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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.



My first memory of a 'formal' use of the Executive responsibilities system by the NBA Executive came some years ago when Allen McCaw was President of the NBA. We came to a meeting and were presented with a novel idea; rather than everyone keeping a 'watching brief' on everything, we would divide up the main areas of concern between Executive members, allowing us to concentrate on areas of particular interest and ability.

Committees to assist with advice on Disease Control matters (first with Ian Berry as chair, then with Terry Gavin) and a Marketing Committee chaired by Allen McCaw followed in later years during Dudley Ward's time as President.

Both of these methods of increasing Executive and NBA effectiveness have given considerable return to the organisation, and are continued into the present Executive's methods of operation. Committee use in particular has been expanded to involve and include a variety of people and viewpoints outside of the Executive with the Executive still retaining ultimate decision making responsibility and accountability. At the meeting held on 3 and 4 *Nick Wallingford* September, the Executive reviewed each committee — whether it was still needed, who to act as chairman, personnel to include and any particular changes to method or range of activity required. The list below summarises the appointments agreed upon.

As the NBA President, I would like to thank the people who offer their time and abilities to assist the industry in this manner. For many of the jobs expected of the Executive, the demands could simply not be met without this willingness to contribute and assist by the membership.

Nature	Name	Members			
Sub-Comm of Exec	Marketing Committee	Allen McCaw (Chair), Neil Stuckey, Peter Bray, Barbara Bixley, Bill Floyd (Advisor/consultant), Harry Brown (Sec)			
Sub-Comm of Exec	Apicultural Research Advisory Committee (ARAC)	Mark Goodwin (Chair), Allen McCaw (Sec), Ted Roberts, Stephen Ogden, Barry Donovan, Russell Berry, Harry Brown (Sec)			
Sub-Comm of Exec	Export Certification Committee	Mervyn Cloake (Chair), Russell Berry, Peter Bray, Harry Brown (Sec)			
Sub-Comm of Exec	Disease Control Committee	Terry Gavin (Chair), Jan van Hoof, Bruce Stevenson, Bryan Clements, John Moffat, Peter Sales, Cliff Van Eaton (Advisor/consultant), Mark Goodwin (Advisor, Harry Brown (Sec)			
Sub-Comm of Exec	Library Committee	Keith Herron, Allen McCaw, John Heinman			
Sub-Comm of Exec	Publications	Russell Berry, Tony Taiaroa, Alan Richards			
Exec resp	Branch resp (Far North, Northland, Auckland)	Terry Gavin			
Exec resp	Branch resp (Waikato, Southern North Island, Hawke's Bay)	Russell Berry			
Exec resp	Branch resp (Bay of Plenty, Poverty Bay)	Nick Wallingford			
Exec resp	Branch resp (Canterbury, Marlborough, West Coast)	Tony Taiaroa			
Exec resp	Branch resp (Nelson, South Canterbury, North Otago)	Richard Bensemann			
Exec resp	Branch resp (Otago, Southland)	Keith Herron			
Exec resp	IHEO USDA, statistics	Keith Herron			
Exec resp	NZ Queen-Bee Producers Assn	Terry Gavin			
Exec resp	Pollination Associations	Russell Berry			
Exec resp	Foundation for Research Science and Technology	Russell Berry			
Exec resp	Trusts and Trustees	Russell Berry			
Exec resp	Federated Farmers Land User Forum	Nick Wallingford			
Exec resp	Landcare (wasps and possums)	Richard Bensemann			
Repr of Exec	Agricultural Security Consultative Committee	Nick Wallingford			
Repr of Exec	Agricultural Security Consultative Committee (Invertebrates)	Ted Roberts			
Repr of Exec	Pesticides Board	Frances Trewby			
Repr of Exec	Ruakura Apicultural Research Unit (RARU)	Jane Lorimer			

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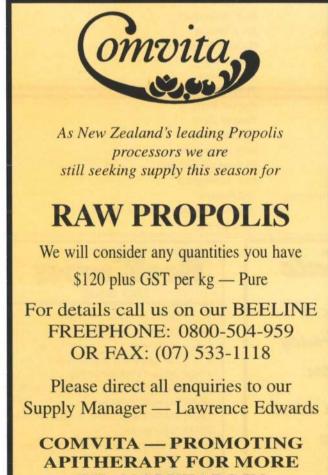
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# Wat i Lurnt AT Confrince

The sector group meetings, seminar lectures, reports both general interest and scientific, even most of the remits, have faded into somewhat of a blur which will all have to be recovered from notes and written reports. On day one we had sector group meetings and the only conclusions I have written down are that I wouldn't want to do artificial insemination of queens and a note made after sitting at the back of several meetings that Dr Peter Molan would be wasting his time researching the use of bee products to cure male pattern baldness. Conversely, as seen from the front of the meetings, a lotion to stimulate facial hair growth is a distinct possibility. Day two: the sun apparently shone, but I for one was so busy taking everything in that I missed it. The morning seminars were far more interesting than I had anticipated. Then in the afternoon we had all the research results, these are always fascinating and I was particularly intrigued by the layman's explanation of the DNA testing used for EFB and the anti fungal affects of honey on athletes foot. It's good for us to hear what the scientists have to say and it's good for them to get feedback of a practical and commercial nature from us. Somewhere in there, were some cooks and medals and Bill Floyd doing his thing, but like I said, it's all a bit of a blur. Mostly what I remember are the people I met and the way they got on together.

On Wednesday the AGM and remit side of conference started and we got down to some pretty serious discussion on some pretty weighty subjects, if you read the minutes of conference you'll soon see who voted for what. Instead, I'll give you a rundown on some of the lighter moments which make it so much more enjoyable for someone like me who dislikes the formal nature of the conference of delegates. I always enjoy Keith's dry Southland sense of humour and I wouldn't mind betting that Frances has put the odd dead mouse into his smoker without ever admitting it.



**THAN 25 YEARS IN NEW ZEALAND** 

How Nick Wallingford managed to keep impartial control of all of us hyped up beekeepers without getting too flustered, was a marvel although his tongue did slip occasionally. I especially enjoyed him addressing Ted Roberts as Mr Edwards (Some of you may not know, but Ted was actually christened Edward, which is of course Welsh for Ted). Quick as a flash Ted thanked Mr Nickford and proceeded with what he was about to say. These lighter moments also help to diffuse the inevitable tension built up within such a disparate group of individuals who largely work on their tods for 360 days a year and then have to reach some sort of consensus during the two days of conference. When you add this to the fact that beekeepers who live in the same street work their hives completely differently and here we had beekeepers from all over the country with different climates, flows, and things to pollinate, it's amazing we get any consensus at all. Often there were two completely opposed groups, both with well thought out conclusions based on the problems in their own areas. In their own rights, both groups were correct and the task of the conference was to decide which was the best of two right answers from a national point of view.

One thing I really disliked about the conference of delegates was being addressed as Mr Berry. Mr Berry was my Grandfather's name, and I've inherited a preference for the use of my given name from my father, lan. Every time the chair recognized Mr Berry I had to look around to see which one of four Nick was referring to and seriously considered raising a point of order (not that I really know what a point of order is but Peter Bray seems to make one cover a multitude of sins) asking to be referred to as Peter. Upon reflection, however, I came to the conclusion that such a course of action would have the effect of causing about a dozen beekeepers to look around. Maybe next year my twin brother John will go as well and that will really put the cat among the pigeons.

The social evening was a success, although in my case I was ostracized (I think it had something to do with the future bank balances of those who have spent \$25,000 each on ostriches) by the HB contingent because I assisted as an honorary Southlander in the boat building competition. I have nothing further to say on the subject, except to say that we should have won and the judges were biased. The social evening went on guite late and I suspect the late night and early start the next morning took some of the desire to argue the point out of some delegates. Although to be fair, the kiwifruit pollinators are so used to it they would have had the edge on the rest of us.

Initially I had wondered about the wisdom of finishing the conference with the dinner. All the business was over and people were tired and thinking of going home, but I couldn't have been more wrong (as usual). I finally got to have a decent talk with some of the faces I'd been starting to put names to during the course of the conference and during the excellent meal and the conversations following I was tremendously impressed by the good nature and fellowship shown by all the beekeepers. There was a special atmosphere there that night as if 200 old friends had just bumped into each other for the first time in years. One corner held the Waikato/Bay of Plenty choral society and the rest of the room held shifting groups of beekeepers and spouses getting better acquainted. I am afraid I had to disillusion poor Frances though, when she told me how nice it was to see Peter Bray and I sorting out the problems of the beekeeping industry over in one corner - I had to tell her in all honesty that in fact I was telling him the joke about Little Red Riding Hood and the Wolf. What a pleasantly wonderful night it was, thank you Southern North Island.

And the prize for the best of conference, well I guess it would - 's below the belt bee beard. The very have to go to thought of trying it makes me cringe, I for one wouldn't try it unless they were all DRONES!

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 Dear Harry A widely spread set of clients is able

I am sick and tired of the misuse of the word "organic". Almost anything assoc-iated with woolly minded nature fanatics is now labelled organic. The dictionaries in my book shelves were not very helpful but the chemistry books helped no end. Organic chemistry deals with substances based on tetravalent carbon atoms which means that a carbon atom can hang onto four atoms of other chemicals, carbon tetrachloride is a multitude of carbon atoms with each one hanging onto four chlorine atoms. Sugars, including honey, are composed of carbon atoms attached to hydrogen atoms and oxygen atoms.

Of course, if you are doing some metal work around your vat and iron filings fall in, your honey now dirtied with inorganic iron chemicals but it is still organic honey. If the organic honey reacted with the iron I suppose we would have another organic compound. What about calling it melliferrate and selling it as a tonic for pale people?. The health food barons could sell it as organic melli-ferrate if they feel it would gain them a dishonest dollar.

As a sideline from beekeeping, when we grow plants in the garden the plants can only take up inorganic chemicals. If we put in horse dung, most of the dung is used as blotting paper to keep the inorganic chemicals in solution in water, anything organic must be broken down by chemical reactions to provide inorganic food for the plants. If we carry on the way we are going and build houses on all the level ground round our cities we shall have to grow our vegetables hydroponically, which means growing them in water with inorganic chemicals added. This is my way of growing vegetables as it saves me weeding the garden. This is done on a huge scale in Israel and the Israelis are now exporting vegetables instead of importing them as they used to in the bad old days.

#### George Nichols

I would like to advise all honey producers who will be sending in Manuka honey for antibacterial activity testing that the charges per sample will be increased from 1st December 1996.

#### \$20 per sample for non-urgent testing \$35 per sample for urgent testing \$40 for quantitative testing with Certificate of Analysis

#### All exclusive of GST.

Dear sir

The charges have not increased since we commenced providing this service but due to increasing costs this small increase is unavoidable.

Thanks to all producers who have been contributing non-Manuka monofloral honey samples for our current project, however a lot more samples are still required.

#### Kerry Allen, Honey Research Unit The University of Waikato

I respond to your enquiries of 13 June and am pleased to provide comment.

#### Eligibility of beekeepers for Business Development Board assistance and grants

The Hawke's Bay Business Development Board is well aware of the significant foreign exchange which our nation's beekeepers generate each year. Therefore, we would consider beekeepers employing less than 50 full-time employees as eligible for grant assistance.

#### Eligibility for you to be a contractor for grant assisted initiatives

It is my understanding that you are a service contractor supplying administrative services for the association and that this is a contestable contract. Further, I am aware that you also contract your services to other organisations, e.g. to develop quality systems, I believe Hawke's Bay Newspapers Ltd; Eastern Institute of Technology among others that have engaged you in the past.

Therefore as you are not an employee of the association, the board would, on past precedents, accept that you could be a recipient of grant monies for one-off contract services to individual beekeepers.

#### iii) Quality Systems for Beekeepers and grant assistance

My comments relating to this should be read in conjunction with the two prior sections viz; that beekeepers wishing to implement quality systems would be eligible for grant assistance.

- a) The dollar value of this would be \$8000 (incl GST (Business Development Board's 50% contribution), i.e. to obtain \$8000 a beekeeper would need to spend S16,000.
- b) As you, in your contract delivery for the association have no doubt been involved with MAF Qual and MAF Regulatory and other organisations relating to industry standards, then the board would recognise this as an appropriate background to assist beekeepers to develop systems — as I said to you, with current information as to likely quality requirements from a regulatory direction, it would seem that this gives you an advantage in terms of how you can assist individual beekeepers.

#### iv) Logistics of serving such a wide geographic spread of operators (NB: This comment is purely personal, ie not a Hawke's Bay Business Development Board view).

A widely spread set of clients is able to be relatively easily served in terms of introducing quality systems if they were all to use Email. With Email, for less then two cents they can send their draft pages (manuals) to you online; you could then review (using Microsoft Word) their work and Email back. This is a completely hassle-free process and would mean that costs can be substantially reduced. The Business Development uses Email to the other 20 boards and it is just brilliant and I believe that beekeepers will be amazed at how effective and professional it is.

Should you require additional explanation please contact me.

#### John S. Sharp, Chief Executive Refer to page 21

#### Dear Sir

I belong to the family of the S.N.I. Branch of the NBA, and I really enjoyed meeting all the beekeepers at the National Conference. Many are friends whom I had met before. I enjoyed conference, but it was the people present who made it special. I have a warm glow each time I think about conference.

Tuesday evening Christian beekeepers were invited to John and Jan Brandon's impressive honey shop at Canaan Apiaries. (Canaan was known as the land of milk and honey in the old testament). We were fed the milk of human kindness; home-made bread with honey in the baking and as a spread, and pavlova.

After supper we moved into their house where people talked about how their Christian faith helped them with beekeeping and in their personal lives. Sometimes I feel beekeepers need a mighty lot of Christian faith!

Often it is the most successful outfits that are run by someone with a strong Christian faith. It was interesting to hear how most had had several hard knocks and their faith had helped to set them on their feet again.

I am hoping that at the Nelson Conference someone will host a similar event. The warmth, encouragement and strength gained were valuable.

#### Mary Allen

#### Dear Mr Brown

Thank you for taking the time to come to my house to see my bee project. I really enjoyed meeting you. Down below I wrote my poem for you.

Little busy buzzing bees Humming as they go Hairy, helpful, smelling, stingers Dancing to and fro J.P. Bevin (9) Letters continued on page 6

#### Letters continued from page 5

#### Dear Sir

My name is Relja Andrejic and I am from Belgrade, Yugoslavia. Since 1986 I have been working as a beekeeper, first at an institute for genetic research of Yugoslav carniolan bees and later in commercial beekeeping. I have international experience in queen rearing and bee package production, as well as in honey production.

For the first half of this year (January-July) I worked on bee package production in the United States of America and now I am making my arrangements for the rest of the year and for the season of 1997.

If you need seasonal help at your beekeeping operation and if you believe that my services could be of assistance to you, please send me your offer as soon as possible, so that I could have enough time for necessary preparations. *My address is:* 

Relja Andrejic Alekse Nenadovica 36 11000 Beograd Yugoslavia Europe Phone: ++ 381-11-444-1019 Fax: ++ 381-11-624-973

#### Dear Sir

I write about my cure for Chalkbrood. It is not a disease but an upset caused by lack of magnesium.

I give my bees a syrup of ¼ teaspoon magnesium plus equal quantities of sugar and water to make a thick fluid. I give this to my bees two or three times in early spring. My bees are on a metal stand, a foot high off the ground. Please try this.

After telling one beekeeper who has 2000 hives, said "It figures, the cows get the need for magnesium".

N.A. Dilks

# **Replacing those winter losses**

Maintaining hive numbers is like fighting a war of attrition, and small losses, if not made up each season, can accumulate to quite alarming proportions. Even the skilful, careful beekeeper will often find five to 10 percent of his hives have no bees left in them after winter. Some

queens inevitably fail and wasps, stock, and spray damage can also take their toll. Those empty hives don't pollinate another flower, or store another drop of honey until some bees are put back in them, and the longer they are left, the more the wax moths and mice turn them into total losses.

Some beekeepers bring the dead hives into a central yard until they can be dealt with. I prefer to leave them where they are out in the apiaries. Whenever I find a dead hive in the autumn or winter, I check it for signs of foulbrood, chase out any mice that have got in to it, tack a strip of

printer's aluminium sheet across the entrance to keep them out, and forget about it until the spring. The frosts in Gisborne where I keep my bees are not very heavy, but sufficient to prevent wax moth damage over the winter months.

By the time spring comes around, most of my apiaries have one or more hives waiting to resurrected. Here's how I do it.

When I go around my yards from late September on, I take with me a "Carricell" electric cell carrier with a supply of nine or ten day old queen cells. I also take about 20 boxes of new frames with foundation in them. I go into a yard, locate the first dead hive, inspect it closely for any signs of disease if it is not marked as having been done already, and take four combs out of it. I then select a strong, heavy hive, move it aside, and place the dead hive in the position previously occupied by the strong hive. Next I take two frames of sealed brood and bees without the queen, and two frames of honey out of the strong hive, place them in the top box of the dead hive next to the feeder, in case I have to feed it later on, and give it a queen cell before closing it up. The strong hive is



The benefits of good spring management become apparent as summer progresses.

then shifted to the position previously occupied by the dead one. The flying bees from it will return to the newlyresurrected hive and strengthen the nuc inside it. These extra field bees, combined with the fact that the nuc has no brood to feed for two or three weeks until the new queen is mated and laying, means that I seldom have to feed it sugar. I repeat this process with every other dead hive in the apiary, finish any more hive management tasks that need to be done, and drive out with the satisfaction of having all the hives in the yard up and running again.

Now if you're wondering why I took those boxes of frames with foundation into the apiary, here is the reason. It's foulbrood. Three AFB hives last spring, and one at honey harvest, means I am still on "red alert" for this disease. Even though the hives to be resurrected have been thoroughly inspected for any signs of foulbrood, including scale, I still don't like to transfer combs from a dead hive into a good one. So when I take the frames of brood, bees and honey out of the strong hive, I replace them with new frames of foundation, not the combs from the dead hive. When removing the

> combs from the dead hive to make room for the nuc to be transferred in, I pull out the oldest and poorest combs. Frequently the hive has four combs which are due for culling out anyway, and this is the ideal time to do it. The wax from these combs is melted out and the frames burnt, or sterilised in paraffin wax if their condition is good enough to warrant it. All the resurrected hives get a particularly thorough inspection at honey removal, or earlier if they don't appear to be progressing well.

I resurrect my winter losses this way as soon as the temperatures are warm

enough for queen mating in the spring, and the majority of them produce a surplus of honey in the summer. The strong hives from which the bees and brood are taken get knocked back temporarily, but they don't swarm and I find their production is not greatly affected. I have used other ways, but this is my preferred method of maintaining hive numbers.

If we are going to eradicate AFB from New Zealand by the year 2000, I believe all dead hives need to be resurrected or burned.

William James (1842-1910) said, "Nothing is so fatiguing as the eternal hanging on of an uncompleted task". Getting those winter losses going again early in the spring makes the rest of the year so much more enjoyable and profitable, that I make it a top priority at the beginning of every season.

Peter Burt

#### In this month's column:

New Zealand honey moving in the right direction; New Zealand honey might be an Olympic Champion; Wellington Gold Medal Chef team share winning recipe; Those honey standards again; Chefs and Foodwriters and a touch of porridge and whisky coming up; My latest favourite; and lastly clover with attitude wins the day.

#### New Zealand honey moving in the right direction

Last month I said that we/I/the Marketing Committee didn't take the credit for the increase in the retail price of honey (and in most cases the increased return to the beekeeper) because the international honey situation had the most effect on what price honey sold for on the shelf in New Zealand. That will always be the case, as long as we are selling simply 'honey' and 'honey' is sold as a commodity product.

However, our task is to work at strategies that 'decommoditise' honey so that come the next world surplus our New Zealand honeys will be sold at a price that's based on unique competitive values; not just the commodity price. (And I've been shown by an industry leader, whose opinion I respect greatly, that it could be three-five years before there's a world surplus again!).

Our unique competitive values will come from research work at Waikato's Honey Research Unit, from the unique flavours of our varietal honeys being sought after by chefs, from New Zealand's generic clean-green image, and even from inventive and successful brand image innovations by New Zealand companies — where the brand itself has the value and the customer loyalty, not just the honey product that's inside the packaging.

Either by design or good fortune, the international honey situation has allowed the New Zealand industry to come through the last four years (with some very high productions) without a fall in honey prices and now, by any intelligent interpretation, we have a situation where it should almost be impossible for prices to fall (if the law of supply and demand prevails).

I say 'should' because the industry is totally free-market. We can't stop a packer adopting a price-cutting strategy despite the obvious opportunities that prevail. It's up to other packers to find solutions that makes their product insulated from such discounting. It's also up to those other packers to offer better prices to beekeepers to get the limited honey that's available. In the meantime the Marketing Committee's job is to create an environment where companies can compete fairly; where beekeepers have the best chance of improving their own business (ie financial returns for both their effort and investment).

One sure way to measure our (the Marketing Committee's) performance is to look at honey sales in New Zealand.

Four years ago we established that New Zealanders ate more honey per head of population than any other country in the world; so we had an interesting challenge just to maintain that status let alone improve it.

Just before the NBA Conference this year we purchased a set of sales statistics from AC Nielsen Ltd. Nielsen collects the scan data from all supermarkets in New Zealand and makes the information available to companies that want to purchase it.

(Yes, for those that didn't realise: Every time you buy something in a supermarket and they put the pack over a barcode scanning machine your sale is recorded and the information is available for sale).

The statistics don't include sales of honey from 'your gate', nor from nonsupermarket outlets like healthfood stores or souvenir shops.

We'll be buying this information twice a year: Just before conference (so we can present the information at conference); and just before the Marketing Committee's planning meeting in November each year.

In this issue we've reprinted the Bar-Graph data from Nielsen. They say you can do anything with statistics; so here are MY interpretations of the information. If anyone disagrees I look forward to hearing from them.

Honey sales are **UP**; they're up by volume, by number of packages sold, and especially by **DOLLAR VALUE**. People are buying honey in smaller size containers and they're happy to pay more for that honey! In other words, the honey brands are adding value and the customer is happy to pay it.

In every way, **HONEY** is doing better than 'jams and marmalades', 'peanut butter', and 'vegetable and yeast extracts'.

So we're pleased! If you're not (as a beekeeper) happy with the prices you're getting for your honey; look around. It IS a seller's market. We can't make packers pay you more, or even stop them discounting prices in the marketplace if they want to; we can only tell you what the likely market situation is. We think it's good; now over to you who you sell your honey to and at what price.

#### New Zealand honey might be an Olympic champion

Top New Zealand chef, Rick Rutledge-Manning of the George Hotel in Christchurch, is entered in this year's Culinary Olympics in the USA. One of the world's most prestigious culinary competitions. Rick's entry dish includes New Zealand honey (that he's sourcing from Honeyland; who have agreed to cosponsor his costs). We'll be asking Rick if we can publish his recipe after the competition. When chefs like Rick Rutledge-Manning select a New Zealand honey for one of the world's great culinary contests it creates exceptional promotional opportunities for us.

(Rick took part in the honey tasting presentation I carried out at the 1996 New Zealand Chefs Conference last month; I'm thrilled that he's using honey in his recipe).

#### Wellington Gold Medal Chef team share winning recipe

Last month's *BeeKeeper* highlighted the Pork and Honey Competition winners from Wellington Polytechnic. We asked Shaun and Colin if they would let us publish their recipe, they were delighted to do so. It's a classy dish and is published in this issue. We hope you enjoy it as much as the judges did.

#### Those honey standards again

By the time you read this, we'll have sent a discussion paper and comprehensive questionnaire to a selected number of honey packers and beekeepers. Once we get replies to that, a final set of specifications will be put in place for the introduction of the HoneyQual mark.

The reasons why it's been in the too-hard bin haven't disappeared **BUT** it's become obvious that there has to be a quality mark available for beekeepers and honey marketers who want to agree to some basic definitions regarding honey. Otherwise, the work (and hive-levy marketing funds) that have been going into creating added-value opportunities could be compromised by people working to different interpretations in a number of areas. (Wasn't that well put?).

The USA introduced the Honeybear logo, without standards, and now regret it. We have to learn from their experiences. What we can guarantee is that any system we introduce will be voluntary. You will only join it if you see it having value for you.

#### Chefs and Foodwriters and a touch of porridge and whisky coming up

This month we're in Wellington with a Continued on page 8

Honey presentation to the Chefs Association there, and in October a presentation to New Zealand Foodwriters at their Guild Conference.

The Guild Conference is in Dunedin this year and we're tying it in with a Honey Marketing presentation to Otago/ Southland beekeepers at a Field Day. As I enjoy both porridge and whiskey (or is that whisky?) I'm looking forward to both the mornings and the nights... and honey makes them both taste better, well, definitely the porridge anyway.

#### My latest favourite

My favourite honey discovery this month? Keith Herron sent me some fucshia; it was just a sample, 'melted out from granulated state and unstrained' as Keith said. But what a delightful delicate subtly fragrant honey... tastes of vanilla and butter, with just a hint of the heady fragrance of our magnolia tree... true! It's top of my toast-topping list at the moment.

## And lastly, clover with attitude wins the day

Had a phone call from a very excited Auckland packer last month. He'd been working with a manufacturer developing a product with honey in it. The manufacturer wanted a clover type honey and they got a range of clovers from all over New Zealand... and the winner: Some of that Waikato meadow clover. Had the best flavour values <u>and</u> the manufacturer was delighted to find that the price was better too. So I told my Auckland mate (yes we are friends still despite his remit at conference) it was the second time in as many weeks that's happened. Another company had sent me six product samples a few weeks ago; each made with different honey. I carried out some taste tests in Marlborough and reported back to the manufacturer. "The winning honey" <u>A clover blend</u>. It stood out from the others to an amazing degree: Everyone of my ten tasters preferred it; and so did the manufacturer's own tasting panel.

I've no doubt that there's a place in future added-value opportunities for ALL New Zealand honeys: From the traditional 0-9's to the nutraceutical manukas to the fashionable mono-florals to the large production meadow and bush honeys. AND we have a world shortage to help us on our way.

Regards, Bill Floyd

## Bee Research Report 1995/96

by Dr Louise Malone, Helen Giacon, Ruth Newton, Dr Heather Gatehouse, Hort Research, Auckland and Palmerston North

We have had three distinct areas of work this year. Our two major research projects are funded from the Government's Public Good Science Fund (PGSF) and a third component of our work has been in the area of diagnostic testing.

## Nosema Disease of honey-bees (PGSF)

This project aims to improve our understanding of the relationship between honey-bees and their protozoan pathogen, *Nosema apis*, so that we can determine whether it would be feasible to breed a bee resistant to this disease. Such a bee would enhance New Zealand's status as a bee disease-free country, improve honey yield and pollination efficiency, and reduce current reliance on antibiotics.

In bee experiments in previous years we have looked for differences in response to nosema among bees from different locations throughout New Zealand and then at several different inbred lines of bees. Neither of these approaches gave results that suggested that there is a "nosema-proof" bee sitting out there

CONFERENCE 1998 — FIJI

David Moore, Bay of Plenty Branch is curious to see what interest there would be for a offshore conference in Fiji for eight days in July 1998 (1997 Nelson).

Approximate cost \$1500.00. If you are interested, (no obligation) contact: David (07) 315-8034. waiting to be bred from. We also did a preliminary trial comparing the responses of different races of bees, and results from these did suggest that a more detailed comparison of yellow and black bees would be worthwhile.

So this year, we have conducted experiments to compare responses to nosema infection in five different lines of yellow bees and five different lines of black bees. These experiments have just been completed and the results have not yet been analysed.

Another aspect of the bee's response to nosema that we are interested in looking at is how much infection may disrupt the bee's performance as a forager. One important aspect of foraging behaviour is the bee's ability to learn to recognise floral odours, and we have been shown a new technique for measuring this by a visiting scientist and two students from France.

The second part of the nosema project is an investigation of the genetics of nosema itself. Because nosema is a protozoan, it's very small and very little is known of its genetics. We have hired Dr Heather Gatehouse, who is a molecular biologist, to look at the molecular genetics of nosema. She started late last year and has begun to sequence parts of the DNA of nosema and to gather samples of nosema from different places to make comparisons of these.

#### Potential effects of genetically engineered plants on bees (PGSF)

This project is part of a large programme aimed at assessing the potential effects of genetically engineered plants on the ecosystem — our part of this is to look at the effects that these plants may have on pollinating insects such as honeybees. Plants that have been genetically engineered to make them resistant to pest insect attack have been developed overseas and in New Zealand there is a considerable amount of research going on to see if such plants could be developed for this country. To ensure that any such plants would be safe for our bees, we are working with the scientists concerned to check the effects on bees of the genes they are working with. There are two major types of pest-resistance genes being researched in New Zealand: the Bt gene which comes from the same bacterium that Bt spray is derived from (this is used in organic kiwifruit orchards) and Protease Inhibitor genes which are taken from plants such as potatoes and soybeans, where they act as a natural defence for those plants against insect attack.

In our tests we present the bees with a "worst-case scenario", where we directly feed the gene products at very high concentrations to bees kept in cages and then we check on their survival. This is deliberately unrealistic, as most genetically engineered plants will have a special promoter or "switch" on the gene that will block its expression in pollen, so that only the parts of the plant eaten by the target pest insect will actually have the gene switched on. So far we have tested four different Protease Inhibitors and we have found that at very high concentrations they do affect bee survival but at lower concentrations they are harmless.

#### **Diagnostic Testing**

Diagnostic tests were carried out on imported products for EFB. An importation of *Osmia* bees was checked for *Nosema apis, Malpighamoeba,* chalkbrood, AFB, EFB, and viruses. It has been some winter and few of us will be sorry to see and feel the last of the cold. Several times snow followed by hard frosts here in the south and at higher levels throughout the country and lots of water in some other parts. Only the plumbers had little reason for complaints with burst water pipes and collapsed water heaters being the order of the day. From a beekeeper's point of view the cold conditions are the lesser evil I think for prolonged wet weather may cause problems s.a. a greater incidence of Nosema and dysentery. Most beekeepers will by now have had a first quick look at their hives to see if they are standing up and ticking over and if stores are holding out. However in most places it will be September before starting in earnest with spring inspection and management. Now is the right time to do a thorough job on each and every hive. It is also the easiest time of the year to handle colonies as populations are as yet not numerous. An experienced beekeeper will take all this in his or her stride, just the start of another new season. For a person who just started with a few hives last year it will be a different issue altogether. There will be a certain amount of tension when handling hive gear with bees adhering, some buzzers flying around, trying to remember the points to watch out for and finally forming the total picture of the state the particular colony is in. It is good to remember that all of us have been beginners and gone through this stage. There is no merit in being arrogant. So it is back to real basics this time. O.K., you have organised yourself for the job. Hive tool, smoker going, hat and veil and probably gloves. Good idea to have a few other things which may be needed lined up. Some good quality combs if available, a spare bottom board and a box or tin for wax scrapings. Before starting the operation once again remember that bees should be handled gently, no uncoordinated movements, no bumps. Hold combs carefully but firmly and don't drop any. Always watch for the queen so that she does not get lost. Concentrate on the job, work smoothly and as fast as possible so that bees and combs are not exposed any longer than necessary.

The lid is removed and placed in front of the hive, follows the crown board after loosening it with the hive tool. While doing that a few puffs of smoke over the top of the frames will keep the bees in order. Before lifting out the first comb, the one nearest to the side you are working on, break the two brood supers apart as bottom bars in the top box are often stuck to the top bars in the bottom box. Second comb to empty place of the one taken out (that one was placed on roof and leaning against the hive). Comb 3 to place 2 and then you will likely find combs with brood. Lift out and examine. Best to have the sun over your shoulder. There should be sealed brood, uncapped cells with larvae showing and cells with eggs. These last are not easy to see without good light falling into the bottom of the cells, they show up as little white rods, not as mini hen eggs. If all these three stages have been found you can be sure that there is a laying queen present in the hive even if you have not seen her. If she happens to be on one of the combs you handle don't worry, leave her, but be careful when replacing the comb into the super not to squash her. Now there is the other thing to watch for when concentrating on the brood combs, that is for signs of disease. Especially the tell-tale signs of American foulbrood (B.L., Bacillus larvae, American brood disease), irregular pattern often, sunken and perforated cappings, ropy larvae remains. It is not difficult to spot but as with all things experience tells. Every beginner should try as far as possible to become familiar with this disease. There is an excellent pamphlet from MAF, colour photos and videos are available from the NBA library. To have the real thing for study is of course not so easy but field days or disease sessions organised by NBA branches or beekeeper's clubs can perhaps offer that opportunity.

So you go through the combs in the first super. Replace all combs in the original sequence. However if there are any of poor quality and dry, that is without honey or brood, replace them now with one of your spares.

Then place the top super on the lid and have a quick look through the bottom super. There may or may not be any combs with brood. If you do see a few cells with cappings on an otherwise dry comb, do investigate, it just could be a B.L. infection left over from last season and as yet not showing up in this season's brood.

If you are so unfortunate to find disease put the hive immediately together and close up. Don't use your hive tool, gloves or anything else which may be contaminated on the next hive before it has been thoroughly disinfected.

If you do not find anything unhealthy, again replace any poor combs in this box with better ones. Now tip the box backward and clean any debris from the bottom broad. Replace the super, scrape any surplus wax off into the tin you lined up for this purpose, second box on top, same thing as to wax, clean wax off crown board and close up hive. In the process you have been able to determine the feed situation. There should be the equivalent of about three combs of honey, if less than that extra feeding will soon be required.

So let us hope that you have found everything coming along nicely. But that is not guaranteed for besides the dreaded disease factor other trouble is possible.

You may not find any brood or eggs. If the hive is very noisy ("roaring") one can be certain that it is queenless. What to do? A colony which is still strong can be given a comb with brood, including very young larvae and/or eggs. It may raise its new queen or be kept going in this manner till a new queen can be procured. A weak hive is better united with another hive or nuc.

A colony without brood but behaving normally (not roaring) may still have an old queen running around but not doing her job or has superseded. A young queen may be present but has not commenced laying. Hopefully she has mated properly or will do so shortly, so give it some time. Have another look in a week or so.

Then there is the possibility of a drone layer. Many drone cells, those with the high domed cappings are apparent. The queen has come to the end of the road, she has run out of the goodies and only produces infertile eggs. She's got to be replaced. Again a strong colony can be given a comb of brood to raise their own queen (remove the old one if possible), better to provide it with a new laying queen. A weak unit should be united.

Lastly one may find a hive with laying workers, showing up as drone brood in a scattered pattern with sometimes multiple eggs in a cell. Hive is usually pretty weak, uniting is the answer. Giving it brood from another hive to make it raise a cell is usually a waste of time.

All this seems to be a lot to watch out for but if one goes about it methodically, with confidence and concentration and without bumping things around, it will prove to be an interesting and rewarding job especially if a hive is in good nick.

The reason why a would-be beekeeper is advised to make a start purchasing more than one hive is obvious from the above. It gives the opportunity to manoeuvre and do those things a one hive owner is simply not able to do.

J. Heineman

## William Charles Cotton The Grand Bee Master of New Zealand

#### Part I - A beekeeper without bees

William Charles 'Bee' Cotton, a remarkable and accomplished man, whose significant contribution to New Zealand and British beekeeping history cannot be disputed, unintentionally left us a mysterious legacy. Did he or did he not, successfully bring honey-bees from England to New Zealand in 1842?

First, some background. William had decided to accompany George Augustus Selwyn, the newly appointed Bishop of New Zealand, and his missionary entourage, bound for the Bay of Islands. As I hold before me an 1842 edition of Cotton's classic work My Bee Book, I ponder the success of his plans to pack and ship bees for safe arrival after a vovage of "five months, or even a little more". In the chapter titled 'Taking Bees to New Zealand'. Cotton explicitly described how he planned to achieve this feat of transporting his winged charges "direct from England, sixteen thousand miles over the sea". (p.357) Cotton believed that there were no honey-bees in New Zealand, for he quoted Henry William Petre on the settlements of the New Zealand Company "One fact has not, to my knowledge, been mentioned. The flowers of the plants abound with honey, which the natives frequently suck. Thus, should bees be introduced into New Zealand, and I see no reason why they should not, they will find abundance of food in the flower of the Phormium Tenax, as well as in others. I mention this, in case any one should be disposed to take bees as an experiment.'

Some doubt remained in my mind regarding the accuracy of his often reported introduction of honey-bees to New Zealand in 1842. Long accepted as fact, this reported event never occurred. Heresy! some Cotton watchers may declare, but his initial failure to introduce honey-bees cannot be tarnished by his beekeeping achievements which commenced fourteen months after his arrival in the North Island. Cotton's ambitious experiment in shipping his bees eventually began on Sunday, 26 December 1841, aboard the Tomatin from Plymouth. It was delayed twice, firstly when contrary winds prevented the Tomatin from leaving port. Cotton made note of the postponement "The wind changed on Saturday night, on Sunday morning we were on board." and "The wind was not fair on Thursday — our sailing was delayed till Sunday 26th December at noon" when the "Tomatin sailed from Plymouth 1 1/2 precisely".

The second delay was due to an unplanned but fortuitous and lengthy

stopover in Sydney. Cotton diarised that the Tomatin suffered damage on arrival in Sydney on 14 April 1842 after the "Pilot allowed the ship to scrape against a rocky point, a heavy bump but (it) did not hang". It was extensively delayed for repairs, so Selwyn and Cotton decided not to wait beyond the five weeks holdup already suffered. They changed ship to the Bristolian which departed Sydney on May 19. The rest of the party would follow later. The Tomatin was to remain in port another four weeks until June 17. Cotton and Selwyn arrived in Auckland after eleven days sailing on 30 May 1842. As recorded in Cotton's journal, he remained with Selwyn in Auckland until June 17 when they then "Sailed in the Wave for the Bay, a rough passage", arriving three days later.

Around 1895-1896, elements of the New Zealand Press published claim and counterclaim in a recognition race to find the first to introduce bees. The Editor of The Canterbury Times of 13 February 1896 commented "The question of when and by whom honey-bees were first introduced to New Zealand has recently been discussed at length in some of our contemporaries... At present the record stands thus -Lady Hobson landed bees from New South Wales at the Bay of Islands early in 1840 ... the Rev W.C. Cotton landed some at the same place in the first half of 1842... Mrs Allom's bees arrived at Nelson... early in 1843. Mr Hopkins is investigating a prior claim to that of Lady Hobson.'

In the 1886 Australasian Bee Manual. Isaac Hopkins was adamant that Cotton had been successful, but he had less facts available to him then than are now available 110 years later. The Canterbury Times Editor was simply relying on Hopkins finding on Cotton, taken from the British Bee Journal of January 1880, which, in hindsight, is now seen to have been incorrect or misleading. The prior claim being investigated by Hopkins was that of Mary Bumby for March 1839. Cotton probably never sought official recognition or praise for his pioneer beekeeping. His interest simply consisted in enjoying the practice of beekeeping while overseas and to "confer on the natives of New Zealand the pleasure and profits of Bees of their own." (p.357)

Cotton is not known to have published anything in favour or otherwise on the success of his wine barrel/ice box method to ship his bees. He certainly was not afraid of failure, for in *My Bee Book* Cotton wrote **"Thus, I trust, my Bees will arrive safely in New Zealand; and their friends shall hear in a few months** 



Cotton hiving bees from an espalier pear tree, July 1836

of their arrival, or, *absit omen*, of their death by sea-sickness." (p.361).

There are few clues to the fate of his bees. His twelve journals, of which volumes one and three through twelve survive in the manuscript collection of the Mitchell Library, Sydney, have none. The second volume, which covers the Sydney-Auckland leg of the voyage, was lost after its dispatch to his sisters in England. Nineteenth century newspaper accounts supply a little assistance. His letters home provide incontrovertible evidence that he had no bees on arrival in Sydney but say nothing on how they were lost. With the able assistance of historical sleuth Bruce Stevenson of Kerikeri, the truth has begun to unfold.

## Why it was believed that his bees did reach New Zealand

William Carr reported in *The British Bee Journal* of 1 January 1880 "In 1841 Mr Cotton became chaplain to the late Bishop of New Zealand, Dr. Selwyn, with whom he embarked on board the *Tomatin* at Plymouth, on 26th December of that year .. Mr. Cotton took with him four stocks of bees; and many marvellous stories are told of his mastery over his favourites on ship board. He was very successful in the introduction of the cultivation of bee-keeping in his adopted country;"

Carr met Cotton in 1868, twenty years after his return from New Zealand. He subsequently corresponded and associated with him until the Reverend's death in 1879. The intimation then was that Cotton successfully cultivated the *Tomatin* bees on arrival. I can't help but think that the two events — embarking four hives and beekeeping a separate batch of bees on arrival was also a possibility:

How should the words "many marvellous stories are told of his Continued on page 11

mastery over his favourites on ship board" be interpreted? Did Cotton display his mastery by manipulating hives on board during the Plymouth-Sydney voyage? Or was this a reference to his involvement in marine migratory beekeeping activities around New Zealand in subsequent years?

In *The Honey Bee* of 1852 the Rev. Thos. James supplied "**Mr. Cotton has taken out with him four stocks of bees**" (p.56). This observation, either from Cotton's *My Bee Book* or from first hand knowledge, unfortunately provides no support either way on his success. Observers naturally concluded that as he had bees on the North Island and he so publically proclaimed his intention to take them to the Bay of Islands, and in the absence of any refutation, that he must have been successful. Surprisingly, Cotton made no mention of bees in his journal.

## Evidence that the Tomatin bees were lost

The December 1858 issue of *The Cottage Gardener, Country Gentleman's Companion and Poultry Chronicle* carried an article by T. W. Woodbury under the pseudonym of 'The Devonshire Beekeeper'. It reported that the *Tomatin* sailors believed the bad weather they encountered was caused by the bees. Being a superstitious lot the sailors threw the bees overboard, to Cotton's dismay.

From a newspaper scrapbook held at the Hocken Library, Dunedin, is a letter from Amy G. Storr, daughter of beekeeper Mrs. Thomas (Mary Anne) Allom, dated October 1895. I believe it appeared in the Hawke's Bay Herald if the editors affiliation of 'H.B.H' can be taken as a guide. The date of publication is also unknown but it's likely to be late December 1895. The last statement in her letter concerned the Rev. Mr Cotton "I believe that an attempt was made about the year 1842 ... to take out bees, but owing to a severe storm in the Channel they were thrown overboard at Plymouth."

No primary source documents in support of either of these views have as yet been found. Woodbury's belief is diluted somewhat as volume one of Cotton's journals, which covers the voyage out, mentions no storms serious enough to trouble the ship or crew. On February 16 they experienced a sudden drop in temperature and a squall. Later on Cotton also mentions a taste of rough weather and another squall. The only discomfort seems to have been some seasickness, and on one occasion, some of his books tumbling upon him from a shelf. Volumes three and four of his journals contain no mention of any beekeeping activities. Not until early in volume 5, which covers the period 22 July 1843 to 26 November 1843 do his beekeeping accounts begin to pepper the pages of his journals.

From Cotton's 1849 work Nga Pi, a beekeeping guide written in Maori, one translation I've obtained has his words "This year 1847 is the fourth year that bees have been in New Zealand, once swarms have occurred each of the many Europeans can have his bees." Another states "In the year 1847 the bee had been in New Zealand four years: one hive only was brought here. From that one hive a lot of pakehas have got bees upon bees." Both translations give 1843 as the year that, to his knowledge, bees reached New Zealand. Cotton arrived at Auckland one year prior in May 1842.

By his own written words, his 1842 attempt cannot have been successful. The Devonshire Beekeeper may have been correct in reporting that the bees were thrown overboard. Cotton's hopeful plans came to nought, at least temporarily. For whatever reason Cotton failed to bring bees safely to New Zealand, he quickly set himself to rectify the situation.

# Who supplied Cotton's bees

Rev. Taylor in 1868 made clear that only one hive was involved "Captain Hobson brought the first hive of bees to the island, but they did not increase. Mr. Cotton, The Bishop of New Zealand's chaplain, was more successful, and from his hive both islands are now well stocked."

From Remarks on the Past and Present State of New Zealand by Walter Brodie, 1845 "Mr. Cotton (Chaplain to Bishop, Dr. Selwyn) had a hive of bees sent him from New South Wales which in one year increased sevenfold." Cotton sought bees from New South Wales not to supplement his stocks, but to replace those lost between Plymouth and Sydney. Either the story of the bees thrown overboard was true, or an equally disastrous calamity had befallen them.

There can be no doubt that Cotton had bees on board from Plymouth. A letter to his sisters dated "30th December 1841, *Tomatin* at sea" contains the following "Becalmed for the first time since leaving Plymouth. All well - Mrs Selwyn, Bishop and Willie - dogs and bees and self." There are several clues that the bees were lost some time before the ship reached Sydney. How and when is unknown.

The first is a letter to "My Dear Arthur, my brother and my Godson" dated 21 April 1843, almost a year after his arrival in New Zealand. Cotton wrote "I hope to have some bees sent over to me from friends in Sydney, where they prosper, as I wrote to you before, most wonderfully. .. The <u>seed</u> which was sent to me last year grew capitally, but does not seed, as there are no bees indeed this seems the fate of most English seeds."

The second is a letter written from Merchant Campbell's house at 'Woolloommoolloo', Sydney, dated May 1842, and addressed to "My Dear Teddy, Agnes & Arthur". It identifies his friends referred to in his April 1843 letter "I send you herewith, that is by the same ship, a bottle of Australian honey, which is so very nice, to my taste at least. It was made at Cooks River, near Botany Bay, by the bees belonging to Mr Steele the Parson of the place. The bees are English bees, but came last from Van Diemen's Land, whither they were taken, I believe, some time ago. They do exceptionally here. I met Mr MacClay... Bees were first brought for his daughter. ... I paid a visit to Mrs McArthur at Parramatta who has a capital apiary, and to Mr Blaxland."



Rev. Dr Thomas Steele, Minister of St. Peter's, Cook's River

Without his cargo of bees, Cotton wasted no time in finding residents in and about Sydney who might be able to supply him, either before he left Sydney or after his voyage across the Tasman Sea. His journal entry for Monday 24 October 1842 noted the arrival of the Bristolian after a stormy passage of 10 days. "Saw Mr Cooper the Collector of Customs, who has come down by the Bristolian, a hive of Bees, which he brought down were seemingly dead. I have many stocks, from kind friends of Sydney, ready to come the first opportunity." For whatever reasons, the dispatch of some hives was delayed, for Cotton had already been resident above the Bay some four months.

From the above letter, one of his friends was Rev. Dr. Thomas Steele, the Minister of St. Peter's at Cook's River. Alexander Macleay was the Colonial Secretary, an *Continued on page 12* 

entomologist and botanist and probably the donor of Steele's first hive in 1842. Gregory Blaxland, pastoralist and explorer, lived close to Parramatta at his *Brush Farm* property. He had previously attempted to bring bees with him from Kent in 1806. Elizabeth Macarthur was a prominent land owner and pioneer sheep breeder and wool producer along with her husband John.

Both Macarthur and Steele were subsequently mentioned in Cotton's journals in his search for bees. Of the three hives to be collected by James Busby on his visit to Sydney in May/June 1843, Steele was the donor of two of these, both box hives.

Pasted into one of Cotton's journals is a letter from Rev. Williams dated at Paihia, 13 October 1845 "... We began the present season with 6 hives and already 7 swarms this month in addition 3 swarms from 2 of Mrs Busby's hives. So we have a show of nearly 20 hives at Paihia. An interesting fact which Mrs Williams hopes will induce you to peg a medal to this plea before you leave for England considering yourself in duty bound, as the Grand Bee Master of New Zealand."

(The next part of the Cotton saga in New Zealand covers James Busby's return to the Bay of Islands with bees for himself and Cotton, the initial setbacks and the establishment of Cotton's bees at Waimate in March 1844.)

#### Peter Barrett, August 1996

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"LOOKING FOR TWO PEOPLE WITH BEEKEEPING EXPERIENCE TO WORK IN A MODERN HONEY AND POLLEN PRODUCING OPERATION IN THE PEACE RIVER REGION OF WESTERN CANADA".

Contact: Ernie Fuhr at North Peace Apiaries, R.R. #1. Fort Street, John, B.C., VIJ 4M6, CANADA. Phone: (604) 785-4808 Fax: (604) 785-2664 Priest — Missionary — Beekeeper' (April 1980, No.36, pp.1-6)

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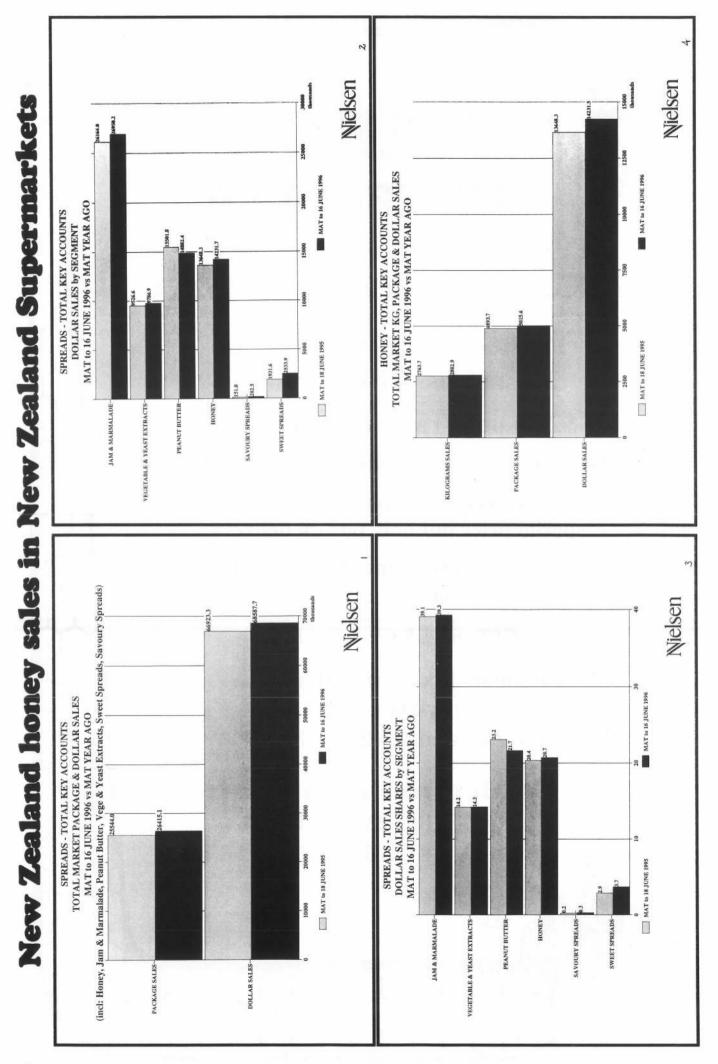
Situation Vacant

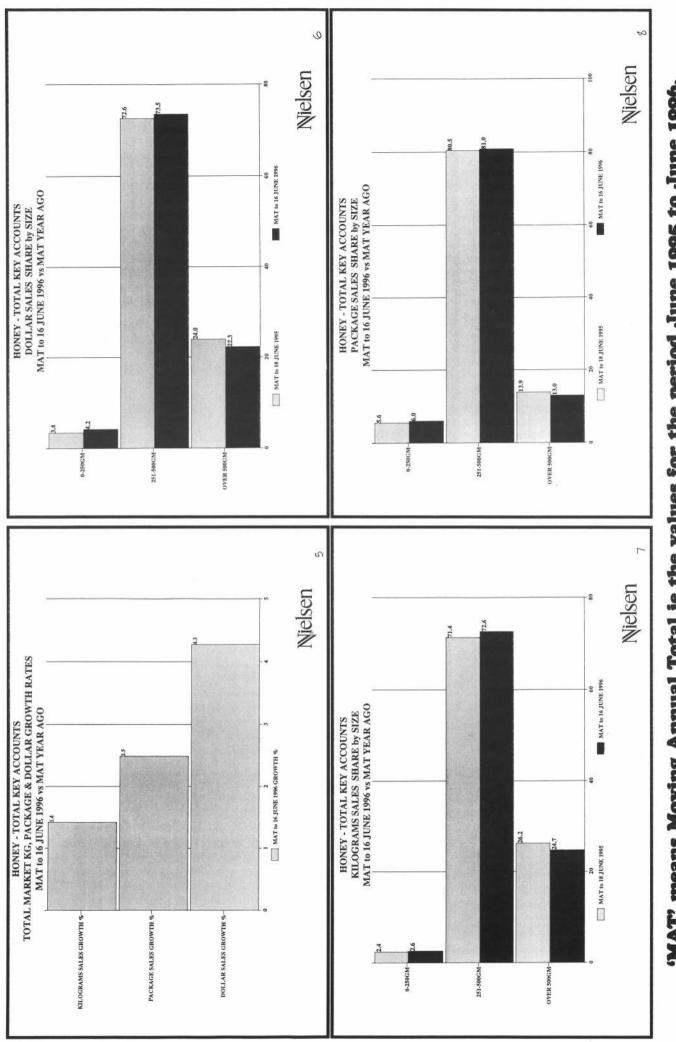
Assistant beekeeper required for apiary work

Apply to: Keith Herron, Greenvale Apiaries, No. 5 R.D., GORE.

*Phone:* (03) 207-2738









## Hon John Falloon Minister of Forestry

Your industry is one of the less visible ones in New Zealand. This is not because you don't promote yourselves, but possibly because your workers are so small! — yet so vital. Besides your production of honey, and exports of live bees, pollination services earn you approximately \$8.8 million a year, and are responsible for pollinating more than \$1 billion worth of fruits, vegetables and seeds.

Agriculture and horticulture would very much poorer without you.

While beekeeper, apiary and hive numbers have fallen in recent years, a key feature of your industry in recent years has been the opening of new markets for the export of live bees and queens. This export of was worth \$1.7 million in the year ending May 1996.

I am also very encouraged to see your efforts to remove honey from the commodity trade. Although many honeys are obviously made from a variety of nectar sources — some of which might not be identifiable — consumers are becoming increasingly aware of honeys from single sources, such as Manuka. Even the standard clover honey seems to be making a comeback as people see honey as a sophisticated food item, and more than just a spread for your toast.

However, the Government recognises that there are a number of access, transport and quarantine difficulties that need to be resolved to make trade more certain. For example, New Zealand's lack of access to markets in the United States of America and the stringent quarantine requirements of Korea.

This week's APEC meeting is the sort of forum that is of considerable value to countries such as New Zealand, who have so much to gain from free trade. Rest assured, we always take whatever opportunities we can, such as the APEC meeting, to work for the benefit of industries such as yours.

Perhaps the ministers at this week's APEC meeting could show good faith by opening up markets that are closed. In fact it looks like Japan has made larger changes to opening markets than some of the free traders of the Pacific. For instance, Japan will buy our apples, but the Australians won't.

The matters of interest to beekeepers I want to discuss today include:

- your National Pest Management Strategy for American Foulbrood
- the Biosecurity Amendment Bill (No. 3) and the Hive Levy Act
- your Commodity Levy application, and
- export certification.

Two of these, the PMS for American Foulbrood and the Commodity Levy, are linked.

#### Pest Management Strategy for American Foulbrood

I know you are very concerned about American Foulbrood, which you believe could seriously harm the New Zealand beekeeping industry. One spot of good news is that, as of 30 June this year, only 3.6% of apiaries and 0.6% of hives showed a presence of AFB. This is significantly lower than last year when 4.2% of apiaries indicated a presence of AFB.

I know also that the NBA is concerned that not enough apiaries are being inspected and that the New Zealand beekeeping industry cannot afford to be without disease surveillance if you wish to increase exports.

After producing several versions, your association sent a National Pest Management Strategy proposal for American Foulbrood to the Associate Minister, Denis Marshall, in February 1996.

The Ministry of Agriculture is currently assessing the National Pest Management Strategy to ensure that it complies with the requirements of the Biosecurity Act.

Currently, those of you with 50 or more hives pay a compulsory levy to fund the American Foulbrood programme. There was considerable concern that the legislation that allows this levy, the Hive Levy Act, would expire, leaving you with no programme and no funding for it. However, the Government changed the Act so that it will now be repealed on 1 January 1997. This still gives a fair amount of urgency to your levy proposal under the Commodity Levies Act, which I will talk about later.

Your association was also very concerned that the legal framework for the control of American Foulbrood would disappear at the end of last month if a PMS was not in place. However, at the end of May the Government gazetted an extension of the transitional regulations to the Biosecurity Act, to extend the legal basis for the current AFB control programme. This means that the provisions will continue to be available until 30 September 1998 or until a pest management strategy is in place — whichever comes first. This does not affect the work you have done on your PMS so far.

#### **Biosecurity Amendment Bill (No. 3)**

Your association has written to Denis Marshall asking why it has taken so long to get anywhere with the PMS.

The answer is simple. The new Minister of Agriculture, Lockwood Smith, has decided that available resources should be concentrated on preparing the Biosecurity Amendment Bill (No. 3) for introduction. This has meant that work on all pest management strategies has effectively been put on hold.

MAF had not completed the assessment of the proposed NPMS when Lockwood Smith made this decision in early April.

Despite this MAF officials expect to complete the assessment of the AFB proposal within the next month to six weeks.

I should point out that the Animal Health Board's National Pest Management Strategy for Bovine Tb was notified in November 1995, three months before yours. It hasn't made much progress since April either.

The Minister agreed that amendments to the Biosecurity Act needed to take priority because, under the current law, pest management strategies cannot be implemented fully. The Act contains no provision for rules in a strategy to impose obligations and prohibitions on occupiers of land included in the strategy proposal.

The local government people have told us that the changes required were relatively straightforward. But it isn't as simple as they believed. The necessary changes will have substantial effects across other parts of the Act, and we had to carefully analyse these to make sure we didn't cause problems for other people.

MAF officials are consulting with other government departments about the draft Biosecurity Amendment Bill (No. 3), and it should be introduced into Parliament shortly.

Another important change we will be including in this Amendment Bill is the conditions for a Board of Inquiry. Currently, if the Minister considers there is significant opposition to the proposal, he is required to call for a Board of Inquiry to examine the issues. The Biosecurity Amendment Bill (No. 3) will clarify when a Board of Inquiry is necessary by stating that it will be when there is "<u>material</u> opposition to any <u>significant</u> element of the proposed strategy".

Material opposition occurs where those affected by the strategy are opposed to the obligations and costs imposed by the strategy proposal.

#### Export Certification

Partly in response to NBA concerns, MAF is also considering

Continued on page 17

changes to the Honey Export Certification Regulations through the Biosecurity Amendment Bill (No. 3).

Some of the provisions relating to product quality are outdated or no longer necessary. Quality should be a matter of commercial contract between a willing selling and a willing buyer.

Examples of quality matters that the Government does not want to certify are:

- floral type eg rata honey, clover honey;
- product type eg comb honey, crystallised honey; and
- packaging and labelling.

It should not be the Government's job to regulate these. There is no need to continue to impose those requirements on all exported honey as this places unnecessary costs on exporting beekeepers.

If an importing country insists on Government export certification for quality matters, then we would need to discuss that with the Government of that country to try to bring about a positive result by upholding the principles of the new trading environment under the GATT's Sanitary and Phytosanitary Agreement.

These changes should benefit the beekeeping industry by reducing your costs and keeping the Government out of what are, quite rightly, purely commercial activities.

On the topic of the GATT SPS Agreement, I was pleased to see on your Internet Home Page that the link on sanitary and phytosanitary issues took me to the GATT SPS Agreement!

#### **Commodity Levy**

The other burning issue for your organisation and the Government to deal with is your plans for a Commodity Levy, which you want to use for funding disease control/eradication purposes, generic promotion and marketing programmes and for administering your association.

We hit a bit of a snag earlier this year when we discovered that one of the examples of a "thing" that could be levied under the Commodity Levies Act was a hive. Of course, you wanted to levy apiaries, so we had a problem.

However, the Government was able to solve it by amending the Act to include apiary as a "thing" that can be levied.

Your recent ballot indicated that there is quite a bit of support for a compulsory levy. According to your own figures, around a quarter of the beekeepers who will pay a levy voted, and they represented over 40% of apiaries and hives.

The Ministry of Agriculture is now awaiting an application by the association to progress the levy order application. This is not the best of years to be pursuing such a levy. The election could put unforeseen hurdles in your way, especially if it takes some time for the situation to be sorted out after the election. Taking this into consideration, MAF officials believe that they will need to receive your levy application soon in order for it to be promulgated by 1 January 1997.

I am sure these issues, and others, will exercise you during your conference.

I hope it is a fruitful gathering, and have great pleasure in opening it.

Hon John Falloon, Minister of Forestry

## And even Britain's bees are under siege too

A killer plague is sweeping beehives and threatening Britain's food crops.

The Aids-type virus has already wiped out up to 80% of the bees in Kent, and is spreading rapidly.

The price of apples and pears, strawberries and beans, could soar this summer amid an ecological calamity. About  $\pounds 6.8$  billion worth of crops depend on bees for pollination.

Wild bumble-bee colonies are about a tenth the size of domestic hives and cannot do all the work on their own. Some beekeepers have contracts with farmers to send their insects in amongst the blossom. But the situation is so bad that one Kent farmer has imported 150 hives from Gloucestershire just so that his fruit trees can be pollinated.

The honey industry — worth about  $\pounds$ 12 million a year — is also braced for disaster.

The virus is believed to work like Aids, destroying the immune system. It is carried by the varroa mite which arrived from the Continent about four years ago. There it has long been controlled.

The mites are left on flowers by infected bees. Then they infiltrate healthy hives to infect pupating bees which are born with fatal deformities.

Hives not actually killed off by the disease can be so weakened that they are at the mercy of attacks by wasps and wax moths.

It caused losses to apricot and apple growers estimated at £80 million when it wiped out the bee industry in Italy's Piedmont region last year.

Beekeepers face a £500 fine if they move hives from infected areas to counties free from the virus. But many beekeepers are unregistered making it almost impossible to keep the disease in check. In the north of England, Yorkshire and Durham are no-go areas for the movement of hives after being hit by varroa and there are now fears it will spread to Cumbria, Lancashire, Greater Manchester and Tyne and Wear.

John Harris, secretary of the Carlisle branch of the Cumbria Beekeepers' Association, said: "We could be looking at an ecological disaster. There is no such thing as a cure for varroa." Pete Raine of the Kent Wildlife Trust near Maidstone said his own observation hive was a victim of the Varroa mite infestation.

All the workers were killed off.



### MAF Quality Management (MQM) Report to the Annual Conference of the National Beekeepers' Association of New Zealand, Wanganui 17-18 July 1996

#### 1.0 Organisation and personnel

Two new consultants joined the apiculture business unit within MAF Quality Management, during the year. James Driscoll is located at Palmerston North while Paul Bolger is situated in Pukekohe. James works part time for the Quarantine Service while Paul carries out duties for the Horticulture business. The apiculture hours worked by Derek Bettesworth and Paul Bolger in North Region still amount to one full-time apiculture position.

#### 2.0 Beekeeping statistics

#### 2.1 Beekeepers, Apiaries and Hives

There were 5306 registered beekeepers owning 286,806 hives as at 30 June 1996 (Table 1). This represented a decrease of 1.9% of beekeepers and 2.1% in hives, a trend continued from previous years.

#### 2.2 Honey Production

The total saleable crop was assessed at 8610 tonnes (30kg/hive) which is an increase on last year's crop of 8047 tonnes (27.5kg/hive). The six year average is 8735 tonnes or 29.4kg per hive.

## 3.0 Exotic Disease and Pest Response (EDPR) Capability

Three joint exercises were run this year. These used EDPR procedures for a European foulbrood response, to inspect apiaries for AFB. The exercises involved approximately 120 MQM staff and 130 members of local NBA branches, held in Tauranga, Palmerston North and Timaru. Most participants found that this was very successful in helping both groups get a better understanding of each others operations and problems.

Whether or not MAF Regulatory Authority will continue to fund a response capability for bee exotic disease is unclear as the criteria for this funding is under review. It is likely that only those exotic diseases considered to have significant socioeconomic impact will be funded by the taxpayer. It is arguable which if any of the presently scheduled exotic bee diseases would meet these criteria. Exotic diseases not meeting these criteria will have to be funded by industry through a Pest Management Strategy, should industry consider the cost/benefits of doing this worthwhile. **4.0 Surveillance** 

The honey-bee Exotic Disease Surveillance Programme is comprised of four parts, the apiaries register, hive sampling, toxic honey monitoring and border protection.

#### 4.1 Register

The maintenance of this Register (in the form of a computer database) is a legal requirement for the Government under the current Apiaries and Biosecurity Acts. To be really effective the database must have accurate statements of inspection provided by beekeepers each spring. However once again, 2583 (48.7%) of beekeepers failed to provide such statements of inspection by the deadline of 7th December. As at 30 June 1996, 883 beekeepers (16.6%) had still not returned their statements despite reminder notices.

#### 4.2 Hive Sampling

In the past 12 months, MAF staff have inspected 491 apiaries for the presence of exotic bee diseases and taken samples for laboratory analysis for internal and external parasitic mites. In addition, 48 samples were taken for European foulbrood diagnosis and one sample was taken for Africanised honeybee analysis. Apiaries were sampled in at risk areas including sea ports, garbage dumps and areas frequented by overseas travellers. No specimens of exotic disease or pests were found. A further 509 samples of bees were tested for live bee exports at Invermay as part of the export certification programme. The samples were analysed for the presence of exotic internal and external parasitic mites. MAF Quality Management wishes to thank the beekeepers for their cooperation in providing samples.

#### 4.3 Quarantine Service

The beekeeping industry continued to have a high profile in the work of MAF's Quarantine Service with numerous consignments of honey and other bee products being intercepted at the border. James Driscoll, Apicultural Advisory Officer, Palmerston North works part-time in the Quarantine Service. The disease risk posed by honey and bees continued to be brought to the attention of the travelling public by way of articles and static displays at airports and other venues.

#### 4.4 New Technologies

MAF Quality Management is constantly looking for ways to improve diagnostic capabilities. We are currently investigating a PCR test for European foulbrood (EFB) and an ELISA test for Tracheal Mites. Provided evaluation of these technologies proves satisfactory we should be using these new tests within the next 12 months.

These tests are much more sensitive and faster than current methods. For example: The PCR test for EFB will give a positive diagnosis within hours rather than up to 10 days as the current test does.

#### 4.5 Toxic Honey

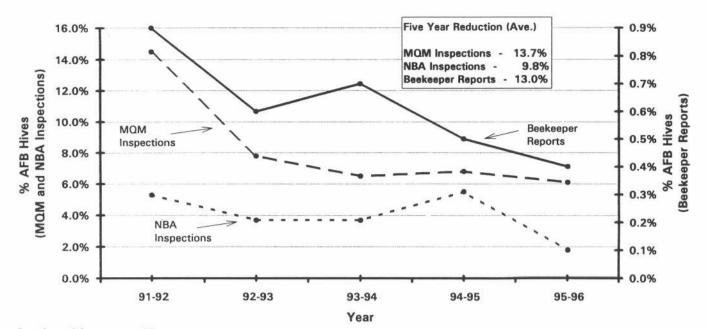
This year there has been one incident of toxic honey poisoning. The levels of tutin (40mg/kg) and hyenanchin (260mg/kg) *Continued on page 19* 

#### INCIDENCE OF AMERICAN FOULBROOD IN APIARY DISTRICTS TO 30 JUNE 1996 (1995 FIGURES IN BRACKETS)

MQM Apiary Register	% o	Diseased f Total D			Diseased Hives/ % of Total District Hives			Apiaries Inspected NBA Programme*				
Location	Number			%	Number		%		Number		%	
Whangarei	95	(95)	3.5%	(3.3%)	193	(181)	0.7%	(0.6%)	123	(154)	4.1%	(5.1%)
Hamilton	120	(151)	4.1%	(5.2%)	183	(259)	0.4%	(0.6%)	153	(122)	4.9%	(4.1%)
Tauranga	148	(175)	4.3%	(5.0%)	317	(501)	0.7%	(1.0%)	480	(363)	13.0%	(10.1%)
Palmerston North	122	(167)	3.0%	(4.2%)	288	(442)	0.8%	(1.2%)	394	(267)	10.0%	(6.7%)
Blenheim	97	(153)	4.8%	(7.5%)	214	(331)	0.9%	(1.5%)	179	(184)	8.6%	(9.0%)
Lincoln	170	(193)	3.2%	(3.7%)	307	(404)	0.5%	(0.7%)	467	(578)	8.8%	(11.2%)
Invermay	133	(118)	3.3%	(2.9%)	239	(252)	0.5%	(0.5%)	218	(205)	5.2%	(4.7%)
TOTAL	885	(1052)	3.6%	(4.2%)	1741	(2370)	0.6%	(0.8%)	2014	(1873)	8.0%	(7.5%)

 Includes both MQM and beekeeper inspectors, whether employed by MQM or under MQM direction (diseaseathons); apiaries inspected as a percentage of apiaries registered on June 30, 1994.

#### AFB FOUND DURING PERIOD OF NBA CONTRACTS



#### Continued from page 18

detected were at the lower end of values previously found to be associated with poisoning symptoms. The poisoning occurred after eating extracted honey, not burr comb or comb honey, as in several previous cases.

However, the number of beekeepers who continue to operate outside the law is a cause for concern. In the Coromandel restricted area, 18% of beekeepers, and 41% of beekeepers in the Eastern Bay of Plenty restricted area, failed to apply for a permit.

#### 5.0 Export Certification

Improved price prospects for Canadian honey resulted in a strong demand for New Zealand package bees and queens for the Canadian market this past autumn. Approximately 18 tonnes of packages were shipped. All shipments through USA, which followed the protocol negotiated in 1995, transited the United States without problems.

Further efforts were made during the year under Sanitary Phytosanitary (SPS) provisions to obtain agreement from Korean authorities to reduce further the testing requirements of New Zealand bees. These efforts have not yet proved successful.

Strong demand for honey, particularly from Germany, which began at the end of 1995, has continued. It is disappointing that the high New Zealand dollar has not permitted a significant price increase to be achieved by producers in New Zealand. However these exports have removed what could have been a reasonable surplus from the local market which has resulted in some firming of prices this season.

#### 6.0 American Foulbrood and NBA AFB Control Programme

The 1995-96 AFB Control Programme contract with MAF Quality Management (MQM) contained most of the provisions of the 1994-95 contract, including the inspection of 3.9% (987) of registered apiaries by MQM personnel, the provision of inspection lists for NBA volunteer inspectors, counselling of beekeepers with AFB problems, and various other services relating to disease control and reporting. A significant new component of this season's contract was a trial of the adult bee test for *Bacillus larvae* spores.

Once again this year, the MQM inspection requirement was exceeded, with 1033 apiaries inspected. The average apiary size was also exceeded, with inspected apiaries averaging 8.4 hives (target minimum apiary size = 6 hives). A total of 35 MQM staff and contract beekeepers were used in these inspections (see Table 3).

The NBA executive canvassed branches prior to this year's contract to determine which branches wished to carry out NBA volunteer (diseaseathon) inspections. Four of the 16 branches elected not to be involved in this part of programme. Nevertheless, total apiaries inspected by NBA volunteers during the contract period actually increased by 10%. Part of the increase may be explained by the involvement of three branches in Emergency Disease and Pest Response (EDPR) training exercises, which were held in Tauranga, Palmerston North and

Continued on page 20

#### BEEKEEPER, APIARY AND HIVE STATISTICS FOR NZ APIARY DISTRICTS AS AT 30 JUNE 1996

Apiary Register	Beekeepers			Apiaries			Hives		
Location	1996	1995	% Change	1996	1995	% Change	1996	1995	% Change
Whangarei	1150	1213	- 5.2%	2687	2898	- 7.3%	28777	29101	- 1.1%
Hamilton	530	551	- 3.8%	2947	2905	+1.4%	41270	43742	- 5.7%
Tauranga	511	537	- 4.8%	3414	3531	- 3.3%	47670	50631	- 5.8%
Palmerston North	1330	1352	- 1.6%	4005	4011	- 0.1%	38121	37245	+2.4%
Blenheim	463	469	- 1.3%	1935	2037	- 5.0%	21775	22679	- 4.0%
Lincoln	789	735	+7.3%	5361	5270	+1.7%	58983	58861	+0.2%
Invermay	533	552	- 3.4%	4030	4112	- 2.0%	50210	50821	- 1.2%
TOTAL	5306	5409	- 1.9%	24379	24764	- 1.6%	286806	293080	- 2.1%

#### PERFORMANCE OF MQM INSPECTORS\* NBA AFB DISEASE CONTROL PROGRAMME YEAR ENDING 30 JUNE 1996

Apiary Register	MOM	Contract	Api	aries Inspected	Hives	AFB Found (% Inspected)		
Location	Staff	Inspectors	Target**	Completed (%)	Inspected	Hives (%)	Apiaries (%)	
Whangarei	5	3	116	118 (101.7%)	1191	83 (7.0%)	36 (30.5%)	
Hamilton	6	0	121	153 (126.4%)	1330	15 (1.1%)	10 (6.5%)	
Tauranga	3	1	144	144 (100.0%)	1472	175 (11.9%)	44 (30.6%)	
Palmerston Nth	3	3	154	154 (100.0%)	824	117 (14.2%)	26 (16.9%)	
Blenheim	3	0	81	81 (100.0%)	958	41 (4.3%)	24 (29.6%)	
Lincoln	3	0	207	217 (104.8%)	1774	58 (3.3%)	25 (11.5%)	
Invermay	5	0	164	166 (101.2%)	1094	41 (3.7%)	18 (10.8%)	
TOTAL	28	7	987	1033 (104.7%)	8643 (8.4)***	530 (6.1%)	183 (17.7%)	
1994-95	22	10	979	993 (101.4%)	7489 (7.5)***	506 (6.8%)	188 (18.9%)	

\* Includes beekeepers employed by MQM

\*\* Based on programme target of 3.9% of apiaries per Apiary District (June 30, 1994 statistics); 1994-95 programme based on 3.9%.

\*\*\* Average hives per apiary (>6 hives/apiary required)

#### Continued from page 19

Timaru. Apiaries inspected for AFB during these exercises were included in the NBA volunteer inspection figures.

NBA branch inspections totalled 981 apiaries, or 63% of the 1545 required to achieve the target of 6.1% of registered apiaries. A total of 108 letters of appointment were issued to beekeepers wishing to assist in NBA inspections, with 82 letters of appointment actually being used. Letters of appointment were not issued to beekeepers taking part in the three EDPR exercises (Table 4).

The NBA AFB Disease Control Programme therefore resulted in the inspection of 8% of New Zealand's apiaries (MQM: 4.1% + NBA: 3.9%). The target inspection level set by the NBA executive for the programme was 10% of apiaries. A total of 16,044 hives were

#### Feed-back from business trips -

- In a Paris hotel elevator: Please leave your values at the front desk.
- In a hotel in Athens:
   Visitors are expected to complain at the office between the hours of 9 and 11am daily.
- On the menu of a Swiss restaurant: Our wines leave you nothing to hope for:
- In a Bucharest hotel lobby: The lift is being fixed to the next day. During that time we regret you will be unbearable.
- In an advertisement by a Hong Kong dentist: Teeth extracted by the latest Methodists.
- In a Copenhagen airport: We take your bags and send them in all directions.
- In a Budapest zoo: Please do not feed the animals.
   If you have any suitable food, give it to the guard on duty.

inspected (MQM: 8643 + NBA: 7401). This figure represents 5.5% of the beehives in New Zealand registered at the time the contract was let. Compared to 1994-95, 32% more hives were inspected by MQM and the NBA during the 1995-96 contract period.

MAF Quality Management personnel found 530 hives and 183 apiaries infected with AFB (6.1% of hives and 17.7% of apiaries inspected). As directed by the contract, all MQM inspections were targeted whenever possible to areas where there was the greatest likelihood of finding AFB (ie, trouble spots/outbreaks). NBA inspectors found a further 132 hives and 76 apiaries infected (1.8% of hives and 7.7% of apiaries inspected). Beekeepers reported an additional 1079 hives and

## Tax deductions on your overseas travel expenses

Many taxpayers dream of an overseas trip subsidised by the tax system, but the IRD is somewhat particular about the costs it will allow as deductible. First, no deduction is available in relation to income from employment. For the self-employed the commissioner recently issued some guidelines.

Tour organisers may apply to the department for prior approval of tour and conference deductions. These, however, will be subject to the circumstances of individual taxpayers, who will need to be able to substantiate their particular claims. This may require details of the itinerary, business contacts visited, diversions from the business itinerary for private purposes, and the total cost of the trip.

Costs specifically related to business will be deductible and those specifically private will not. As to the basic travel fares, these will be deductible in full or in part, or not at all, according to the trip's mix of business and private purposes. An apportionment may be based on the number of days devoted to each activity. **Acknowledgement Denton Donovan**  626 apiaries to be infected (Table 5). The overall reported incidence of AFB in New Zealand beehives in 1995-96 was 0.6% of hives and 3.6% of apiaries, down

from 0.8% of hives (25% reduction) and 4.2% of apiaries (14% reduction) in 1994-95 (Table 6).

The suggestion has been made that the reduction in AFB incidence in the last five years is due to beekeepers underreporting AFB hives to enable them to meet disease area freedom export certification requirements. However, the reduction in AFB reported by beekeepers during that time (13.0%) is similar to the reduction in the amount of AFB found by MQM inspectors (13.7%). This tends to indicate that the decrease in reported AFB reflects a real decrease in the incidence of the disease.

#### Costs of \$50 or less — need they be recorded?

What record must be kept of goods or services costing \$50 or less?

There can be some confusion. For GST purposes the special tax-invoice requirements under section 24 of the Goods and Services Tax Act of 1985 do not apply to items costing \$50 or less. However, this does not discard the need to fulfil general GST and income-tax requirements.

As a minimum the Commissioner of Taxes requires a record of the date, description, cost and supplier of all purchases. Supporting documentation such as an invoice or receipt detailing GST content is desirable to support the claim for GST.

Without such documentation, and in the event that the supplier was not registered and the purchase was not of secondhand goods, the commissioner may disallow the input tax credit.

However, if a non-registered supplier has represented that GST was charged, then the commissioner will allow the purchaser the claim and seek to recover GST from the supplier.

Acknowledgement Denton Donovan

# **Development Programme's Aim**

The aim of the Business Developments Programme is to help New Zealand's small and medium size enterprises gain access to the information and skills they need to compete effectively in today's globalised trading environment. The better the information available the better the quality of decision making and the greater the chance of successful enterprise and innovation.

The programme is based on two very important premises:

- \* That any assistance to business has to be appropriate in that it is tailored to individual business needs; and
- \* That the assistance is not provided on a "one-off" activity/project-related basis, but is provided as a means of building on a business's strengths and skills with the objective of helping it to become a better business performer.

The Business Development Board administers a grant scheme. Assistance is provided in three areas: Innovation/ research and development, strategy and implementation. The aim of the grant is to help clients without building dependence on government assistance.

The innovation/research element enables clients to test their strategic focus. For example, under innovation, assistance could be provided to improve a current product/service, while under research and development the development of new products/services could be supported.

The strategy element helps clients to determine their goals and objectives and their ways of meeting them, as well as to identify any necessary resource requirements.

The implementation element provides assistance for export-ready clients to develop offshore markets. For example, an advertising strategy could be tested in a new overseas market, or a representative could visit a new overseas market.

BDB grants available are: Preliminary Business Appraisal Capability Assessment (maximum grant, \$500); Innovation/Research and Development (maximum grant, \$10,000); Strategy Project (maximum grant, \$20,000); Implementation Market Research into New Overseas Markets (maximum grant, \$2500); Implementation Exploration Visit to New Overseas Markets (maximum grant, \$3000); Implementation Tradefair Participation (maximum grant, \$7500); Implementation Promotion/Advertising in New Overseas Markets (maximum grant, \$5000); Implementation Protection of Intellectual Property Rights in Overseas Markets (maximum grant, \$2000).

by John Sharp, manager of the Hawke's Bay Business Development Board

#### Grant limits

The grant scheme offers assistance on a 50-50 basis (ie dollar for dollar) to a maximum contribution of \$50,000 for all time to any one applicant. Clients can make any number of applications against this \$50,000 maximum but approvals are subject to a maximum of \$20,000 in any one July/June year. The annual maximum for the innovation/research and development element is \$10,000.

The term "maximum" refers to the amounts actually uplifted. Grants are GST inclusive.

#### Who can apply?

- 1. Applications can be made by any individual, business, trust, organisation, iwi authority or incorporation, etc, based in New Zealand for tax purposes.
- 2. Clients employing more than 50 fulltime equivalent employees and their subsidiaries (including overseas companies) are not eligible.
- Grant assistance is available only to clients who are selling or have the potential to sell in overseas markets or in competition with imports.
- 4. Assistance is available only for legal activities.
- 5. Assistance is not available for activities which are directed at the Australian market; this is in line with New Zealand's obligations under the Australia and New Zealand Closer Economic Relations Trade Agreement.
- 6. Assistance to local authorities is available only to help them investigate projects outside their normal scope of activities. Government departments are not eligible.
- 7. Applicants will have to satisfy their board that they are at the stage where a grant is appropriate - that they wish to test or apply a skill that they have acquired or have had access to through either the Business **Development Programme's business** training element or through some other means. The board will base its decision on the appropriateness of the grant on the basis of the capability assessment - which will clearly show the level of capability/skill - or it may waive this requirement if applicants are able to demonstrate their skill/capability level through some other means.
- Applicants seeking a grant under the innovation and R and D element will have to show that they are developing a new product/service to the region (R and D component) or

that they are looking to introduce significant new technology into an existing product/service (innovation).

#### How do I apply?

You can apply for a grant by lodging an application with your local Business Development Board. Application forms are available from the boards (contact details at the end of this article).

Applications should be made to the development board in your area. Board personnel are available to advise you on how to complete the application form. An original of the application form is required in each case, but photocopied or faxed supporting documents are acceptable.

Applications are initially assessed by the board staff. The staff then present these to the board for decision, except in the case of the preliminary business appraisals and capability assessments, where boards may delegate the power to make decisions to board managers.

#### Payment procedures

Once a grant has been approved it is paid on a reimbursement basis. Claims can be made any time after the client has confirmed, in writing, their acceptance of the written grant offer from the appropriate board. All claims must be made to the board by the expiry date of the grant.

#### Appeals

If your application is declined, can you appeal this decision?

Board decisions on applications are final. Clients do, however, have the right to ask the board for a review of the process by which a decision was made on their application.

John Sharp, Hawke's Bay Business Development Board manager, P.O. Box 1041, Napier. Phone: (06) 835-2044.

> Acknowledgement Business to Business



# "Apimondi" from a U.K. perspective

by Don Hannon

I must confess climbing anything higher than our front door step, such as mountains, was never for me. But Switzerland isn't all rocks, and in August it welcomed beekeepers worldwide at the Apimondia Congress. "Beekeeper meets beekeeper" was the friendly motto.

Lausanne, by Lake Leman, was the French speaking backdrop. Its superb Palais de Beaulieu was the venue, with its large complex of halls, air-conditioned cinema and committee rooms. I needed the plan to find my way round.

With so much, there is no way one reporter could do justice to such a large get-together. Twelve might manage it.

#### **Bees In Switzerland**

Twenty-five thousand Swiss beekeepers keep 300,000 hives, They have 18 hives for each square mile, but there can be 54 near towns. Honey yields are about 11kg, more near rape and dandelions. At about \$22.00 per kg it might be more profitable than my bees. Well that's what we tell the tax man. They use four types of hive: Langstroth, Dadant-Blatt, Ritter and Swiss (Bürki-Jecker).

They keep three kinds of bee: black in the centre and east, *Carnica* next to Germany and France, *Ligustica* in the Italian regions, with Buckfast as well. Mountains isolate mating stations and help achieve pure matings.

Some seasonal migration goes on. Hives are at heights from 600 to 6000 feet, so the weather and timing of flows vary a lot.

Swiss people speak German, French, Italian and Romantsch in different regions. The national beekeeping organisation has associations for the three main language areas. Each produces its monthly journal in its own language with 17, five and one thousand copies.

Association concentrate on training, information and breeding, with 150 counsellors, 50 breeding specialists and 200 honey inspectors. The Federal Research Station gives support, and trains 500 part-time disease inspectors. The Swiss organise all with typical efficiency in the land of naturalist Francois Huber.

#### Congress overview

Imagine a five day Stoneleigh, with over 4000 bee folk from 65 countries. At least 54 from Grande Bretagne.

- And what was there:
- about 400 reports on bee topics;
- an excursion day to a bee display and a tourist attraction;
- an exhibition of poster and equipment on Swiss beekeeping;
- bee videos, most in English or German, in a cinema;
- commercial stands like Stoneleigh, but more and from wider afield.

The main talks were videoed. Copies could be purchased, hopefully for the UK PAL system. Many slides were too detailed for video, and the hall and cinema large screens were too dark to see clearly.

Our Cecil Tonsley retired as a Vice-President, after many years of active support. He was elected an Honorary Member; many congratulations.

An Apimondia closing ceremony has to be seen once, with brass band and girls in national costume carrying the medals. Everyone on the platform seemed to give the President something; I hope he has cupboards for them all. Clive de Bruyn represented BBKA; he had a poster on the spread of Varroa at home.

Medals and commendations galore; many to Swiss keepers showed that hosting Apimondia had given Swiss beekeeping a big boost. I left hoping BBKA will invite Apimondia here one day and boost our beekeepers. Surely we could obtain sponsors as the Swiss did?

#### Four hundred reports

Many international bee scientists came, but there were more keepers. I felt quite at home, as one usually does with

beekeepers, talking "things bee". Reports were made in three ways:

- talks in the main hall, with continuous video on a large screen or speaker or slides;
- specialist talks for scientists in another hall, a chance to learn;
- · posters on vertical stands.

Translations on headsets were in the main hall (only), for the five official languages, German, French, Italian, Spanish, and English — thank goodness. Can you imagine the complication of translating both ways, between 10 possible pairs of languages? Don't expect perfection; it's not possible.

#### Varroa — The latest

Varroa is still the major scourge. There did not seem to be major breakthroughs, but useful confirmation of treatments. Danish and Swiss Institutes advise keepers on soft chemicals. Soft they may be, but keepers should still take care, with gloves as the minimum.

A Danish poster compared September treatment 1990-94 with 15% lactic acid (LA) in two apiaries. Their conclusion is that autumn treatment with LA in broodless colonies is sufficient to control Varroa *if* re-invasion is low. If it is high, another treatment in summer is needed. The Danes check infestation levels by counting mite fall onto a screened board. Denmark is at the same latitude as Scotland.

The Swiss Federal Dairy Research Institute advice covers lactic, formic and oxalic acids, and Apilife VAR (essential oils, mostly thymol) with drone removal the following spring in some cases. The oils and LA approaches sound much less risky to us than formic and oxalic acids.

Monitoring of infection level is essential, again by counting mite falls. The questions raised in the UK on relying on mite counts don't seem to apply abroad. Are we being too idealistic expecting a perfect result?

Sandoz's representative stressed the importance of treating with the correct amount of Apistan and the correct times of treatment. This achieves optimum control, and reduces risks of contamination of honey and wax, and delays the onset of mite resistance to chemicals. A treatment to reduce residues in wax may be available for 1996.

Perhaps the best news was the appearance of resistance to Varroa in Tunisia. Bees transferred to France retained this trait.

Other Congress topics were grouped as:

- beekeeping economy;
- bee biology;
- bee pathology;
- melliferous flora and pollination;
- beekeeping technology and equipment;
- apitherapy;
- beekeeping in developing countries, with Nicola Bradbear from UK.

However, talks were cut to 15 minutes with brief introductions only, preventing full explanations. So we must wait for publication of scientific reports to get things in full.

#### The posters

This is a good way to get over lots of information in a small space, ignore or just scan. It gets over a great variety of interesting points rapidly. Authors, like Steve Taber, stood by their poster at one point to answer questions.

Poster contents varied from descriptions of hive and nucleus designs to abstruse chemical analysis. Midway, posters were changed for a new set.

Researchers in the Ukraine recommended four colours for the fronts of multiple nuclei: They help bees locate their own colony. The colours are: Any white or blue, "aluminium", yellow, black or red.

There were 12, 18 or 36 nuclei in one box, possibly for Continued on page 23

overwintering - brrh, I thought winters were cold there.

They claimed the main cause of drifting between nuclei, in these boxes, was bees walking between entrances. So they added exterior entrance tubes in different colours. Tubes were about 70mm long and 9mm in diameter.

Steve Taber gave a talk on finding hygienic bees. These bees find and clear brood infected by AFB or Varroa. Finding hygienic bees has the merit of being something that most keepers could do and with luck get something worthwhile.

Posters would be good in our shows. Like the interactive Internet you don't have to sit through something that bores you; just walk on by, or stand, stare and think.

#### Trade stands

These are always interesting. Stainless steel seems to be everywhere for the honey house; also different designs of nuclei.

The Swiss Jenter system of raising queen cells is well-known in the UK now. More recently the French Nicot system has also become known, receiving good reviews in a German book. New Zealanders showed a brand new system. It appears more suited to larger scale use in raising queens and royal jelly.

Each system looks less fiddly to use than its predecessor but I am still waiting for one that fits into shallow frames. Never satisfied some people.

#### Swiss bees

In the Palais garden beekeepers displayed live bees in hives, and in Apidea and Ordinance mini-nuclei. The Swiss Apideas is well known here.

The Ordinance looks a bit like a wooden Apidea, made to save money, with three hinged frames. I was told its insulation was poorer and they keep the candy reserve and don't expand to five frames. Conditions in the mountains can vary so much and prevent access.

Their Apideas had the same problem of entrance blocks dropping with age, and they too cure it with a piece of wood. I had heard of it before, but was still astounded by the docility of Carniolan bees, no stings with my nosy nose millimetres from the bees. Leave your veil at home. I suppose Swiss keepers profit from breeding programmes in Germany: Could we, should we, shouldn't we?

Above all friendliness was apparent, with ready explanations of how they keep bees.

#### An excursion

There was a choice of 12 destinations. I went to the training and demonstrations to the public and for bee-house beekeeping. It is totally different from our teaching apiaries: A hexagonal doughnut of a building, with its hole open to the sky.

Inside they had Swiss and Ritter hives on a narrow stage, with standing room only for spectators. Hives had coloured entrances into the doughnut hole.

The Swiss hives had glass panes at the back, behind doors to see the bees, with space for just two supers. The few Ritter hives were more like our storey hives, with metal angles on vertical hive corners.

Louvre windows at the apex of the apiary gave exits for the bees. Even on a sunny August day further south than Lyon, the light was not good for seeing eggs.

Novices on the other side of the apiary could use five microscopes or watch the hive entrances.

On over 110km of rail and 200km of road I saw only one beehouse; they must be hidden better than in Bavaria.

#### And the next Apimondias

Apimondia hold congresses every two years. They decided to give six years' notice for easier forward planning. Delegates voted for:

•	Antwerp,	Belgium,	September		
	1-6 1997.				
	Vancouver,	Canada,	September		
	13-21 1999.				

• Johannesburg, South Africa, 2001.

So get out your diary. Next time I will go a day earlier to collect the programme the day *before* it starts. Then I can plan when to go where, before it happens. Also I can get a translation headset that works properly. I expect the best destination excursions will be oversubscribed again.

I hope next time to hear a talk covering beekeeping in the host country in much more detail, their differences, problems and solutions.

You just have time to learn Flemish or French and confound those who say the English are not literate.

"Beekeeper meets beekeeper" was the motto and it worked. The opportunity to see beekeeping which was different from ours was, as always, absorbing. It was impressive to meet people who welcomed us in four languages fluently, plus beekeeping. I must get back to my French classes this autumn. I only have two years.

**Courtesy Beecraft** 



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# **Collecting a swarm**

Like all beekeepers I've been asked to pick up swarms from some pretty strange places in my time. But perhaps the strangest was the time I was waved down outside the local sun club. It seems they had a swarm hanging out of a tree just a bit too close to their swimming pool for comfort. The man offered to get everyone dressed, but I for one only wear clothes to keep warm and stop people laughing at me, so I told him not to bother. The sight of a few extra acres of skin wasn't going to bother me and who knows I might even enjoy it. Mind you I drew the line at taking my own clothes off, not from any sense of prudity mind you, but I prefer to collect swarms in overalls, gloves, and veil, even in hot weather, funny that.

STOP! Read no further, you're not entitled to find out what happened until you've put some film-canisters, or a similar container, in the cab of your truck, to collect type samples of honey to send off to Dr Peter Molan for his research on the antibacterial properties of the different types of honey.

Anyway a whole mob of these club members gathered around to watch, brought me over a ladder and generally just stood around looking interested while I lit my smoker and got an empty box ready. Everything would have been all right if they had just left me to it, but one of them, a very attractively endowed young lady, insisted on holding the rather rickety ladder as I climbed up. This had a rather adverse effect on my concentration, so much so that I missed the fact that I'd stepped off the top of the ladder until too late and promptly fell off clutching at a branch on the way down. This sent one corner of the swarm flying out in every direction as it flicked back.

Now this being a family magazine, I won't detail the jokes that go around about the supposed effects of getting a bee sting on a certain portion of the male anatomy (but I can assure you from a most unfortunate personal experience that the effect is quite the opposite to the one alluded to by popular folk-law). Fortunately most of the members probably escaped unscathed, being generally fairly athletic types with remarkably quick reflexes and take-offs. By the time I'd stopped laughing, picked myself up off the ground, waited for the swarm to settle again and got it into a box, half an hour had gone by, with no sign of further sightseers. I put the swarm on the back of the truck and went up to the club room to make sure everyone was all right. I need not have worried

however, a few of them were rubbing antihistamine cream on to the odd sting on an arm or leg, but they all looked pretty well okay. Then I caught sight of the young lady who had caused all the trouble in the first place (or rather caused me to cause all the trouble), her breasts were very red and sore looking and she rubbing cream on them was industriously, but the strangest thing was that they had swelled to nearly twice their previously carefully noted proportions. Well I've never been so embarrassed in all my life, she saw me staring at her, I apologised for causing her such pain, she looked at me queer and started looking around for a large supportive male and everything wasn't really sorted out till her younger sister walked in sporting a rather sore looking sting on her left buttock.

After a round of explanations everything got sorted out in the finish and we all had a good laugh. It seems it was all a case of mistaken identity and the older sister had been accidentally wacked with a tennis racket. All in all a most interesting experience, but next time they have a swarm of bees they can call in a different beekeeper.

Peter Berry

## Guinness seeks out offbeat and bizarre

London, — Mel Blanc, who provided the cartoon voice for Bugs Bunny, was allergic to carrots.

In Alaska, it is illegal to look at a moose from the window of an aircraft.

France's Charles VI, convinced he was made of glass, hated travelling by coach in case the vibrations shattered him.

For those in search of the offbeat and oddball around the globe, the Guinness Book of Records team has now turned its attention to international oddities.

The publisher, famed for the definitive manual for record-breakers, has unearthed scores of eccentricities to prove truth is stranger than fiction.

The royal families of the world make a hefty contribution to The Guinness Book of Oddities, published in London.

Emperor Menlek II of Abyssinia was so impressed by the invention of the electric chair that he ordered three from New York.

He sadly overlooked the fact that electricity had not reached Abyssinia. Undeterred, he used one as his throne.

King Pepi II, ruler of ancient Egypt, hated flies so much that he always kept handy a collection of naked slaves covered in honey to keep the swarming hordes at bay.

Fantasies abounded in twisted royal

minds.

Princess Alexandra of Bavaria was convinced that as a child she swallowed a grand piano.

England's King George III, his madness immortalised in an Oscar-winning film, leapt out of his carriage and started talking to a tree, thinking it was the King of Prussia.

The United States wins the race to come up with the most eccentric competitions — from cow-pat tossing and armadillo racing to a moose-dropping festival.

Britain proudly hosts the world wormcharming championships. They are wiggled out of the ground by vibrating garden forks.

Norway has its own festival for grandmothers who skydive, race horses and scuba dive.

But perhaps the most intriguing section lists the strange laws that prevail across American states. Elephants have to be kept on a leash in Milwaukee. Barbers may not eat onions in Waterloo, Nebraska. It is illegal to carry an icecream cone in your pocket in Lexington, Kentucky.

Kirkland, Illinois, has a tough one to administer — bees are forbidden to fly over the town. — Reuter.

Acknowledgement Evening Post

### New Zealand BeeKeeper Binder

If we were to purchase a quantity of binders that you could put your 11 issues of the magazine in would you be interested?

We would have the spine printed NZ BeeKeeper etc and it would look very smart in your bookcase.

Cost? If we purchase 100, the cost would be about \$15.00 per binder. This would take the whole year's magazines in (you would not hole punch the magazine).

If we purchase 2000 the cost would be about \$8.00.

If you might be interested, (no obligation) please fax, ring, write, to me or tell your local secretary. All contact numbers and addresses on the inside front cover.

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# Hazardous Substances and New Organisms Act

## What happens after the Act becomes law?

Explosives, toxic substances, genetic modification, new organism imports, flammable materials, Biotechnology, corrosives

This information is in a series designed to assist understanding of the Hazardous Substances and New Organisms Act. The information explains the process for bringing the Act into force and how the Act is intended to work when in force. It is not to be taken as defining or providing a definitive interpretation of the relevant parts, sections or subsections of the Act. Questions of interpretation are matters for the Courts to decide. The information is intended as a guide only and you are advised to carefully consider the express provisions of the Act itself.

#### A new law

The Hazardous Substances and New Organisms Act became law on 10 June 1996. However, most Parts of the Act will not come into force for at least a year, possibly, longer. Until then existing laws and all their regulations will continue in force. The relevant laws are:

- Dangerous Goods Act 1974
- Explosives Act 1957
- Toxic Substances Act 1979
- Pesticides Act 1979

The people and agencies with responsibilities under those Acts will also continue to operate as usual until the main Parts of the Act are brought into force.

#### What is happening now?

There are three main reasons for the timing between the Hazardous Substances and New Organisms Act being passed and the Act coming into force:

- Regulations to make the Act work in practice have to be developed
- A new government agency, the Environmental Risk Management Authority (ERMA), is to be set up to implement the new law
- The methodology used for assessing hazardous substances and new organisms has to be developed.

#### What are the regulations?

The regulations are the statutory rules and controls through which the new Act operates in practice. The Ministry for the Environment is working with other key government agencies and regional and district councils to develop these regulations.

The process of developing regulations was begun in November 1993 with the publication of the document called *Proposals for Regulations under the Hazardous Substances and New Organisms Bill.* Public submissions on this document were requested, and 115 written submissions were received. The Ministry has also met with many individuals and organisations who deal with hazardous substances or new organisms to discuss how the Act would operate through regulations.

Proposals for Regulations under the Hazardous Substances and New Organisms Bill is still available to anyone wanting more information about the regulations, though submissions have closed.

#### What will the regulations deal with?

The key areas covered by regulations are:

- Defining what is (and what is not) a hazardous substance and classifying substances according to the hazard (section 74)
- Setting the direct controls on each hazard including:
   acceptable levels of exposure to the hazard such as

- the acceptable amount of heat from a fire a person may be exposed to, or
- acceptable amounts of ecotoxic substances in the environment
- requirements to stop a hazard occurring such as keeping ignition sources away from flammable materials (section 75)
- Specifying requirements for hazardous substances control systems. These are requirements for:
  - packages including strength, resistance to contents, closures etc
  - containers including fixed tanks, truck and rail tankwagons
  - identification such as labels and datasheets
  - the conditions to be met when disposing of a substance
  - emergency management systems such as first aid information or fire fighting equipment
  - tracking systems for highly hazardous substances such as high explosives
  - the knowledge and skill to be required of persons who will be handling highly hazardous substances (section 76)
- Setting limits on what is a genetically modified organism (section 140 (1) (a) and (b))
- Specifying methods to assess the level of risk from various types of genetically modified organism development (section 41)
- Specifying risk species of new organism links to the Biosecurity Act (section 140 (1) (h))
- Controls on compressed gases (gas cylinders) (section 140 (1) (c))
- Methods for quantity estimation (section 140 (1) (d))
- Requirements for laboratories handling substances otherwise exempt from the legislation (section 140 (1) (g))
- Special requirements for fireworks available to the public, eg, for Guy Fawkes Day (section 140 (1) (r))
- The qualifications of enforcement officers and test certifiers (section 140 (1) (g))
- Forms and documentation (section 140 (1) (m)).

#### What will the new government agency do?

The Environmental Risk Management Authority will be responsible for a number of tasks, including:

- assessments of hazardous substances and new organisms
- advising the Minister for the Environment on the control of hazardous substances and new organisms (including regulations)
- ensuring that compliance procedures (such as inspections, audits, and prosecutions) are working properly
- undertaking the transfer of existing hazardous substances and new organisms to the new controls.

It is expected that the members of the new Environmental Risk Management Authority will be appointed over the next few months. These people will have knowledge and experience in matters likely to come before the Environmental Risk Management Authority, and will be supported by specialist staff. The practical details of setting up a new organisation will also have to be addressed.

#### Continued on page 27

#### What is the assessment methodology?

The methodology is the process to be used in assessing hazardous substances and new organisms. It must be in place before any assessment can be undertaken and must be applied consistently to each assessment carried out under Part V of the Act. The methodology will be developed though a public process similar to that required for regulations (see section 9).

The six to eight people to be appointed members of the Authority will advise on the assessment methodology. It is expected that proposals for the methodology will be published and comments sought.

#### What should we be doing?

If you are a manufacturer or importer of hazardous substances, make sure that you comply with the current legislation. The transition to the new legislation will be easier if your current products are recognised as legally in New Zealand under

# **Beekeeping Memoirs**

#### **Bull Number 3**

About twenty years ago I formed a beekeeping partnership with my son Neil. At the time we had two, five-ton, long wheelbase Bedford trucks.

The job this day was to take some of our hives out of a restricted beekeeping area. As we had to have all our hives out of this area by 10th November we made every effort to honour our obligations. Years ago the tutu closed area was very good for spring build up of hives and raising nucleus colonies. It is not so good today because of the planting of pine forests in a number of these areas, and also swamps being drained and willow trees removed.

We were to take two truck loads of hives to our summer area for the clover flow. Neil and I took a truck and a helper each and at first light in the morning we loaded our trucks and put a large scrim over the hives. My helper was a nervous young man from the city. We arrived at my apiary site, pulled the scrim partly back and started to unload half the hives in the usual place. I had not noticed that a bull had dug a hole in the ground just in front of the first row of hives. We almost had the usual number of hives unloaded when the bull arrived. He seemed to think that it was his piece of turf and did not want us about. He started to dig his bull hole deeper with his front feet and head, getting a good sweat up in the process.

Much to his disgust, the bees began attacking in droves. The bulls defiant bellow changed to a high-pitched, wavering screech. My helper was getting more and more nervous, and so was I. I suggested to him that if the bull rushed our way, to throw the hives we were carrying at him and leap onto the back of the truck.

It was touch and go who would quit first. Us or the bull. At last the bull could not stand any more stings and took off for the far end of the paddock. I thought for a moment he was going to go through the wire fence, but he seemed to just bounce off it with a squeal of fencing wire being pulled through post staples. We quickly pulled the scrim over the remaining hives on the truck and drove across the paddock to the gate way. My man opened and shut the gate behind us in record time.

As I drove along the outside of the fence I could see about a hundred cows with raised eyebrows still looking at the bull and no doubt wondering about his strange noises and antics. Soon after that my man found some excuse to go back to city life. I called that apiary the Flying Bull yard after that. It had that name for years after.

While on the subject of flying, I will mention that about four months ago I flew over the old power house at Waharoa where I used to work before we moved to Tauranga and started full time beekeeping. I flew with a friend in his home built aeroplane existing legislation. If this is not the situation when the Hazardous Substances and New Organisms Act comes into force, you risk prosecution and will need to have these products assessed under the new Act.

If you have technical expertise in any of the areas covered in the *Proposals for Regulations*, you may be able to assist in the development of regulations. The Ministry for the Environment will be seeking the advice of technical experts to ensure that the new regulations are technically sound and complete.

If you have enforcement or other responsibilities under the current legislation, start familiarising yourself with the new Act and continue business as usual.

For further information contact: Dr S R Vaughan Project Manager, HSNO Reform Ministry for the Environment PO Box 10-362, Wellington, Fax: (04) 471 0195.

#### by Ron Mossop

with a nice little Rolls Royce engine purring away up front. I sat beside the pilot in his wife's navigator seat or the navigator seat that I heard one other pilot's wife laughingly refer to. As we looked about up there I thought of the old song, "The gallant young men in their flying machine, looping the loop and defying the ground." The trouble is we are not young men any longer. I am nearer eighty years of age than seventy and my friend is about the same age. I wasn't a bit worried about the pilot because he had flown Kitty Hawk fighter planes in the Pacific war and the Japs did not get him.

When I looked down, I could see that horrible place where I once worked, now obsolete and deserted. It only seemed yesterday since I helped commission it when it was brand new. I have no regrets taking on commercial beekeeping. It has been a good life.

### Have you got any photos of bees?

Huia Publishers is looking for a number of photographs of honey-bees with which to illustrate a book in Maori on the honey-bee for use in primary school immersion classes. We are hoping to get photographs (mostly close-up) depicting the following activities of the honey-bee:

- · Group of honey-bees
- The two types of wax cells
- · Egg being laid in cell by queen
- · Larvae being fed by workers
- Adults emerging from cells
- Adult bees leaving hive
- · Adults bees gathering food
- Bees swarming
- Making a new queen
- New queens fighting
- Bees finding new hive

If you have photos which may be suitable, could you please contact:

Ross Calman Huia Publishers P.O. Box 17-335 Wellington. Phone: (04) 473-9262 Fax: (04) 473-9265

A small fee will be paid for any photos used.

## **New Zealand Gold Medal Recipe**

Mille Feuille of pork, polenta and winter vegetables with a honeydew hollandaise and taro quenelles

by Shaun Woodroofe and Colin de Munnik, Wellington Polytechnic

## Mille Feuille

Serves 4

- Ingredients
- polenta 250g 1kg pork scotch fillet --- cut into medallions 1/4 pumpkin 1 large aubergine
- 2 zucchini
- 15q butter

2

#### Hollandaise

egg yolks 250g butter - melted

white vinegar 1 tbsp 1

honeydew honey tbsp pinch of salt and pepper

Quenelles

350g Taro (approx) creme fraiche tbsp 1 pinch of salt and pepper

#### Method

#### Preparation for Mille Feuille...

Cook polenta according to instructions on packet. Once cooked, press into a Swiss roll tin lined with buttered tin foil and bake at 220°C until set. Cool, then cut into triangles, roughly the same size as the pork medallions. Bat out pork medallions with a meat mallet and refrigerate until required. Cut pumpkin into 4mm thick slices and place on a greased baking tray. Cut aubergine to the same thickness. Top and tail zucchinis and slice wafer thin.

#### Cooking...

#### Hollandaise

Reduce vinegar by half. Cool. Place egg yolks in a blender, add vinegar and mix well. With blender running, gradually pour in melted butter, leaving behind the sediment left at the bottom. Add honey and season to taste.

#### Quenelles

Peel, dice and boil (or steam) taro. Drain well and blend with Creme Fraiche. Season to taste.

#### Mille Feuille

Bake pumpkin at 200°C until tender and lightly coloured. Melt butter in pan and season pork. Cook pork until golden brown on both sides and pale pink in the centre. Grill aubergine until cooked right through and slightly crispy. Blanch zucchini in lightly salted boiling water until "al dente". Reheat polenta triangles under grill.

#### Service...

Stack all of the ingredients (alternating the angles) in the following sequence: Polenta, aubergine, pumpkin, pork, hollandaise, zucchini. Reheat and top with polenta. Form quenelles of taro with dessert spoons and arrange three (evenly spaced around the mille feuille on each plate. Garnish. Serve.

#### Almond Crunch Candy

Now for a recipe for almond lovers. Be sure to thank honeybees for pollinating the almonds so we can make some delicious foods such as this candy. By the way, this recipe was a prize winner in both 1986 and 1988. That's a good recommendation!

cup butter 1/3

- cup slivered almonds 3/4
- 1/4 cup honey

Butter an 8x8x2 inch baking pan. (You can use cooking parchment if you wish). Melt butter in heavy skillet; stir in honey and almonds. Cook over medium heat, stirring constantly until mixture turns golden brown, about 5 minutes. Spread in prepared pan, working guickly. Cut with sharp buttered knife. Cool and store covered in refrigerator.

#### Kansas Honey Producers Cookbook. Honey Yum-Yum Balls

Yield: 24 balls

- 2 cups Rice Bubbles
- cup peanut butter, creamy 1/2

1/2 cup raisins

- 1/2 cup honey
- 1/2 cup confectioners' sugar

Mix together all ingredients except the confectioners' sugar. Form tablespoon sized balls. Roll in the sugar. Refrigerate until firm, or the mixture can be pressed into a shallow pan. Chill and cut into squares.

#### Honey Recipes, North Carolina State Beekeepers' Assn. Special Occasion Candy

This next recipe is excellent but requires baking, so some children may need help with that.

1¼ cups oatmeal

- cup chopped walnuts 1
- 1/2 cup toasted wheat germ
- 1/2 cup chopped dried apricots
- 1/3 cup sesame seeds
- 1 tsp cinnamon
- 1 cup honey

Combine all ingredients in the order listed, mixing well. Spread in a 13x9 inch greased pan, (I like to line the pan with cooking parchment). Bake at 350° for about 25 minutes, stirring 2 or 3 times. Turn out immediately onto greased foil. Cool. Break into small pieces.

#### Nature's Golden Treasure Honey Cookbook, Joe M. Parkhill.

Pralines

Yield: 1 dozen pralines.

- 1/2 cup honey
- 1/2 cup buttermilk
- 1/2 tsp soda
- dash of salt
- tbsp butter 1
- 3/4 cup pecan pieces

In a saucepan, mix honey, buttermilk, soda and salt. Cook over high heat for 5 minutes. Add butter and continue to cook, stirring frequently until mixture forms a soft ball when dropped into cold water or reaches 234°. Remove from heat and cool for 5 minutes. Beat with an electric beater until creamy. Add nuts. Immediately drop by the tablespoonful onto buttered wax paper. For storing, wrap each praline in plastic wrap

Naturally Delicious Desserts and Snacks, Faye Martin. Acknowledgement Bee Culture

- SUITABLE NEW ZEALAND HONEYS FOR THIS MONTH'S RECIPES Clover and clover blends are perfect for any confectionery or try experimenting with honeys like Rata, Tawari and even Manuka for completely different flavours. Tell us what works for you

## Library news

Once again Trevor Bryant gave a box full of goodies to the library. Many thanks Trevor. Some of it means second copies, the following are additions: Beck B E &

Beck B.F. &	
	Honey and your Health. 1947, 231p, UK. ea, Kiwifruit Marketing Review. 1994,
	138p, NZ.
Bryant T.G	Feasibility study and Enterprise analysis — Pollination, Grower and Beekeeping
Bryant T.G	Servicing Company. 1987, 14p, NZ. Financial Monitoring Report — Beekeeping and honey producer. 1986/ 88, 20p, NZ.
	Arable Farm Crops. 172, 345p, NZ.
	Farmers & Growers Guide to Health and Safety in Employment Act. 1992,47p, NZ.
Douglas R. &	
	Options for Kiwifruit — An Industry in Crisis. 1992, 62p, NZ.
	Employment Rights and Obligations, poster. 1992, NZ.
	Basic Bookkeeping for the Farmer and Orchardist. 1992, 32p, NZ.
	A Book of Bees and how to keep them. 1989, 193p, USA.
I.A. Root Coy	Honey recipes. USA (pamphlet).
Inland Revenue Department	GST Guide. 1989, 128p, NZ.
Kiwifruit Growers	
	Kiwifruit Industry Review Stage III. 1995, NZ.
La Manna P	50 Steps to Success. 1994, 22p, Aust.
Lawrence J.P. &	
	The Peter Principle. 1969, 157p, UK.
McKenzie R	The Amazing Bee. 1989, 23p, NZ, (from NZ Geographic).
MAF	Kiwifruit cropping with HI-CANE. 1989, 53p NZ.
Miller D	Common Insects of New Zealand. 1971, 178p, NZ.
NZ Kiwifruit Author	National Research Conference. 1988, NZ.
Norris P.E.	About Honey. 1956, 72p, UK.
Scriptographic Pub	Quality and You. 1992, 15p, USA.
Stockly G	Trees, Farms and the New Zealand Landscape. 1973, 220p, NZ.
Rice N.V Yates J.S. &	Queensland. 1990, 132p, Aust.
O	A

Campbell E.C. ........... Agricultural Botany. 1968, 233p, NZ. 274 slides covering travel and beekeeping in Canada, United

States and Israel. 490 slides covering beekeeping aspects, equipment, pollination,

field days, courses etc.

#### Frank and Mary-Ann Lindsay supplied the following tapes:

- No. 22 Waikato Fielday 1995, 2 hr, 29 mins. Loan fee \$3
- No. 23 Pre Conference Seminar 1995 Christchurch. "Pit falls and how to avoid them," Dale Gifford; Rural Lending, Grant Bright; Beekeeper of the Year, Bruce McCuskel; Preparations for Retirement, David Penrose. Loan fee \$3
- No. 24 Pre Conference Seminar 1996, Wanganui (1). Loan fee \$2
- No. 25 Pre Conference Seminar 1996, Wanganui (2). Dr P. Molan and Reports. Loan fee \$2.
- No. 26 Pre Conference Seminar 1996, Wanganui (3). Loan fee \$2.



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	IMPO	RTANT	DATES	FOR <sup>1</sup>	1996	
BRA	ANCHES SEN	ND YOUR MEE	TING DATES IN	FOR 1996.	NO CHARGE.	
EXECUTIVE MEETING	GS					
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MAGAZINE						
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Copy/advertising deadline			<u></u>			
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President: Arthur Tucker,				-		
Secretary: Mr Harold Hag	gemann, 33 <sup>-</sup>	Takaha Street,	Whangarei. Teler	ohone: (09)	437-0098	
Contacts for advice: H A. Tucker 438-4283.	. Hagemanr	n 437-0098, A	Gordon 435-0	368, J. Gar	den 437-5804, P.	Smith 437-5320,
A. TUCKET 430-4203.						
$\star \star \star CLU$	J <b>BS</b> PL	T YOUR M	EETING DAT	TE IN HE	RE FREE	***
AUCKLAND BRANC	н	FRANKLIN	BEEKEEPERS	CLUB	SOUTHE	RN NORTH
Secretary — Jim, phone: (09)	238-7464		Sunday of each			BRANCH
			r cuppa and disc		Phone: Fra	ank 478-3367
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SOUTH CANTERBURY BI			ne: (09) 294-7015	5		KI AMATEUR
The next meeting will be hel		All welco	me — Ring for ve	enue.		06) 753-3320
24th September at the Me Rugby Club at 7.30pr						
Guest speaker: John McKa			E'S BAY BRAN		WAIKAT	O BRANCH
South Pacific Seeds, to ad	ddress		nonth at 7.30pm.			(07) 856-9625
the meeting on his requirements for pollina		Cru	use Club Taradal	е.		
requirements for polina	uon.	Phone	: Ron (06) 844-94	193	WAIRARA	PA HOBBYIST
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Phone: Brian (03) 318-0	0732		10am — 5pm.			) at Kites Woolstore,
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CHRISTCHURCH HOBBYIS	an older of state and state of	DOVE	DTV DAV DDAN	сu	11. (00	, 0,0,0040
These are held on the 1st S each month, August to May,			RTY BAY BRAN eathon Saturday	10.000 kills	WELLINGTON	N BEEKEEPERS
January on which the	e	21	1st of September		ASS	OCIATION
2nd Saturday is applica	able.	C	Details contact:			econd Monday of
The site is at 681 Cashmer	e Road,	Barry	Foster (06) 867-	4591	the month (e	except January)

commencing at 1.30pm. Contact Peter Silcock, phone 342-9415

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in Johnsonville. All welcome, contact Frank Lindsay (04) 478-3367.

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