracts to develop a unique green tea extract concentrate.

"Initially, we are targeting the export market, but we see opportunities to market it locally as New Zealanders follow international consumption trends.

He adds that Tasman Extracts has already sourced the raw material and has developed the technology required to extract the key health elements and process them into a variety of 'green tea extract' products which could be sold in a variety of forms.

Interest is already being shown by various manufacturers who could incorporate the extracted compound into their core food stuffs, cosmetics, nutritional supplements and confectionery.

Citing an example of the compound's versatility, Mr Washington-Smith says an active chewing gum, containing green tea extracts, was launched late last year at the international Food Ingredients Europe exhibition, held in Paris.

Also on show were the result of in-vitro tests the German chewing gum manufacturer had developed with the Johnnies Gutenberg University of Mainz in Germany. These tests confirmed the possible health-promoting properties of poloyphenols, another of green tea's active ingredients.

Acknowledgement Food Business

Check this out!!!

• A novel excuse for speeding from Sydney, where a man was caught driving at 130km in a 70kmh zone. He had just washed his car and was drying it off, he said.

• FORD cut the pay of chairman and chief executive Alex Trotman by 40 percent last year as high costs for the new Taurus and F150 pickup cut profits by 22 percent. That meant Trotman was paid NZ$6.6 million, down from $9.25 million in 1994. His bonus was halved but his $2.25 million base salary was unchanged.

Databox business

On their own A recent survey shows that 98.6% of Japanese companies have "corporate bachelors" who live apart from their families for a range of reasons. These include: children's education (cited by 63.2%), illness in the family (57.5%), and their spouse's career (42.5%). Companies paid an average ¥152,000 ($1,440) allowance for management-level corporate bachelors, and ¥114,000 ($1,080) for regular employees. Most corporate bachelors also get some extra cash to defray the cost of maintaining two households. In addition, about half the bachelors say they get a paid trip home once a month, and 20% got two paid visits.

Room at the inn Hot competition in the hotel industry has led to a plethora of promotions, most of them aimed at women. They're trying to fill rooms with low rates, free meals, extended checkout times, and even free silk pajamas. One hotelier offers dinner, a room, and two hours' use of the house limousine (including all you can drink from the limo bar) for ¥19,000 ($180) per person.

Boomer blame Some economic experts blame Japan's Baby Boom generation (born between 1947 and 1949) for the country's plummeting consumption. The Boomers are the nation's largest age group, making up 15.6% of the population. And lately, they've been one of the most frugal, cutting back on clothing and shoes, dining out, education, and leisure. But there's a good reason for their sudden stinginess. More than 40% are saddled with hefty mortgage payments, and many have seen their take-home pay drop sharply in the past year or two. They're also apprehensive about government pension plans that are supposed to help them survive retirement.

Acknowledgement Look Japan

TELFORD RURAL POLYTECHNIC

welcomes Dr David Woodward, our new Apiculture Tutor

and says thanks and bon voyage to Nick McKenzie

Under David's direction, Telford's Apiculture programme will continue to offer Certificates in Apiculture which may be studied by:

One year of full-time study in-house
Two years of part-time study by correspondence

For those wanting to study full-time, Telford's one year Certificate in Apiculture will provide you with the practical skills and theoretical knowledge needed for a career in the beekeeping industry.
Enrolments currently being received for 1997 intakes starting July and September.

ENROL NOW!

Our correspondence course may be commenced at any time and is ideal for beekeepers already in full-time employment, or hobbyists who want their hives to perform as well as any professionals.

We also can create programmes tailored to your individual needs.

Don't delay — contact us now for further information

TELFORD RURAL  **POLYTECHNIC**

Te Whare Wanaka O Puerua

FREEPOST 73901
The Apiculture Secretary, Telford Rural Polytechnic,
Private Box 6, Balclutha, New Zealand.

Telephone: 64-3-418-1550 Fax: 64-03-418-3584

OR USE OUR TOLLFREE NUMBERS

0800-805-657 OR 0800 TELFORD

IMPORTANT DATES FOR 1997

BRANCHES SEND YOUR MEETING DATES IN FOR 1997. NO CHARGE.

MAY - 17th to the 18th - HAMILTON
JULY - 21st AT CONFERENCE - IN NELSON
SEPTEMBER - 2nd and 3rd - CHRISTCHURCH
DECEMBER - 2nd and 3rd - WELLINGTON

MAGAZINE **Copy/advertising deadline 1st of month. EXCEPT for DECEMBER issue. DEADLINE 25 NOVEMBER**

COMING EVENTS...

PROPOSED NBA DATES FOR 1997

NBA Executive Elections		**Conference**	
Closing for nominations	Fri 16 May - 5pm	Specialty group meeting	Mon 21 July
Voting forms posted out	Fri 23 May	Seminar	Tue 22 July
Closing date, return of votes	Mon 23 June - 5pm	Conference/AGM	Wed 23 July - Thu 24 July
		Special Meeting	Wed 23 July - 8am
		Last date, remits in	Sun 8 June - 9am
		Last date, rule changes in	Sun 8 June - 9am

★ ★ ★ BRANCHES... *PUT YOUR MEETING DATE IN HERE...* FREE ★ ★ ★

AUCKLAND BRANCH
Call Jim on (09) 238 7464

NORTH CANTERBURY CLUB
Meet the second Monday of every month March to November inclusive.
Contact Mrs Hobson
Phone: (03) 312-7587

SOUTH CANTERBURY BRANCH
Phone: Noel
(03) 693-9771

CANTERBURY BRANCH
Phone Brian Lancaster
Ph/Fax: (03) 318-6966

CHRISTCHURCH HOBBYIST CLUB
These are held on the first Saturday each month, August to May, except for January on which the second Saturday is applicable.
The site is at 681 Cashmere Road, commencing at 1.30pm.
Contact Peter Silcock
Phone: 342-9415

DUNEDIN BEEKEEPERS CLUB
We meet on the first Saturday in the month September - April, (except January) at 1.30pm. The venue is at our Club hive in Roslyn, Dunedin.
Enquiries welcome to Club Secretary, Dorothy phone: (03) 488-4390.

FRANKLIN BEEKEEPERS CLUB
Meet second Sunday of each month at 10.00am for cuppa and discussion.
Secretary — Yvonne Hodges,
Box 309, Drury.
Phone: (09) 294-7015
All welcome — Ring for venue.

HAWKE'S BAY BRANCH
Meets on the second Monday of the month at 7.30pm.
Cruse Club Taradale.
Phone: Ron (06) 844-9493

MANAWATU BEEKEEPERS CLUB
Meets every 4th Monday in the month at Newbury Hall, S.H. 3, Palmerston North.
Contact Joan Leckie
Phone: (06) 368-1277

NELSON BEEKEEPERS CLUB
Phone: (03) 546-1422

OTAGO BRANCH
Phone Bill (03) 485-9268

NORTH OTAGO BRANCH
Phone: Mr Peter Cox,
38 Rata Drive, Otematata
Ph: (03) 438-7708

POVERTY BAY BRANCH
Barry Foster (06) 867-4591

SOUTHERN NORTH ISLAND BRANCH
Phone: Frank 478-3367

SOUTHLAND BRANCH
Contact Don Stedman,
Ph/Fax: 218-6182

TARANAKI AMATEUR BEEKEEPING CLUB
Phone: (06) 753-3320

WAIKATO BRANCH
Call Tony (07) 856-9625

WAIRARAPA HOBBYIST BEEKEEPERS CLUB
Meet 3rd Sunday each month (except January) at Kites Woolstore, Norfolk Road, Masterton at 1.30pm.
Convener Arnold Esler.
Ph: (06) 379-8648

WELLINGTON BEEKEEPERS ASSOCIATION
Meets every second Monday of the month (except January) in Johnsonville. All welcome.
Contact Frank Lindsay
(04) 478-3367.

CENTRAL HAWKE'S BAY PRINT, WAIPUKURAU. HB. — 1728