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The NZ BeeKeeper wishes all readers a very Merry Christmas and Prosperous New Year

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Notes from the Executive

National Pest Management Strategy
American Foulbrood

The Hon John Luxton, Associate Minister of Agriculture, has moved us another step closer to the implementation of the National Pest Management Strategy for American Foulbrood.

He has decided that there is no need for a board of enquiry into the proposed National Pest Management Strategy for the honey-bee disease American Foulbrood. It is only the second national pest management strategy proposal under the Biosecurity Act 1993 to have reached this stage. The first was for Bovine TB. On the basis of submissions received Mr Luxton has decided that there is not sufficient opposition to require a board of inquiry.

The executive of the National Beekeepers' Association wish to express their thanks to the many people who have worked so hard to bring about the setting up of the mechanism to eradicate American Foulbrood from New Zealand. This is such a milestone in the history of New Zealand beekeeping that we believe names of those who have worked so hard and been the driving force behind the national Pest management Strategy should be recorded here.

For the original concept we have Dr Mark Goodwin to thank.

For the constant pushing on government doors and trying to get government to see things our way including government negotiations, Nick Wallingford (immediate past president), Terry Gavin who took over from Ian Berry, has been for a considerable period of time the chairman of the Disease Control committee (later renamed the Pest Management Review Committee), guiding the team in its deliberations.

Cliff Van Eaton has had lots of input into the NPMS using his skills on government requirements and has created a substantial part of the text of the NPMS.

Bruce Stevenson I believe wrote the section on education, well done Bruce.

The following people have served on the Disease Control Committee and/or the Pest Management review Committee:-

Terry Gavin (chair), Jan van Hoof, Bruce Stevenson, Bryan Clements, John Moffat, Harry Brown (sec), Richard Bensemann, Graham Cammell, Peter Sales, Cliff Van Eaton, Warren Hantz, Allen McCaw, Ian Berry (past chair) and Graham Wilson.

Dr Mark Goodwin, technical adviser, Cliff Van Eaton, primary consultant and Ted Roberts consultant.

Also we extend our thanks to those who made submissions to help build the NPMS. Also to all the government personnel who guided us through the difficulties of new legislation. And last but not least our thanks go to the Honourable John Luxton who has decided that no enquiry is required.

The executive thanks you, one and all. There has been a lot of hard work done but the real challenge is still in front of us - to eradicate AFB. We can only say we have been successful when we have no more AFB in New Zealand and a thriving industry because of no disease. It is going to take your input, yes you! That is, if you live in New Zealand and you are a beekeeper. We believe it is very important that our industry has as much input into the running of the NPMS as possible, particularly when one considers the uncertainty of MAF Qual being around for much longer.

The other very important issue is to keep the likely increase of the Apiary (Commodity) Levy to a minimum. We have to get very good value for money for anything spent on the NPMS. The only bee in the ointment is the deficit NBA budget this year and the higher budget cost of the NPMS in the future over our current disease control programme.

We will all be doing our best to get a non-intrusive, easy to operate, affordable and an effective NPMS up and running as soon as we get the final go-ahead from the Minister.

We are making progress at last!

A news snippet: there is increasing public opposition to honey produced from transgenic plants. This places New Zealand in a very good position on the world market as we do not produce honey from transgenic plants. Let's keep it this way until adequate research has been carried out to ensure that nobody will be made unhealthy from honey or pollen produced from transgenic plants. We have been assured no transgenic crops will be allowed to be visited by bees in New Zealand. If you have any information to the contrary please advise us urgently.

Lots of hot drying winds, hope they stop soon as the chances of an average crop are reducing with every day of wind.

I would like to wish all a Merry Christmas and a Prosperous New Year.

Russell Berry, President

TO ALL OUR READERS

Harry and Janice Brown of Training In Progress, would like to say a very sincere thank you to all those people who supported us in so many ways this year. We really do value your comments. We would like to take this opportunity to wish you every joy for the festive season and may 1998 be an even better year than you dreamed.

The New Zealand **BeeKeeper**

THIS ISSUE

Letters to the Editor

Dear Sir

Our company is producing honey bee in Iran. We would like to develop our activities by working on Propolis, Pollen, Royal Jelly, Venom and bee's wax and establish a factory for producing food additives.

We would be please to co-operate with specialists for producing any kind of food products specially child's food with mentioned materials.

We can export venom and propolis with uncompetitive prices. We appreciate if you could possibly inform about your activities and any kind of co-operation you offer in this regard and the favourite analysis of venom and propolis.

To the pleasure of hearing from you soon, we remain.

Yours Truly

MR Hamidi, Box 19578-368, Tehran, Iran

Dear Sir

Royal Jelly New Zealand developed and owns all patent and copyrights to the EZ1 Queen and Royal Jelly systems and has not licensed anyone to sell a "Hobbyist Kit" system.

Royal Jelly New Zealand Ltd is developing a small system for the hobbiest keeper which will be ready in the New Year.

Our agent for the EZ1 Queen and Royal Jelly system is:

Ceracell Beekeeping Supplies, East Tamaki, Auckland, Phone (09) 274-7236

Or for further information please phone Royal Jelly New Zealand Ltd, on: Ph: (09) 837-8651, mobile 025 477-253, fax: (09) 837-8652.

Royal Jelly New Zealand Ltd is run by beekeepers producing Technology for the industry.

We thank New Zealand beekeepers for their support and wish all and their families a Merry Christmas and a Prosperous New Year.

Bee Happy

AP Fraser-Jones
Managing Director

Dear Sir

There are people who like to see the world, but are not in a position to join the international Jet set which is cruising the continents. I am one of them.

I would like to visit and stay in a country in the Southern Hemisphere for a period of some (four to six) months. Therefore I am looking for a possibility to assist a (professional) beekeeper in exchange for free board and lodging and a little subsistence money. I am offering my experience as a beekeeper and farmhand.

Working "au pair" (thus avoiding possibly needed workpermits) and taking care of my flight ticket I supposedly could have a travel-active 'holiday', enjoy your summer climate and moreover get acquainted with beekeeping methods in your country.

I would be very grateful when you would be able and willing to assist in this matter.

Maybe you could introduce me to relevant people or send me addresses and further data for this purpose.

Let me introduce myself a bit more.

Apart from my professional career I have been a beekeeper for almost 20 years now. With an average of 14 hives and my theoretical education (at the level of "beekeeper professor") I suppose my skills meet the necessary qualifications. In 1994 I have assisted at an apiary (1500 hives) in Toronto (Canada).

After my technical professional education I was employed by several companies and lately joined the government staff of the province of South-Holland as an official at the department of environmental health.

If you can help me in whatever way, please send a fax or a message to the below-mentioned fax No or E-mail address.

Thank you on beforehand for your effort. I am looking forward to response.

Sincerely yours

Jaap van Vliet
Tel/fax: +31252373599
P/o E-mail: tjwarink@worldaccess.nl

Dear Sir

The recent announcement from the minister giving the green light for our industry to proceed with the implementation of our PMS for American Brood disease, without the further delay of a "board of enquiry", should be hailed as a victory for consensus politics. The views of the 80% plus majority, who have consistently supported the strategy, as expressed in successive conferences, have been heard by the minister.

The celebratory mood of all involved in the department of the PMS has however been severely curtailed by the news that our president appears to have received the glad tidings with a very glum face. His rumoured attempt to illicit support for asking the minister to reverse his decision and call for a board of enquiry is totally reprehensible. The president is fully aware of the wishes of the huge majority. He has no right to let his own, well known, negative mind set on the PMS, interfere in his responsibility towards the members. If the president is successful in his apparent drive to undermine the PMS and commission a board of enquiry, the cost to our association could be considerable and incalculable.

Our president needs to wake up to the reality of consensus politics, the fact that he is the servant, not the master, of the members. Any further attempts on his part to undermine the progress of the PMS will undoubtedly lead to calls for his resignation.

Bruce Stevenson

Dear Sir

As a new levy payer, I am astounded at the tone and inferences of this Nick Wallingford ordinary member chap. My first introduction to the industry was through the June issue of your magazine. Sir I could not believe the vitriolic of the president's letter in this issue. I am surprised that you even bothered to print it.

To me what is worse is the continual criticisms of the industry and the people who serve it voluntarily. Not just through the magazine but on his Home page as well, which I subscibe to.

His November letter is a classic, he condemns the cost of the magazine, yet he was president, why condemn it now?

Yes I do enjoy the magazine but not the compulsory levy.

I would like to wish you and your readers a very Happy Christmas, and may their honey boxes overflow for 1998.

B Peterson, Nelson

Dear Sir

The NBA developed the concepts of a Pest Management Strategy for American foulbrood. The NBA conducted a lengthy consultation process. We had two votes at Conference that showed 80% in favour of the PMS. Beekeepers and branches made submissions to the Minister, after which the minister decided that there was no significant opposition to the PMS.

He forgot about the NBA's president! Russell Berry recently tried to get the executive to ask the minister to hold a Board of Inquiry anyway! A Board of Inquiry would be expensive and time wasting at a time when the Disease Control Committee is trying to get the PMS operational.

I believe our president is continuing to oppose the PMS, and the wishes of the Executive and the industry, while trying to look like he is supporting all of us. The PMS has the overwhelming support of beekeepers - why doesn't it have the support of the NBA president?

Russell Berry should:

(1) Publicly release the submission that he made to the Associate Minister during the consultation process so members are fully aware of any personal bias he might have towards the PMS and

(2) Make (another) promise that he

Letters to the Editor

will work to implement the clearly stated wishes of the NBA membership in such things as PMS.

This sort of activity does not sit well with Russell Berry's assurance that he will not promote his personal agenda when he should be working for the industry as a whole.

The NBA president clearly does not have the confidence of the NBA executive on this issue.

Why should he have the confidence of the NBA membership?

Yours faithfully

Nick Wallingford, NBA member

Please refer "Notes from Executive" Page 3, ***Ed.***

The future was now

If it is true that Doctors have the best trade union in New Zealand then it is also true that beekeepers have the worst.

Having just returned from an International Apitherapy Conference in Tokyo, Japan held 20/21 October 1997 one can only wonder at whatever is the cause of death or decay of the fabled Kiwi pioneer spirit.

Smug, self satisfied and ignorant are fair words to use of an industry that is mainly populated by amateurs in the worst and best sense.

Statistics would be relevant but boring and miss the point that little has changed in 160 years of New Zealand beekeeping and that until the leaders look for ideas beyond their mindset/ horizon then it will continue to be an industry where the majority are led down a path of financial failure for as a return on capital it would rank as pitiful.

In this modern and scientific world New Zealand remains an isolated backwater. We drive Japanese cars, use Korean microwaves, flock to The Warehouse to buy Chinese clothing and yet have not the slightest clue about Asian health systems or scientific research or how the New Zealand beekeeper can go upmarket.

Two classic examples are the master book 'Practical Beekeeping in NZ" (first published 1984) and the Apimondia Publications.

"Practical Beekeeping in NZ" is an excellent book with one major flaw-the complete omission of references to Apitherapy. In 1993 I met again the author and one of my two early New Zealand tutors in beekeeping. At the Apimondia congress at Beijing 1993 which had as one of seven subjects-Apitherapy or Scientific medicine from bee products.

I expressed admiration for his book but asked why no reference to Apitherapy. His reply was that he did not have room.

I wondered at the attitude of one who put out an excellent publication now into its third edition who admits totally reference to a critical segment of present and future modern international beekeeping.

After 15 years of research and treating arthritis and multiple sclerosis and being a New Zealand Foundation member of the American Apitherapy Society I accept the ignorance of the majority but fail to see why honey industry trust and research funds go to people who are re-inventing the wheel.

The fact that I am involved with the Chief Ombudsman's Office into an investigation of the Ministry of Health for failure to give fair appraisal for what is the first pharmaceutical from Modern China to apply for registration under the 1981 Medicines Act gives me a unique position plus my appointment to the Supreme Committee at the recent IAHBA (International Apitherapy, Healthcare and Bee Acupuncture Association) Congress in Tokyo gives a contact point for international knowledge that is yet to be utilised. (The honey industry trust refused help to attend and no beekeeper expressed interest over three months in going to Tokyo to learn).

It is interesting that everyone talks of the immune system but no one can draw it as they can the digestive system or the blood circulation system.

At this point China is a mystery to most people yet I have found them the opposite of my prior notions-just as I have found the New Zealand medical system the opposite of its public image.

A simplified starting point is the Asian concept that the cause of ill-health is lack of balance or harmony. Western medicine is freely available in China to a level equalling the best in the West but traditional medicine admitted that Western medicine can fix things that traditional medicine can't but traditional Chinese Medicine (TCM) can fix things that Western medicine cannot. Medicine is for the benefit of the people/patient and the duty of a doctor is to serve the people.

Organised bee acupuncture started in Japan in 1920, but records go back to 1915. Page 436 on of Apimondia Congress Report, Nagoya, 1985 gives a report/introduction to bee acupuncture therapy in Japan. In October 1979 the Japan Bee Acupuncture Study Association, was formed. Any serious student (including Waikato's honey research Unit and MAF Beefax article writers) should read the articles and insights into cancer, virus control as well as arthritis.

P457 of the same apimondia reports has an article by the recognised Western Grandmaster of Apitherapy-Mr Chas Mraz, on Bee Venom and Immune-Therapy. I was taught by correspondence by Mr Mraz and had the privilege of being present when he and the Grandmaster of Eastern Apitherapy-Prof Dr Fang Zhu met in China in 1993. It was Prof Fang Zhu who arranged for myself to be appointed to the Supreme Council of the IAHBA for the 4th Congress in Tokyo, Japan this October. The next is Korea in two years.

A symposium on apitherapy was held in Cairo, Egypt in March this year and I sat with the Egyptian secretary at the Tokyo Conference.

I find it pathetic as to what passes for scientific research in New Zealand. I believe that our demigods are incapable of looking outside their self interest and preservation but funding to them is money wasted in an International context.

15 years of research with no support in New Zealand tends to sour one especially after the Honey industry trust replied in the negative for funds, two weeks after my return.

There are possibilities for the New Zealand Beekeeping Industry to act as a supplier of raw material for overseas processing especially bee venom which can be readily extracted using a Chinese machine that milks the venom but not kill the bees. Bee venom's effect of stimulating the immune system and its effect on cancer cells as well as lowering cholesterol and blood pressure, besides its well known effect on arthritis, make it an exciting new drug (for the West).

The other Bio-stimulant bee products especially propolis for its antiviral qualities and Royal jelly for 10-Hydroxy-2-decenoic acid and its effect on tumours are products that will effect all New Zealanders and lower our drug bill.

It was fascinating to compare names and business cards that I exchanged this year with a listing of those present at Nagoya Apimondia 12 years ago.

I believe that the future of the New Zealand Beekeeping Industry lies with intelligent laymen/women and people like Bill Floyd and his marketing insight, for too many quasi-scientists have survived and an invitation should be given to Prof. Fang Zhu to visit New Zealand to update knowledge, to access the reports and papers that I brought back. The conference declared that chemical medicine has failed and that "Apitherapy is the 3rd Medicine of the 21st Century."

Graeham Gaisford
Apitherapist/Researcher, Levin

Marketing

A honey tasting at Christchurch Polytechnic goes nationwide on TV One Network News-

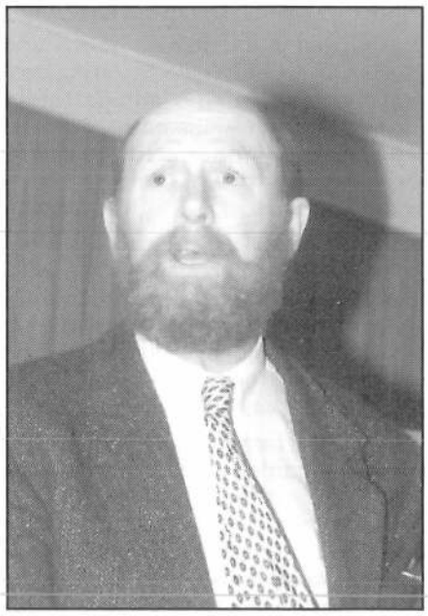
Christchurch Polytechnic runs at least three-honey tasting classes each year. The format is simple; and the classes last around four hours.

They start with a one-hour background lecture on New Zealand honeys: on our Research programme, the history of honey and cooking. Then the chef students take part in a honey tasting (we use six different New Zealand honey varieties) and discuss the flavour differences. Following that the chefs are given a basket of ingredients and required to make two dishes: a warm chicken salad and a pork-based entree. Honey has to be a key feature of each dish and the students use their honey tasting experiences to decide on which honey to use.

The format is very successful. And we had a bonus this time; I asked TVNZ if they'd like to film 40 chefs eating honey... they liked the idea and came and filmed the class - the result was exceptionally positive publicity for New Zealand honeys, nationwide at peak time.

We also follow up the classes with a media release to specialist magazines. A copy of that release and the photos used is included in this month's *BeeKeeper* to show how we get publicity from these activities (and as a bonus for *NZ BeeKeeper* readers I've added a photo of Tony Taiaroa who came along to check how the Marketing Budget was being spent)

The NBA's Marketing Budget is too small to allow us to indulge in conventional advertising. But as a result we have had to develop strategies that gain publicity instead. The Chef classes have been very successful in this regard: we get converts on the day (the young chefs love the honey differences!) and usually some sort of free media exposure. All more credible and effective than paid-for advertising!



Bill Floyd

New Zealand Honey Research Unit creating exceptional potential

Also in this month's *BeeKeeper* is a Report on the Unit's activities to date.

NOTE: Early in 1998 we'll be reviewing all of the projects and looking at any new concepts that should be explored. If you have an idea that you believe warrants discussion please contact me before 28 January!

A new concept that we'll be adding to the research agenda is the presence of antioxidants in honey! Antioxidants are the hot fashion health topic.... everything and everyone seems to add antioxidants to processed foods because of their importance. Dr Molan believes that New Zealand varietal honeys contain naturally occurring antioxidant compounds.

That's an exceptional plus for our product! We'll look at identifying and quantifying those antioxidant values in New Zealand honeys!

Maybe Honey *IS* 'a Bucket of Milk!'

Confused? Don't blame you. What that means is: for some years we've envied the milk industry's ability to convert a 'bucket of milk' into some very sophisticated high value industrial ingredients.

We've assumed that honey...."made from basically sugar"...just doesn't have the same potential for high tech ingredient extractions. But we might have been wrong!!!

The HRU has now discovered that honeydew contains a certain type of oligosaccharide. This is the same type as the one at present extracted from milk. The milk-based product has a very high value: it's used as a growth factor for lactobacillus bifudus. (That's the 'very good for you' bacteria that's promoted in some health yoghurts ...keeps your intestinal tract healthy!)

So it may be that we can extract the same compound from honeydew ... or maybe honeydew can be used 'as is': that all has to be explored. But what a marvellous niche market opportunity for that very underrated honey type!

(And thanks Chris Wardle for your honeydew samples and serving suggestions. For those who didn't know "try it warmed as a syrup for pancakes or puddings, mixed with red wine and spices for a delicious mulled wine, as a topping for ice-cream, a glaze for meat dishes, to replace syrup in baking, or just spread on toast or waffles!" Some people would say honeydew is the most versatile honey ... I couldnít possibly comment! ... but I know the chefs like it!)

Honey sample base

Don't forget to keep those samples coming in ... especially if you gave us samples last season! That's right....don't think we don't want to see you again! Because we want to see what sort of differences develop from year to year ... it all helps to build up a picture of the honey types ... and lets us develop our analysis data banks.

Remember we need a kilo of honey ... with information as set out on the Sample Form that Harry has agreed to publish in the next two *BeeKeeper* magazines for you. If you have more than one honey type please photocopy ..or ask us to send you extra forms.

The 1997/98 Season

As at time of writing it's not looking good ... by that I mean that the crop could be low! Fortunately beekeepers were forewarned of the likely effect of the El Nino. But remember.... if you don't have much crop you need to be selling it to someone who's getting the best value for you from it. It's a sellers market!!!!! Don't sell yourself short.

And my favourite honey this month?

Well, it has to be thyme doesn't it! And if you're wondering why ... try the recipe in my media release about the Chef classes... that red wine vinegar, rosemary and thyme honey sauce is utterly delicious!!!!!!! But would I put it on my morning baguette ..... nnnnnnnnooooo.... not when I've got this incredibly white oily smooth seductive pohutakawa honey from Rangitoto Island ..... that's amazing honey Stuckeys ... I can see why you call it the rarest and most beautiful honey in the world!!!

And that's all from me ... have a good Christmas and New Year ... hope your hives overfloweth with nectar ... and Christmas good spirit.

Regards

Bill Floyd

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New Zealand honeys set to buzz the Pacific Rim

"A sizzling combination of sauce and science will make NZ honeys the hot new ingredient in Pacific Rim-based dishes", predicts New Zealand's hospitality honey tutor, Bill Floyd.

"New Zealanders are the world's greatest honey lovers', says Floyd, "we eat more per capita than anywhere else in the world. But that consumption has been based on the safe flavours of our clover and clover blend honeys."

"Research into the health values of manuka honey, especially as relates to stomach ulcers, changed the paradigm on honey..... and New Zealanders are now thinking of honey as 'honeys!'....plural! And they sampling other flavours such as Rewarewa and Honeydew, Kamahi and Tawari as well as the traditional New Zealand types."

Four years ago the New Zealand Honey industry approached the Christchurch Polytechnic for assistance to develop our honey varieties as exciting culinary ingredients. As a result a honey tasting module was developed at Christchurch Polytechnic.

"Honey tasting and application classes have since been held each year," says Floyd. "The format is very enjoyable for the trainee chefs. We blind taste six honey types and then the chefs have to create two dishes from a set list of ingredients. The real differences they can create in the dishes comes from which honey type is selected."

"We find that the classes start out with the chefs believing that 'honeys just honey'... and that selection for a recipe isn't critical ... by the end of the day they realise the enormous difference you make to a sauce using e.g. honeydew instead of manuka...or thyme instead of kamahi", says Floyd.

The New Zealand strategy of creating long-term relationships with young chefs is proving very successful.

The honey industry is a very small one and can't afford traditional above-the-line media campaigns. Getting chefs on-side, and having them develop menus that name honey types is in turn educating the consumer and creating demand for unique honey types at retail level.

The concept has been seen as so successful its now being picked up the USA honey industry.

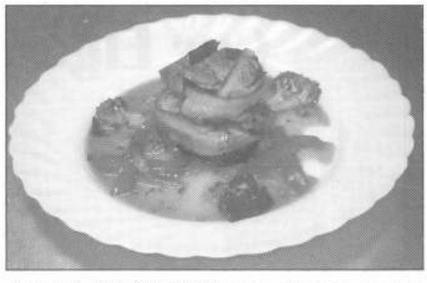
But New Zealand's advantage is the phenomenal difference in flavours between the major honey types.

Some of the 70 plus dishes created from the honey class.

Sally Waldie (le cafe, CHCH Art Centre); Fraeona Heller (Knights); Sally Wright (Chateau on the Park) and Ian Mulling (Quality Hotel) develop their honey sauces for a warm chicken salad.

TV One News films Fraoena Heller with her Rewarewa Honey Warm Chicken Salad. (Chicken Breasts stuffed with Rewarewa honey glazed kumara, coriander, red capsicums and orange zest, served with poached zucchinis and a Rewarewa honey sauce (red wine vinegar, red capsicums, Rewarewa honey, olive oil and coriander). Fraoena won the honey-tasters spoon for best honey chicken dish.

Christchurch Polytechnic 753 students blind-tasting New Zealand honeys and endeavouring to put flavour descriptives to the honey types.



Joseph Watkins' Thyme Honey sauce showed incredible depth of flavour says New Zealand Honey's Bill Floyd. Thyme Honey has hugely robust, farmyard flavours and it's a very difficult honey to use. Joseph's sauce was exceptional... the total synergy of the ingredients matched and balanced the thyme flavours... very classy! Joseph won the Best Pork Dish honey-testing spoon with his Pan Roasted Pork Fillet Wrapped in Fresh Basil and Bacon, served with a Cherry Tomato and Rosemary Chutney infused with Thyme Honey. (See box for recipe).

NBA Executive member and Marketing Committee representative, Tony Taiaroa, enjoys talking with chef-student Stewart Baileysmith as Stewart develops his honey glaze. (Tony's smile had nothing to do with the fact that the honey Stewart chose was a Canterbury one!)

Joseph Watkins Recipe for

Pan roasted pork fillet wrapped in fresh basil and bacon served with a cherry tomato and rosemary chutney infused with thyme honey (serves two people)

Two portions of pork fillet cut into medallions; four large leaves of fresh basil; two slices of streaky bacon.

Sauce:

10 cherry tomatoes cut in half
1 sprig of fresh rosemary finely chopped
1.5 tablespoons thyme honey
1 teaspoon of brown sugar
quarter cup red wine vinegar
quarter onion finely chopped
1 clover garlic chopped
1 tablespoon olive oil

Method:

Seal pork in a hot pan to brown all sides. Season with freshly ground black pepper then remove from pan. Place two of the basil leaves on each slice of bacon then surround the pork with the bacon. Place on a baking tray and cook at 170 degrees C for 10-12 minutes (or cooked to your preference)

To make the sauce add the oil to a pan then the onion, garlic and rosemary and cook for a few minutes. Add the tomatoes, sugar, vinegar and honey and continue cooking for a few minutes. Season with salt to taste.

Once the pork is cooked it should sit for a few minutes to set. Then present the pork on top of the chutney and surround with char grilled vegetables or a fresh garden salad.

(Note for *BeeKeeper* magazine readers: If you can't get thyme try another strong pungent honey ...manuka will work.... but the thyme is truly brilliant in this recipe ..... you may want to add the thyme honey slowly at the end and sample as you go until you get the strength you want...also depends on the strength of the thyme honey of course).

The winning dish was served with char grilled red peppers. The thyme flavours went superbly with the peppers: they have an obvious affinity together.

Notes for beginners and others

That your colonies may be in good condition with a strong workforce of the correct age, with plenty of super space for storage of the nectar, if the weather cooperates. Some beekeepers will already have full supers to extract while others are still cooling their heels. Anyway it is time to give some thought about the best way to remove full supers. That is, the best for your particular situation. One may have to handle 2, 3, 10 or a thousand. Also has it to be done in a hurry during the flow so as to have empties available to go back onto the hives or does it mean harvesting after the flow is over. What is suitable for the small beekeeper may not be practical for a large operator.

BRUSHING IS probably used from the day the first movable comb hive was invented. With fixed comb hives such as skeps, box hives, logs, etc. it was either eating nice pieces of comb as such or after cutting them out crushing followed by pressing. Crude and wasteful. Brushing is very cheap as it does not need any expensive gadgets. You really don't need to buy a bee brush. Easy enough to make one or a few. Just cut a small bundle of tussock grass, tie some string firmly round the top and trim the bottom end. Nothing to it. At a pinch a small branch of pine or macrocarpa will do the job and broom can be satisfactory. So wherever you are the materials are always at hand.

The most elementary way is to take each comb and brush the bees off in front of the entrance, that is after giving the comb first a good shake to get rid of the bulk of the bees. Slow going and of course it is upsetting for the bees. Okay if it is just a matter of clearing one or two boxes. An empty super to receive the brushed combs is pretty well a necessity.

This method can be improved upon by going to a little trouble. Construct a simple shute box. A full or three quarter depth super or box of similar dimensions is needed. Nail on four legs to give it a comfortable height and fashion from flat galvanised iron or aluminium the shute. Fasten this to the back and sides of the super's inside, sloping forward so that the shute's lip finishes about 100mm above the ends of the front legs. Place the shute box at an angle of 90 to 45 degrees to a front corner of the hive you are going to work. The super to be cleared goes on top of the shute. Take out the first comb, sweep between side of box and second comb, move that one over and sweep between the combs etc, etc. Lastly replace the comb you did remove in the first place after cleaning off the bees. Tilt up the super and give the bottom bars a quick swipe. Super is cleared. Take it away and cover. Next hive. After gaining some practice a good number of supers can be handled in a day. A good bump will clear any bees clinging to the shute. Those bees in a little heap in front of the hive will soon find their way inside. Brushes and shute will become sticky. We used to have a bucket with water, swish the brush through the water and shake off and splash some water down the shute. This solves that problem and it never did our honey any harm. Once the honey flow ceases brushing definitely becomes a less attractive method for the bees will not only become much tougher to handle but robbing may start on a big scale.

ESCAPE BOARDS, so relatively cheap and easy to make, are in my opinion a very good medium when it comes to remove honey supers. Using them causes the very minimum of disturbance to a colony, the bees will clean up any drips of honey that are always bound to happen when separating supers full of honey. With a little extra trouble (if your back is up to it) a super with empty combs can be put under the escape board for the bees to walk into so that there is no hold up at all. Removing the full boxes after the bees have escaped is a quick job giving them little opportunity to start robbing. The method is satisfactory during as well as after the honey flow. There are some drawbacks. Hives have to be visited twice, once for placing the boards and again for the removal of the full supers and it takes at least overnight for the bees to escape. If there happens to be any brood in the super to be cleared the bees will not leave it.

You can either use the Porter escape, a little spring loaded gadget to be bought from bee equipment firms or make the escape yourself. A good clear diagram of such an escape board can be found in "Practical Beekeeping in NZ" by Andrew Matheson.

Both types of escape are on the principle of "one way traffic", so remember when inserting the board to place it the right way up. Make a mistake and you finish up with a super full of upset bees. Putting the boards into place does not need a lot of exertion. With the hive tool separate the box and pull it slightly forward so that it can be hinged up, hold with one hand and place the board on with the other, lower the box and wriggle everything into place. Two supers can be taken at once if wanted. Same way but separate the two of each other after placing the board and having everything straightened out, otherwise there will be a disaster with the top box on the ground. Good fitting gear is a must for deserted supers full of honey are attractive to robbers. If there are any gaps or cracks make sure they are blocked up. Also make sure that there is no burr comb blocking either the entrance or exit of the escape. Scrape the area clean with the hive tool if in doubt. If not abused escape boards will serve for many years.

FUME BOARDS are like crown boards with an absorbent material on the underside and with the tops painted black. The last so as to take advantage of the sun's heat. The material is sprinkled with a little benzaldehyde, artificial almond oil, which is a bee repellent. Placed on top of the box to be cleared, the fumes should drive the bees down. I have found that sometimes they work and at other times they are hopeless. It very much depends on the temperature. As we found them not very dependable we abandoned them, but a little more persistence could well have improved the performance.

Use of carbolic acid on fume boards is out as it may taint the honey, is carcinogenic and also may cause burns to skin and eyes. Fume boards have the advantage of needing only one trip to an apiary but supers will drip more than those cleared with escapes.

The Abandon method will work under perfect conditions when a good flow is going on. Full supers are lifted off the hives and placed alongside but towards the back of the hive. The bees will leave them to go about their business after a short while. Marvellous! But those perfect conditions? Only twice during my years of beekeeping have I seen it work just right. In both instances while helping an old friend taking supers from a site with about 20 hives. By the time we took off the last box and replaced with empties, the supers were absolutely clear of bees and ready for the truck. Twice is not often during 40 years.

BLOWING is the method in common use today. Especially for those who have to deal with large quantities it is the answer for it is fast and uncomplicated. It is also noisy which I don't like and of course fairly disturbing to the bees. However those are minor drawbacks when counting the advantages. A bee blower is a fairly expensive piece of equipment and for those operating a limited number of colonies certainly not warranted.

GASSING was a method frequently practiced after the flow was finished. We used cyano gas in granular form placed in trays in a shallow box covered up above the super to be cleared. The stuff was in common use for rabbit eradication but is no longer available. Certainly it is dangerous. It worked

perfectly well, fast and no robbing and of course a massive lot of dead bees. The theory was that by that time of the season most bees in the honey supers were old anyway and would not survive, being eaters but not earners one might as well dispose of them. Being soft-hearted me I still harbour a certain amount of guilt when remembering all those killed bees. The gas was ideal to get rid of feral colonies in difficult places.

Summing up I really do think that the escape board takes a lot of beating for the use by the small and not so small beekeeper. Quiet and calm, no robbing (if precautions are taken), good for both early and late harvesting, probably the best for taking off supers meant for cut-comb or with sections. For a small investment and some labour one can make the number needed and with care they will last for years. So make up a few now, you won't be sorry.

Be weary of too much interference during a honey flow. It is well known that supplying empty combs will entice the bees to gather nectar. It is the volatile given off by combs that seems to work as a stimulant. So one would think that the frequent supply of empty comb could increase the amount of honey harvested. But field trials in Canada where a number of hives were robbed of their honey on several occasions and given empty supers as replacements produced less than the same number of hives which had been supered adequately for a start and did not need to be disturbed. The recorded difference in production between the disturbed and undisturbed hives was 3.84kg per hive (A.B.J.Vol.131:120-122). A considerable amount of honey when working with large numbers.

So if there is a need to remove a full super during the honey flow and replace it with an empty, the bees will be stimulated and probably bring in a little extra but do it as quietly and quickly as possible (Bee World vol.78 no.1:9).

And now just a reminder: do not take off and extract honey unless you know that the hives it comes from are free of disease, this is Am. brood disease.

Honey supers from infected colonies are the most frequent source of spreading B.L.

As this will be the last issue of *The NZ BeeKeeper* for 1997 I wish you all a very good Christmas and New Year, may all your honey supers be filled to the brim.

John Heineman

PMS Review Committee

We have a pest management strategy

As most of you know, the Associate Minister of Agriculture, Hon John Luxton, has decided that, as there was no significant opposition to the strategy proposal, there was no call for a board of inquiry.

The beekeeping industry should be proud of its achievement in being the first industry here to reach the goal of a PMS under the Biosecurity Act. For such a small industry to reach this status is a tremendous effort. Those members who supported the strategy through its formative process can now be confident that AFB will still be controlled by regulation after September 30th, 1998.

As there are so many people I would like to thank, I feel I cannot name them in case I overlook someone. Very well done by all.

There are many decisions still to be taken before the PMS becomes a reality and the PMS Review Committee will now endeavour to take all practical steps to ensure that the reality of AFB elimination will be achieved in the years to come.

To those opposed to the strategy, the committee will endeavour to see that AFB control is not going to cause the disruption to your business you expect it to. All of us want to reduce the incidence of AFB in our hives so that elimination will occur in time. The strategy asks that all hives be inspected regularly and destroyed when found to be infected with AFB.

Thank you, members, for your faith in the Disease Control Committee during the formulation of the national pest management strategy for the elimination of American Foulbrood and we count on your support in the years to come.

Terry Gavin

A milking complex in the middle of the desert

That's what Dan Cosgrove Ltd machinery division manager Peter Cosgrove found when he attended a recent Bou-Matic milking equipment conference in Arizona.

The new plant was sited in the desert about 64 kilometres from Phoenix. It was milking 3400 cows, in three milkings a day, 24 hours a day, 365 days a year.

He said the complex was fully computerised and equipped with close circuit television. The owner, who started with "a bucket and cow," is planning a duplicate plant to cater for milking a total of 6500 cows.

The dry desert climate ensures healthy cows with a complete absence of mastitis.

Cows are housed in colorsteel structures in evaporated conditions. The animals are sprayed but are not wet. Feeding is entirely automated and Bou-matic had a big hand in the design of the whole plant. Cows are milked in 50-aside "express ways" and in all 100 cows are milked every 8.5 minutes.

The capital cost of the milking plant was $US10 million and that did not include the cost of the land at $1000 an acre.

Mr Cosgrove described the set up as amazing and almost unbelievable. It was sited in the desert because of the comparative cheapness of the land and an assured underground supply of water.

Acknowledgement Ag/News

Did you know?

• Why do you get the "sack" if you lose your job

In medieval days, most working people carried the tools of their trade around in a sack. At the end of each day, the sack and tools were left at the place of work. When the workers were no longer wanted, they were told to go and were given their sack.

• Why do we touch wood for luck?

Trees were considered to be gods in pagan times and were worshipped. By touching them, people believed they'd be given some of the good fortune of the spirits living in the trees.

• Why do chefs wear those high hats?

The Turkish city of Istanbul was once renowned for its great chefs. But towards the end of the 6th Century, barbarians from northern Europe invaded the area, and many of the imperial chefs sought refuge in monasteries. To disguise themselves, they wore the tall black hats worn by Greek Orthodox priests today. They later switched from black to white hats to differentiate themselves from the monks. The tall black hats of the monk became the tall white hat of the chef.

• Why do we say "a pair of pants", which has two legs, but not "a pair of shirts," even though it has two sleeves?

Until the 19th Century, pants consisted of a pair of stockings that reached to above the knees and another pair, resembling knickerbocker shorts, reaching from the top of the stockings to the waist. The term "a pair of trousers" has stuck ever since.

The New Zealand Honey Research Unit

Annual Report to the NBA Membership-1997

This Report updates NBA members on the current research projects. Also included is this month's *BeeKeeper* magazine is a copy of the Honey Research Unit's Internet site.

BACKGROUND TO THE FORMATION OF THE HONEY RESEARCH UNIT

1996 was the first year of operation for the Honey Research Unit (HRU).

Up till '96 both Professors Molan and Wilkins had been initiating research into hive products through their respective departments (Biological Sciences and Chemistry).

The formal establishment of the HRU as a Waikato University specialist unit, and the NZ Honey Trust grant of $20,000 pa for 3 years, allowed the research for both professors to be collated under the aegis of one entity; and has allowed the NBA to be actively involved in identifying, implementing, and capitalising on research strategies.

The HRU team -

HRU CO-DIRECTOR

Assoc Prof Dr Peter Molan MBE

(Assistant: Kerry Allen /laboratory researcher.)

Specific Responsibility: Research into hive related products, in the area of Biological Sciences.

Responsible for allocating research concepts to students and overseeing their development.

Responsible for all research conclusions and any resulting media information regarding that area of the Unit's work.

HRU CO-DIRECTOR

Prof Alistair Wilkins, Chemistry Department

Specific Responsibility: Research into the compositions of hive related products.

Responsible for allocating research concepts to students and overseeing their development.

Responsible for all research conclusions and any resulting media information regarding that area of the Unit's work.

HRU Liaison Committee

This Committee has been created by the NBA to ensure that the skills and resources available to the beekeeping industry from the HRU is fully utilised.

Chairman is the Current Chair of the NBA-Marketing Committee (up until September 97 this was Allen McCaw, now Neil Stuckey); Committee members: Assoc Prof Peter Molan, Prof Alistair Wilkins, (a beekeeper representative to be appointed : formerly Neil Stuckey but he has now taken the Chair in his position as NBA-MC Chairman), Dr Mark Goodwin (bee scientist); Bill Floyd (NZ Honey Food & Ingredient Advisory Service ((NZHFIAS))).

HRU Manager:

Bill Floyd

Responsibilities:

Ensure that the HRU can focus on research with outcomes that will assist the beekeeping industry achieve its Marketing Objectives.Provide the HRU faculty staff with whatever support they need and is warranted, including: matching concepts to potential industry sponsors; media publicity for activities; providing generic bee industry advice relevant to projects. Work with the faculty staff in maintaining good communications between the HRU and the various groups within the beekeeping industry and in general.

HONEY RESEARCH UNIT CURRENT PROJECTS

HRU Project One: Chemical Fingerprinting Data Base

Student Wouter Hyink /Prof Wilkins.

The purpose of the project is to identify the constituent components of individual mono-floral honeys. The results will then be used to develop a database for use with other HRU projects. An immediate follow-on project will be to determine if there are 'signature' elements in each mono-floral variety that allow for simple, inexpensive varietal identification of honeys for the domestic (and eventually) international marketplaces.

Ongoing Work:1997:

Analyses being carried out as samples are collated by the NZ Honey Food & Ingredient Advisory Service.

Project Two: Honey & Milk Peroxidase

Student Lynne Bang / Dr Molan.

Concept of marrying the antibacterial properties of honey with lactoperoxidase (antibacterial agent in milk) to create a natural food preservative. This project now being funded by GRIFFS and is being carried out in partnership with the Tatua Dairy Co.

1997 Activities:

Project started in 1996; continuing in 1997.

Project producing good results says Dr Molan but a problem with the honey inhibiting the lactoperoxidase. (This finding indicates that honeys peroxide activity may be more stable and longlasting than first thought: and could have significant values for honeys with peroxide-based antibacterial properties.)

Project Three: The Antibacterial and Antifungal Properties of Honeys (other than 'non-peroxide-active' manuka).

Research Assistant Nicolette Brady/ Molan.

Funded by Lotteries Board & Agmardt.

1997 Activities:

Survey of all NZ honeys. Looking for any anti-microbial/anti-yeast/anti-fungal activity. Will also look at identifying best floral sources for honey varieties with high hydrogen peroxide content.

This research has great significance to the honey industry. Strong indications that it will create antibacterial-based opportunities for a number of honeys: eg Penny Royal; Honeydew; Rewarewa, 'non-active' manuka.

A copy of the Report on this Research was published in last month's Beekeeper magazine.This research was specifically undertaken to 'balance' the amount of work the HRU had done on 'active-manuka'.

The commercial potential of this research will depend on the follow-up work planned for the 'values' of Hydrogen Peroxide in honeys. Our intention is to formalise a Glucose Oxidase Standard and honeys could then be marketed against that Standard. (This is a different therapeutic 'performance' to the 'active' manuka honeys: the antibacterial activity is those is based on a **non**-peroxide ingredient).

Project Four: Sensitivity of Streptococcus Pyogenes Strains to Various NZ Honeys. (*These are the honeys responsible for sore throats).*

Student Grant Oulaghan/ Prof Molan.

1997 Activities:

Research commenced in 1996. Project is 'going well' according to Dr Molan: kill time at present is 1 hour at 10% solution of honey in water. Inhibition rather than 'kill' will require less time; keeping the honey aerated also appears to increase strength of honey.

Project Five: NZ Propolis and Antibacterial Activity

Student Phillipa Rhodes/ Prof Molan.

1997 Activities

The research follows on from the published research by Markham and Wilkins in 1996. This research showed that NZ propolis has unique bioflavanoid constituents that may have good commerciable potential, especially in Asian markets.

The HRU now looking for an organisation to collaborate on follow-on work:otherwise now on hold for sponsor/ student to follow up.

Project Six: Solidifying Honey Without Loss of Any Unique Antibacterial Properties (especially H2O2 activity).

Dr Molan "own-project".

1997 Activities:

The objective is to create a lozenge with

pure honey; but it's likely that boiling or freeze-drying will be unsuitable : hence the project had stalled.

However, in Oct 97 Crop & Food Lincoln approached Bill Floyd to advise they have 'discovered' a plant compound that may 'thicken' other substances, including honey, and therefore allow the honey to be virtually lozenged ... this is an hypothesis at present!...but if it proves correct, it could allow for the lozenged honey P Molan wants.

A lozenged honey product would be immediately commerciable in its own right; and would be invaluable for the Otago Uni research work into rheumatic fever (see Project 13 this report).

Dr Molan believes the lozenge-work has a reasonable chance of getting Griffs funding, (100%), **if** we can get a member of industry to base the student who will proceed with it into their operation. The student must be based at the industry site, not in the University.

Floyd to discuss politics of favouring an NBA member with the opportunity - who is selected and why; and how to retain confidentiality for them; whilst using industry funds to do so.

Project Seven: Develop Honey-impregnated Dressings for Skin Ulcer/ Bedsore Applications.
Researcher: Rademaker/ Prof Molan.

Activities 1997:

Project now with manufacturing pharmacist. Production issues have been resolved. Discussions now taking place with Ministry of Health to get approval for retailing.

Dressings now available for Clinical Trials; Clinical trials would be expected to give strong commercial impetus/ promotional opportunities but at present insufficient patients to conduct trials: both Waikato and Middlemore Hospitals interested in principal, but they can't direct medical consultants to make patients available for trials.

The concept of carrying out the trials in the UK was explored during Dr Molan's visit to the Wound Centre Convention there end of last year; nothing definite yet.

Project Eight: Test the Clinical isolates of Animal Gastroenteritis
Research Assistant Dawn Willix-Payne/ Molan.

1997 Activities:

This project follows on from Nicolette Brady's 1996 research. Nicolette's research will be published early in 1998. The conclusions show excellent potential for NZ honey as a curative agent in this area. Dawn's research is taking isolates from livestock (animal infections) and testing various honeys against those. This work includes checking for anaerobic activity; which will be carried out at the Communicable Disease Centre.

Peter Molan to arrange publishing of Paper in suitable (Ag-based) publications to attract the interest of veterinary surgeons/animal remedies companies.

Project Nine: Active Manuka Honey and Stomach Ulcers
Molan own-project.

1997 Activities:

Project in abeyance. It is not possible to initiate, at this stage, clinical trials to prove (or disprove) that *in vitro* results translocate to *in situ*. Such trials will require substantial patient involvement; and costs are prohibitive for the NBA or HRU to undertake.

It should be noted that we now understand far more about honey and the digestive 'system' and the best way to get the honey to stay in the stomach to allow it to work against the bacteria (need to trigger the 'osmotic inhibition of gastric emptying'.)

This work would qualify for Griffs funding: Bill Floyd to find suitable sponsor.

Otherwise we will continue to collate anecdotal evidence and look to alternative funding sources as other HRU work establishes credibility of the organisation and makes third party sponsorship of this concept increasingly possible.

Project Ten: Test the Effectiveness of Various NZ Honeys Against Multi Resistant Staphlococci Aureus (MRSA); *the antibiotic-resistant 'super bacterias'*

Dr Maggie Brett (Communicable Disease Centre)/Prof Molan

Brett/Molan have carried out initial trials with excellent results for both 'Waikato Clover' and Manuka. Initial results have gained national and international publicity. The HRU now developing skin tissue cultures to allow further tests. Results of these will then be used to get approval for Clinical Trials.

The work is being prepared for publishing at present. The Communicable Disease Centre was impressed with the results and wants to collaborate with Peter on a second stage of trials.

This work will cross over into the lozenge and dressings projects, increasing the commercial potential available from both.

Project Eleven: The Development of A Honey Based Meat Baste, Creating a Natural Meat Preservative

Student to be appointed/Molan.

The concept is not new: in rural Thailand meat is preserved by smearing with honey.

Project needs the support or participation of the Meat Industry Council and/or a meat company. (May be an opportunity for a specific industry sponsor.)

As at Oct 97: Lotto advised a $5,000 grant towards the project. Bill Floyd is to now find an industry partner (and possible Griffs funding to match the Lotto contribution).

Project Twelve: Test the Concept of Honey being Used As A Treatment Against Protozoa (Giardia Cryptosporidium)

Researcher to be appointed/Molan.

Project at concept stage only. Needs specialist cultures not available at Waikato Uni. Dr Molan discussing with Dr Brett (Communicable Diseases Centre). Will then need student to be matched to project. Peter discussing with Vet school at Massey; otherwise he has an Australian institution that is interested.

Project Thirteen: Explore the Concept of Honey's Antibacterial Properties Being Used to Prevent Dental Caries and Periodontal Disease

Researcher to be Appointed/Molan.

Theoretical research shows concept has value.

1997 Activities:

Dr Molan is at present collating data regarding the cariogenicities of honey. (He also has a student keen to take the project up: once again Griffs funding would be available if we can find a suitable project partner.)

The concept is also being evaluated by Otago University: Assoc Prof John Tagg, microbiologist at Otago Uni is investigating the concept of inoculating children with strains to protect against rheumatic fever....and is interested in using honey to sterilise the mouth prior to inoculation.

As a prerequisite to this Dr Molan needs to confirm honey activity in mouth (times/dosages); and the lozenge development may be a prerequisite.

This prerequisite work is being assessed at present.

Project Fourteen: Investigate the Use of Honey to Reduce/cure Gastroenteritis (scouring) in Livestock. (bobby calves, piglets/chickens)

Floyd/Molan.

1997 Activities:

Floyd has commissioned a Marlborough vet to develop Trials model for Bobby Calves. Trials started in spring 1997 but climate conditions meant no 'scours' problem with the chosen herd. We have established the feeding protocols and will look to a better environment for the trials in 1998. The trials used a Rewarewa honey with a high hydrogen peroxide content.

Project Fifteen: Pollen Analysis

Doctorate Student Paola Galimberti/Molan

Ms Galimberti keen to do a doctorate in Pollen Analysis. Has considerable background in pollination (kiwifruit/Tauranga) and honey (Italian honey industry).

1997 Activities:

Bill Floyd to look for suitable Griffs sponsor.

Project Sixteen : The Anti-Bacterial Properties of 'Other Hive Products (wax & pollen)

Students to be appointed/Molan

The concept is that wax and pollen (and venom) may contribute significantly to the antibacterial properties of honeys....rather than the attribute being solely from the nectar. An analysis of these hive products will indicate their role in honey, and may lead to new production techniques and products.

1997 Activities:

Bill Floyd to source samples for Dr Molan who will then determine project timeframe and methodologies.

Project Seventeen: Canonical Variable Analysis (CVA) of NZ Honeys

Student Sylvia Barrs/Molan

CVA is a highly sophisticated statistical analysis computer programme that allows for identification of substances or entities based on a synergistic conclusion of the sum total of the variables within the substance. It's particularly relevant where the variables can, within themselves, have considerable deviations from a norm. CVA may be highly appropriate in the analysis and identification of mono-floral NZ honeys.

In 1996 the data from all previous research was collated by nomenclature preparatory to the CVA being developed.

1997 Activities:

Apply CVA to all known data; include information from the NZHFIAS 1996 sample base. Dr Molan sending first set of data to Germany to produce the first CVA model.

Project Eighteen: Honey's Biological Effect on Human Metabolism

Molan (and students).

The intention is to investigate whether or not honey has any biological effects on the human metabolism other than simply as an alternative to refined cane sugar.

This project has the potential to change the honey/food paradigm with health and nutrition professionals; and create an opportunity to force a change in the food labelling laws (where honey cannot be claimed to have any more nutritional value than sugar).

(Note:A successful finding in this project could be the most significant value-adding market factor for honey since the 'active' manuka concept was discovered by Peter Molan!)

1997 Activities:

Research is being accumulated regarding all aspects of human metabolism , honey and sugar.

Already we have published research to show that the human body appears to use/absorb honey sugars better than refined sugars (blood sugar levels do not 'spike' to the same degree).

This will be reviewed early in 1998 and a set of objectives developed for the Project.

HONEY RESEARCH UNIT FUNDING:

The NZ Honey Trust is providing $20,000 pa for 3 years.

Additional Funding:

Dr Molan has independently secured research funding for projects:

Agmardt	:	$25,000
Lotteries Board	:	$20,000
Forst (Griff)	:	$23,000

Bill Floyd, Manager, NZ Honey Research Unit

Library News

Nothing to report.

BeeFax

Vol. 3, No. 2 December 1997

LET'S CATCH THE BEEHIVE THIEVES

Imagine working really hard, through a very difficult spring, doing everything possible to ensure that you have the very best quality hives when the kiwifruit comes into bloom. And then imagine going out to an apiary just before dark to fill a pollination order, only to find that the hives aren't there any more.

Or imagine doing all that work and shifting the hives into an orchard. But when it comes time to make your syrup feeding round to help increase the pollen gathering of your hives, you find that a number of them have gone missing while in the orchard.

Unfortunately, at least four Bay of Plenty beekeepers have so far experienced either one or both of these nightmares this pollination season, and the number of stolen beehives continues to grow.

Judging by the timing, it would appear that one or more persons is stealing beehives to be used elsewhere in pollination. And for a lazy and dishonest person, the rewards might seem tempting, since pollination fees in the Bay are running at anything from $70-100 per hive.

The obvious question, though, is who would do such an evil thing, and along with it, what's to become of the beehives once the pollination season comes to an end? That's where I think *BeeFax* readers can be of help.

While we can always hope that the police will sort this one out, the mind boggles at the thought of the Te Puke desk sergeant receiving calls from concerned citizens who've seen a truck loaded down with beehives driving around in the middle of the night! Because there's so much of this sort of activity by legitimate beekeepers in the Bay of Plenty at this time of year, the real culprits can just about drive around without any fear of being noticed.

Or should we say, without being noticed by non-beekeepers. Beekeepers who are involved in the pollination trade, and commercial beekeepers elsewhere who keep an eye on the territory surrounding their honey production apiaries, can really help by noticing strangers in their midst, either shifting beehives out of pollination, or establishing new apiaries where there weren't any before.

They can also look out for some of the distinguishing features of the hives which have so far been stolen. Dale Gifford from Paengaroa reports losing 41 hives from 4 different locations, just before pollination. The hives include 5 hives belonging to the Bay of Plenty Polytech, which Dale was managing on behalf of the local NBA branch. Dale's hives are all 3/4 depth gear, with distinctive migratory lids (they have a flow-through ventilation system). Dale's registration number (D225) is branded into his boxes just below the hand-holds.

Arataki Honey in Rotorua has also lost two sets of hives (22 in total) from two orchards on Te Matai Rd in Te Puke. Arataki hives are familiar to most beekeepers in the north of the North Island, and their registration number (E1) is branded into many boxes.

Dave Klausen from Turangi has also lost two lots of hives. Twenty-three hives went missing from an orchard on John Bird Rd (just off Te Matai Rd., where Arataki's were stolen), and another 5 recently were lost in Bethlehem, just north of Tauranga. Dave's brands (D239 or H615) appear on the hives.

Finally, Peter Townsend, from Paengaroa, has also lost two hives, from (you guessed it!) Te Matai Rd in Te Puke. Peter uses a very distinctive migratory lid with large wooden ends, and also keeps a queen excluder between the first and second brood chambers of his pollination hives. Peter's registration number is D442.

If you see any of these hives (or any hives of any kind which appear to be out of place), by all means contact your local Apicultural Advisory Officer, who will check the Apiary Register, and if necessary, pass on your information to the police.

If you're a beekeeper doing pollination in the Bay of Plenty area, we'd also suggest you contact your grower clients and ask them to check their neighbours' properties, once the pollination season is over. The thieves may be lazy enough to just leave the stolen hives in the orchards, in which case we'll be able to return them to their rightful owners.

If anyone is going to find these criminals, I think it's going to be conscientious members of our own industry. So keep your eyes and ears open, and let's catch those beehive thieves!

AND ITS GOODBYE FROM THEM....

Two Apicultural Advisory Officers have decided to hang up their hive tools and have resigned from MAF Quality Management (MQM). Robert Rice from Lincoln, is returning to Brisbane with his family to take up a position at the University of Queensland in the Molecular Biology Department. And Cliff Van Eaton is leaving after the Christmas/New Year break.

Robert joined our team in May 1995 and has been an asset to our group, even though he has been trying to finish the dreaded PhD as well as manage a full-time job in MQM. That was always going to be a tough ask and we admire Roberts' application to his job, the work he has put into his doctorate thesis, and his contribution to the apiculture unit and our beekeeping industry.

Robert's two major roles, as apiculture business coordinating officer for the South Island and as the Canterbury region Apiculture Advisory Officer, have both been reassigned. The role of South Island business coordinating officer will be carried out by Dave Grueber of MQM, Blenheim. The role of Apiculture Officer will be assumed by Phil Sutton, MQM Timaru.

Phil has for some years provided support to the apiculture business and his current duties include Honey Bee Exotic Diseases Outbreak Response Process Manager for the South Island, apiaries surveillance officer, and apiary inspector for the AFB contract.

Phil has also travelled to Canada to study exotic bee mites, and to Australia to study European foulbrood and apiary management practices. Phil is the first point of contact for Canterbury beekeepers for consultancy, bee diseases and issues other than the register. He can be contacted on (03) 688 9184 fax 688 9181; E-mail suttonp@timaru.mqm.govt.nz.

The Apiary Register for Canterbury will remain at the Lincoln office and will be maintained by the Registrar, Barbara Tappenden, with assistance from Linda Hagan. David McMillan, Apiculture Officer, Invermay, will continue to cover the Southland-Otago area. Dave Grueber, Apiculture Officer, Blenheim, will continue to service Marlborough, Nelson and the West Coast.

Cliff Van Eaton is also leaving MQM, after working for MAF for some 12 years in two stints (first in Gore and Whangarei, and since 1991 in Tauranga). Cliff is going into private enterprise where we know his skills will be well utilised. We understand that he'll continue to work in the beekeeping field, so he won't really be lost to our industry.

Both officers will be sorely missed by the rest of us here at MQM. Cliff's duties, like Robert's, will be redistributed amongst other staff, including those involved with delivering apiculture services on a part-time basis. No doubt we'll still keep in touch with the guys. Brisbane's not that far away, after all, and Cliff will continue to live in Tauranga.

- Murray Reid, AAO, HAMILTON

MQM...WHERE TO FROM HERE?

As you are probably aware, the Ministry of Agriculture (MAF) is involved in a major restructuring exercise. There are currently 2 processes underway. One involves the amalgamation of MAF with the Ministry of Forestry to form the new Ministry of Agriculture and Forestry (also to be called MAF). The second process is the removal of contestable services from the core government department. These services include most of the apiculture services currently provided by MAF Quality Management (as well as dairy, animal health, and plants services).

All of these services are likely to become part of a more commercial entity, still owned by the crown, but separate from MAF. A State Owned Enterprise (SOE) structure is one option being explored. As with any organisation, the success of the new entity will depend on the quality of the services and products it provides, and the customer demand for those services. Agricultural Quarantine will remain as part of the core MAF structure, and will not be privatised.

- Murray Reid, AAO, HAMILTON

WHAT'S UP IN NIUE

I recently had the opportunity to visit Niue and examine the state of the local beekeeping industry. Commercial beekeeping was established in Niue in the late 1960's by a former Waikato beekeeper, J. B. (Mack) Mackisack. He shipped over 600 screened hives to the island, and built hive numbers up to 1250 by 1971, producing 75 tonnes of honey (60 kg/hive). Unfortunately, following his death in a road accident in 1973, the industry has steadily declined.

There are now 370 live hives located on 21 sites. Dead hives are also present on some sites, although rapid wax moth invasion makes it impossible to determine the cause of death. Sacbrood is present at a low level, and three hives appeared to be suffering from AFB. Samples were taken of both bees and larvae for laboratory analysis. Several importations of New Zealand queens were made in the 1970's and 1980's, and the bees appear identical to New Zealand commercial stocks.

During the 1990's, honey production has averaged 10 - 12 tonnes per year, from around 400 hives. This is an average yield of around 30kg/hive, very similar to New Zealand production, but well below that achieved by Mr Mackisack. The Niueans are unsure if this is the result of differences in hive management, or the widespread clearing of bush (and nectar sources) for taro production. Undoubtedly production could be improved with more intensive hive management, but whether it could match the levels of the early 1970's is unclear.

The Niue Development Bank is currently considering options for future management of the business. One possibility is the sale of the holdings to an expatriate (non-Niuean) beekeeper, if a buyer can be found. Anyone wanting more information on beekeeping in

Niue is welcome to contact me at the Pukekohe MAFQual office (ph. 09-238-5255).

- Paul Bolger, AAO, PUKEKOHE

WHITE CLOVER AND EFB

Peter Stace, writing in the October issue of the *Australasian Beekeeper*, suggests that EFB is worse on white clover flows because white clover pollen is deficient in amino acids such as valine and iso-leucine. Peter reports that NSW beekeepers who chase clover crops, either to build up their bees or gather a surplus honey crop, find their bees suffer from chronic or severe outbreaks of EFB. The outbreaks are such that they need to feed antibiotics with the attendant likelihood of residues.

Peter says that EFB is associated with poor nutrition in bees, but pure clover pollen may not be all that good despite a high protein content of 22 - 25%. The low iso-leucine and valine content of clover pollen may reduce the overall usability by 35-40%, giving it a digestibility of a pollen with only about 16-18 % crude protein. This is low for an expanding or honey producing colony, and may well account for the reported higher incidence of EFB on clover crops.

The problem can be reduced somewhat if pollen from other sources is available. Or beekeepers could feed a protein supplement with these amino acids added or included. If EFB ever becomes established in NZ we may see similar problems, although we probably don't have the expanse of pure clover pasture, without any other pollen sources nearby, as is perhaps the case in areas of NSW.

- Murray Reid, AAO, HAMILTON

NEW EDITION OF BEEKEEPING FAVOURITE

When it comes to bee books, there are the long, scholarly tomes, the never-ending editions of the *ABC and XYZ*, and even a whole host of how-to-do-it's from other parts of the world. But really, at the end of the day, New Zealand is most fortunate to have such a good, straight-forward bee book as *Practical Beekeeping in New Zealand*.

Perhaps we just take *Practical Beekeeping in New Zealand* for granted, even though it is one of the very few books of it kind ever written for New Zealand conditions. The book's continuing popularity, however, especially overseas, shows just how good a beekeeping text it is, no matter where you might happen to live.

It's that continuing popularity which has led the book's author, Andrew Matheson, and its publisher, GP Publications, to come out with this new edition, the third since 1984.

The book has a new, shiny white cover, and appears to be thinner, but don't be fooled! There's lots of new bits; it's just that the thickness of the paper has been reduced.

The biggest, and most welcome change in this new edition is the use of colour pictures to help describe the symptoms of bee diseases. The two previous editions had black and white drawings and pictures. While they were useful, most beekeepers find that to distinguish between, say, sacbrood and AFB, you really need to have colour photographs.

Once upon a time, we used to have a colour AgLink on honey bee brood diseases, but now that the government no longer provides such resources, these colour pictures in *Practical Beekeeping in New Zealand* are a must. The colour rendition and picture quality are especially good in the photographs of AFB scale and the ropiness test (hands up all those readers who can't identify AFB scale!). There are also several excellent shots of sacbrood, and a great picture of a whole pile of those pesky chalkbrood mummies.

Andrew has also added sub-sections on the Biosecurity Act, the Commodity Levies Act and the Pest Management Strategy for American foulbrood, although with the continuing changes facing the beekeeping industry regarding government services, some of what's in this section will be out-of-date before long. Internet resources have also been added, including information about New Zealand's very own (and deservedly famous) New Zealand Beekeeping Homepage.

The new edition of *Practical Beekeeping in New Zealand* is available at all leading bookstores. It would make an excellent Christmas book, especially if the beekeeper in your household doesn't already have a copy. And even if you do, the colour pictures make it worth replacing your older edition with this sleek, new, white-covered model.

WASP NEWS

Fenitron Up-Date

At a recent meeting of people interested in wasps at Hort Research in Auckland, a representative from Elliot Chemicals, the distributors of Fenitron wasp baits, said his company is seeking registration for Fenitron (sulfuramid) as an insecticide for commercial users to apply to their own baits. Elliot Chemicals made a fish bait incorporating sulfuramid, but the product had to be kept and shipped frozen which added to the cost.

The company's experimental use permit is also about to expire, hence the move to market the insecticide on its own. They have sought a hearing at the December 1997 meeting of the Agriculture Chemicals Board, but it is doubtful whether their application will be processed by then. The next Board meeting is in February, which will be too late for this wasp season (assuming of course that Elliot Chemicals can obtain the label registration they are seeking).

Elliot Chemicals will be selling the product only through a few selected outlets and to commercial users. Beekeepers and orchardists would be regarded as commercial users. The cost of the sulfuramid will still be relatively expensive, but 30-40% cheaper than the

old fish bait. Elliot Chemicals envisages selling their product through such outlets as Fruitfed Supplies and stock and station agents. As the insecticide will not be pre-mixed, there must be a risk that some users will add the insecticide to a sweet bait, with possible consequences for nearby honey bees.

That's A Lot of Wasps!

It seems that in the honeydew forests around Nelson at least, wasps create the biggest biomass. There are on average over 10 nests per hectare with around 10,000 workers in each nest. These wasps have a biomass of 1 kg/ha/year. This is more than all the birds, stoats and rodents put together.

New Documentary of Wasps in NZ

For the past 2 years, the BBC, in association with a NZ company, has been filming the effects of wasps on insect and bird life in the Nelson Lakes area. The film follows the life cycle of wasps, which they call "bandits of the forest" (that's also the working title of the documentary). It also shows how wasp numbers build up in the honeydew forests and the terrible toll wasps take directly on the insect life and indirectly on bird life that depends on the honeydew. The film follows the life of a breeding pair of kaka named Knuckle and Duster (some scientists obviously still have a sense of humour!)

The documentary has the most magnificent close-up action shots of the common and German wasp, and also the parasitic wasp *Sphecophaga* which has been introduced to try and control them. You see wasps being born, being parasitised, building their paper nests, hunting for prey with ruthless efficiency and just generally being wasps. The parallel action scenes of the kakas' struggle against the wasps, stoats and the normal cycle of the beech trees that they rely on for food in the form of berries is also magnificent.

If I have a criticism of the film script, and it is really a minor one, it is the use of emotive language that is somewhat prejudicial against the wasp. The wasp is made out to be the villain in the piece, and is frequently referred to as a bandit. There is no doubt that both the common and German wasp are having a tremendous effect on the ecosystem in the beech forests, but really they are just being wasps and "doing what wasps gotta' do".

Wasps are prime predators of other insects and scavengers of meat, as well as consumers of sugar products such as honeydew. It is rather sobering, though, to see wasps take on moths and a huge stick insect many times their size, quickly kill and then dismember the bodies. Also the number of wasps in any given area is staggering, especially to anyone who has not been in honeydew forests during late summer.

The film is currently with TVNZ, but there is no word on when they might use it. Apparently they are in the process of cutting it to fit in with our long commercial breaks, but the programme will still go for an hour, so it will most likely fit into a time slot like "Our World". What's the bet that TVNZ shows it over the holiday period when no one's watching?!?

- Murray Reid, AAO, HAMILTON

ENVIRONMENTAL " ISO"

You've heard of the quality systems called ISO 9000. Well, there is now a new boy on the block called ISO 1400. The ISO 1400 series is about environmental management standards and covers environmental labelling and claims.

"Green" consumers are on the rise and so are product labels which claim that the contents are environmentally friendly. At the moment, consumers have some protection for products approved under Germany's "Blue Angel" or New Zealand's "Environmental Choice" programmes. Such products must meet a stringent set of criteria and be subject to audit by independent parties. However, there are a number of self-declared labels or claims made by manufacturers, or "report card" labels which present information about environmental aspects.

The new ISO 14000 series will have 6 guideline series in total, but the 3 guides on self-declared claims (14021-14023) will have the most effect on manufacturers:

- ISO 14020 contains principles which will apply to all environmental labels and claims.
- ISO 14021 is about to be published and will harmonise self-declared claims by providing general guidelines for making the claims and definitions for terms used. Claims must be accurate, verifiable and relevant to the product.
- ISO 14022 is still at a draft stage, and indicates the product contains recycled material and the product itself can be recycled.
- ISO 14023 has just begun to be drafted and is expected to contain requirements for testing and information to substantiate claims.
- ISO 14024 lists requirements for third party assessment or auditing and will become a formal Draft International Standard early in 1998.

[Source: *Food Technology in New Zealand,* February 1997]

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A blue streak and every single solitary bee

While supering some of our hives that had just come out of the orchards, I noticed a small blue streak next to a hole between two boxes. Ha! I thought to myself, I know what that is. A couple of minutes later JT, who was helping us out over our busy period, called me over to ask what the blue pollen on a bee's legs was. Now the subject of pollen colours and what they come from is an endlessly fascinating subject to beekeepers and we had a good discussion about this blue pollen and the other pollens that were coming in and I tried to knock the blue pollen off the bee's legs to show JT another feature of it, but the bee got away. It was, of course, tree fuchsia pollen, the only bright blue pollen that I know of (and as I understand, the only blue pollen in the world) and while not as rare as rocking horse droppings it is something that we see very seldom in Hawke's Bay. However, now that some measure of control is being exerted on possums, things like tree fuchsia and five finger are starting to become more common again. Those of you who are old enough to remember what the bush was like before possums trashed it will no doubt know the other weird feature (apart from its colour) that tree fuchsia pollen has, it is stringy, it sticks to the woodwork as the bees come in and leaves blue streaks on the alighting board.

Other pollens have their own peculiarities as well, which can help you tell what the bees are working, an obvious one is broom which has brick coloured pollen. If you tickle the inside of a broom flower with your finger it will snap its pollen bearing structures down onto your finger, which presumably is why bees come into the hives with orange backs. Five finger pollen is creamy white and is carried in huge loads on the pollen baskets, mingi mingi, on the other hand, is light yellow and is only ever carried in very small loads. Rewa rewa pollen is a brighter yellow and is carried in biggish loads. Obviously the time of year and what is in flower has a bearing on what you would expect as well. Purple pollen, for instance, is most likely from wing thistle before Christmas and mostly likely from nodding thistle later in the season. Still a lot of pollen that you see coming in you wouldn't have a clue where it came from or you can't decide which of 2 or 3 plants it might be. It isn't absolutely necessary to know what the bees are working but it is sometimes useful to know and it is always interesting. Occasionally most of you will have experienced a flow which you didn't expect, didn't know what it was and as such can't try to predict when you will get it again. Those of you who trap pollen will also be aware that different hives in the same yard work different pollens, there may, for instance, be a clover flow but one hive will have brown coloured pollen (clover) with a little purple, the next hive will have brown pollen and pasty yellow (anybody's guess - there are lots of yellow pollens) while the next hive may have mainly yellow pollen with only a little brown pollen and the one after that could be mainly white pollen (scotch thistle) All of which goes to show that the main flow of honey is not necessarily the main source of pollen. The bees appear to me to shop around a lot more for pollen than for honey, each hive tends to remain fairly consistent in what it gathers, however. Fortunately the habit of bees, where each bee tends to stick to an individual floral source, makes it easy to tell what colour pollens come off what flowers. All you have to do is position yourself by some flowering plants on a nice morning and look at the colour of the pollen on the legs of the bees that are working the plant you are interested in.

Not all pollens have the same goodness for feeding brood. All things being equal, hives on gorse will always be stronger, despite gorse not having any nectar. I suspect that all the legume pollens are good, that any primarily windborn pollens are slack and the rest are a mixed bag that I'm not sure about, although obviously willow and fivefinger are pretty good at building hives up. I do know, however, that shortage of pollen knocks the hell out of the bees and anything is probably better than nothing. When the hives are building up they need a huge amount of pollen.

Another interesting feature of pollen is the amount of it that occurs in honey as a contaminant. With rewa rewa, which is a bird pollinated flower, the amount of pollen in the honey is small, presumably because the pollen is a long way from the nectaries. The bees, however collect lots of rewa rewa pollen when they want to. And the odd one out, of course, is that pre-eminent honey plant, manuka, it has lots of pollen in the honey and every single solitary bee you see during a manuka flow has its pollen baskets full of grey manuka pollen and that is the rub - native solitary bees collect manuka pollen but I've never once seen a honey-bee collect it. I can't think of any other diaceous (male and female parts on the same flower) honey plant that the bees get honey from but no pollen. It obviously is present in the manuka flowers because the solitary bees gather it and it turns up as a contaminant in the extracted honey. You can also get a dusting of pollen off a manuka flower onto your fingertip. It would be interesting to know why our honey-bees can't, or won't collect it.

Peter Berry

Today's T.I.P. Daring to be different makes winners

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Today's T.I.P. if at first you don't succeed you are about average

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Today's T.I.P. Fear is the little dark room were negatives are developed

From the Colonies

Report from Hawke's Bay

I would like to add some comments to the report given in the November issue 'Hawke's Bay Beekeepers can't find AFB' on our annual Disease Inspection Day. It certainly was a success, and the suspect sample turned out negative as well!

In the last few years we've tried to make it a fun day, where people can enjoy what they do, without having to do too much and relax after with a barbecue and a few refreshments. The whole day becomes a good public relations exercise, some hands on learning experience for the people involved, a social and getting to know other beekeepers situation. We've been doing our annual inspection day on the first Saturday in November for about 10 years. We continually targeted areas and beekeepers with a known history of AFB and also random new beekeepers and blanket coverage of most areas over time. It is my belief that our success in getting AFB down to negligeable levels has been due to consistent effort and also the time factor involved in reducing it. It takes years to finally pick up these odd re-occurring situations which perpetuate the cycle and cumulate them. Full credit must go to all the dedicated volunteers who turned up each year to help. I think for me personally that willingness to give has been the biggest reward for me being president of the branch. One thing I think this industry will need to consider very carefully and perhaps re-evaluate its approach to, is in regard to hobbiest beekeepers who under the PMS will want to become accredited beekeepers.

For a commercial guy it's a one off cost, part of doing business and probably not much of a big issue for him.

This won't be the case for many of the smaller beekeepers. Some may see it as someone trying to make money out of them, some may see it as being draconian or bureaucratic, but I think the point is - if you want it to work you have to approach it in the right way. I know there's no easy answer and the best options will probably evolve as the strategy is introduced. The best way to get rid of AFB will be for people to actually inspect their hives and know what they're doing, but if they're not on your side you will spend more time dealing with the difficulties which arise than with achieving your goal.

Colin McLean
President - Hawke's Bay

Southland Branch Report

Winter - early spring

Temperatures:	Mild, for Southland
Rainfall:	Below average
Ground condition:	First early spring round a little wet, otherwise good
Winter work:	After a poor season, only essential maintenance done

General comments: After a mild winter hives have opened up in good health and strength. Early spring became cool and dry, willow flow poor, constant winds grey cold days. A lot of supplement feeding done. Very little bulk honey sold also wax and comb honey, making for financial difficulties with large sugar orders.

Otago, Southland Branch Combined Field Day

Date: Saturday 14 February 1998

Venue: Telford Rural Polytechnic, Balclutha.

Watch this space for a full programme of events, when they become available.

Today's T.I.P. Failure is the opportunity to do it again with more experience

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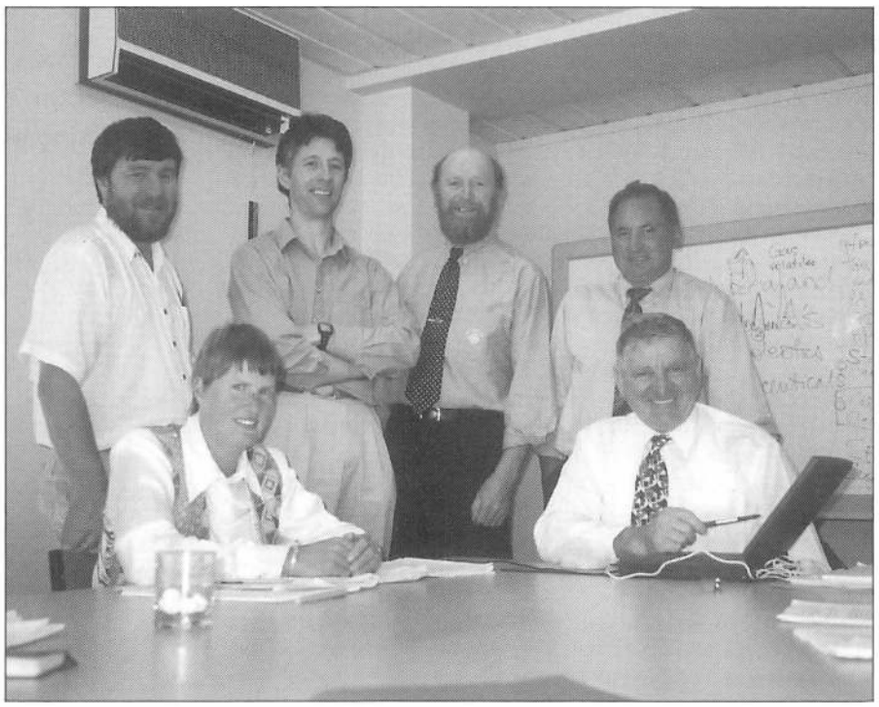
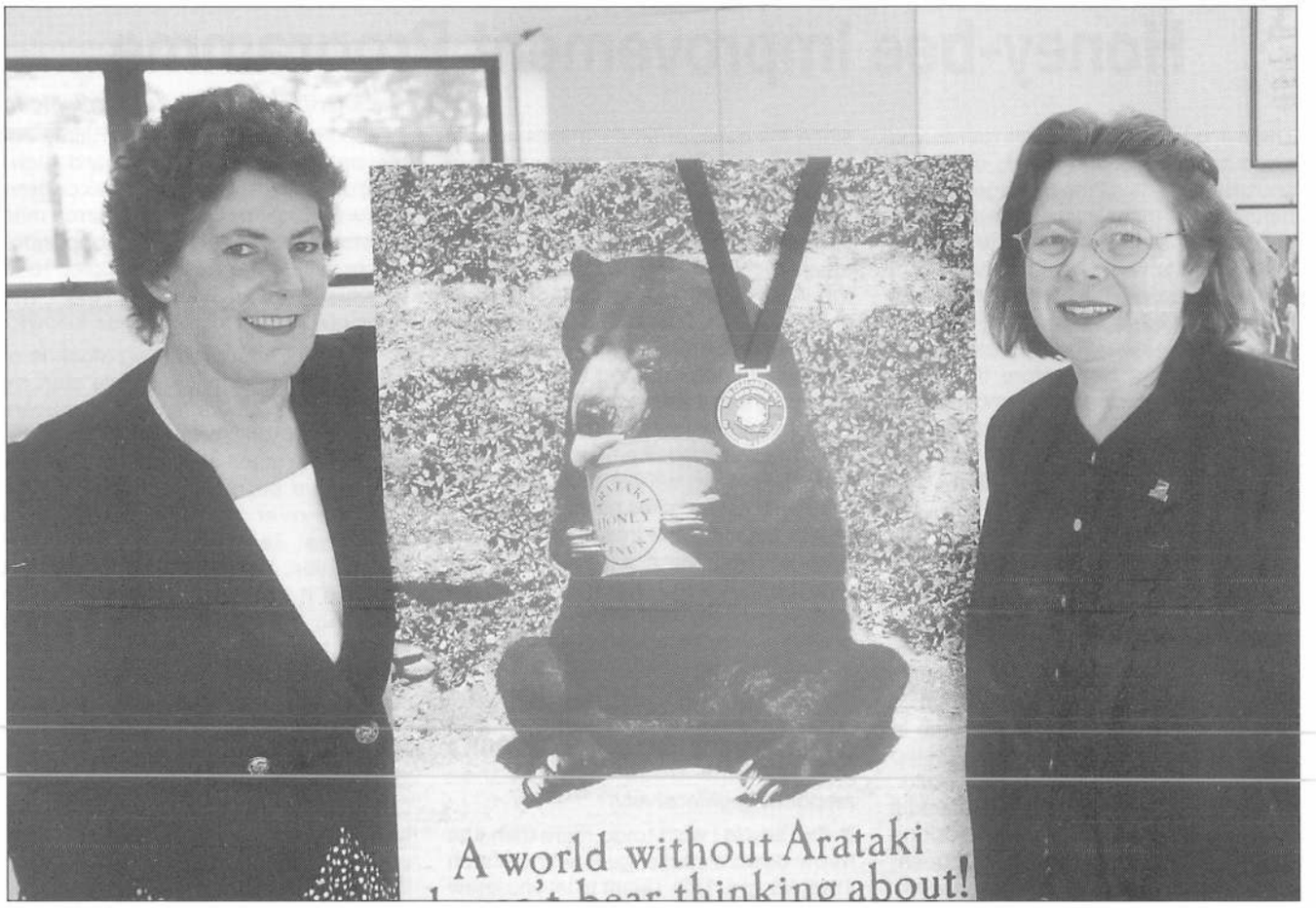
Today's T.I.P. The trouble with getting something right the first time is nobody appreciates how difficult it was

Marketing meeting in Wellington in November



Left to right: Jane Lorimer, Neil Stuckley, (Chairman) Peter Bray, Bill Floyd, Tony Taiaroa, (Executive Member), Harry Brown (Secretary), looking at a graph on world honey prices at a recent meeting in Wellington. (Absent: Allan McCaw). Thanks to Bill Floyd.



Barbara Bixley (left) and Pam Flack, Arataki's Marketing team with their Honey Gold Medal.

Honey-bee Improvement Programme

by Jack Griffes, Ottawa Lake, Michigan

There is no need to read this unless you are a beekeeper who hates, despises, and utterly disdains the damage done by parasitic bee mites, namely Tracheal and Varroa. For those of you who are still reading, let's review a quotation from Richard Adee, president of the American Honey Producers Association, "We are in a race to see whether we can develop a mite-resistant bee before the mites themselves develop resistance to the chemicals we're using. Winning the race is critical to our survival as an industry." (Aug. 1995 ABJ pg. 529). To that I say, Amen.

I think it is now common knowledge that fluvalinate-resistant Varroa mites have been scientifically verified in Italy. What we don't know is just how long it will be until the same thing happens here - my guess is it will be within the next five years. I understand that some alternative treatments that would be practical in commercial operations are being tested and have shown mixed to good results. That is good news and I am very thankful to the scientists and others working toward giving us more legal treatment options. Please keep up the good work. I sincerely believe we collectively need to work and work hard from all angles due to the serious threat the mites and mite-vectored diseases pose to our industry and the one-third of our American diet that depends on bee pollination.

While it is true that most of us must simply hope (and pray) that new legal treatments are developed and approved in time, that does not excuse us from the duty of defending our industry from our common foes, the parasitic mites. Instead of idly observing others at work on our common problems, we beekeepers individually need to realize that we each can do something to help make sure we win the race to have mite-resistant bees or at least come close enough that we aren't wiped out when the mites do become fluvalinate resistant here in the USA. We, unfortunately, must also keep in mind that while any potential new legal treatment may buy us some much needed time (to develop mite resistant bees), the mites may become resistant to some, and perhaps all, of the chemicals we could use to control them - particularly if we do not have rotation of controls. We, of course, hope that this will not happen, but believe it wise to plan for the worst while hoping for the best.

Moreover, we honey producers need to think hard and long about maintaining the image of honey as a pure, natural, wholesome, healthy food. That positive public image is worth a lot more to us than every penny spent promoting honey since the dawn of time - it sells a lot of honey. Just think how many of your honey customers have said something to the effect of "I love honey - it's so good — and good for you too!" Then think how much it cost the apple industry to put the Alar scare to rest despite their positive public image of a wholesome, healthful product. How many times have you heard and/or recited the old adage "an apple a day keeps the doctor away." Could our industry even afford to try and put a media-driven chemical scare to rest especially when we are battling for our lives against the mites as it is? Wouldn't it help preserve the image of honey as pure and healthy if a whole lot of us voluntarily worked together to reduce and potentially eliminate the routine chemical use thrust upon us of late? In other words, wouldn't we be better off being pro-active (anticipating and working now to ward off foreseeable future threats) rather than reactive (waiting until trouble strikes then responding defensively)?

In this article I wish to do more than just throw down a challenge (see the March 1995 ABJ pg. 182). I want to let you know that a minuscule few of the beekeepers worldwide have been and still are selectively breeding toward Varroa-resistant stock. Each research facility, cooperative breeding programme, or independent "resistance oriented" bee breeder is approaching the problem from a somewhat different angle and most of the programmes are reporting progress. None of the Varroa-resistance breeding programmes have the answer all bottled and packaged yet. There is more ground that needs exploring and each of the existing programmes could use increased and continuing support in this very important endeavour to develop field usable Varroa-resistant bee stock.

Hereafter I will briefly explain how Country Jack' s Honeybee Farm (Griffes), T.M. Klein and Sons, Hilltop Honey Farm (Veale), Cantu Apiaries, J & J Bee Service (Hettinga), English Apiaries, Connor Apiaries, U.P. Apiaries (Nebel), Champlain Valley Bees and Queens (Webster), Keiser Apiaries, Great Lakes Bees & Supplies (Hathaways) are working together to breed better bee stock - stock which will require no routine chemical mite treatment. Our Cooperative breeding program is called the Honey-bee Improvement Programme (HIP). Our testing protocol has been streamlined over a three-year period to make it more practical in commercial operations that have the large numbers of colonies needed, but not a lot of spare time to pick out and test 20-50 (or more) of their best colonies each year. Our method of breeder queen selection is one way, but certainly not the only way to breed toward high-producing, gentle, excellent overwintering, Tracheal and Varroa mite resistant stock. Each HIP Cooperator has to adjust the basic principles to fit into his/her own timetable, etc.. The basic guiding principles are as follows:

We feel that high producing stock is of paramount importance, so we start by each picking out our highest producers that seem by eyeball evaluation to be keeping the mites down better. Then we each move our own superior colonies from all over creation to our own individual test yard(s) for further observation. We move them as we find them so it doesn't take a special trip (knowing full well that if it requires a special trip chances are it would never get done). Once we have observed all our best producers together on a level playing field (same yard thus same foraging opportunities), we can easily see some are much better than others. Out in the other yards they suffered for lack of real competition. Now in our "high producers only" yard they are competing in their own league. So now we can quite easily pick out the best half of the high producers - they will have either substantially outproduced the other high producers or show other desirable traits like superior comb drawing which is important to our comb honey-producing Cooperators. Without much extra work we each have now narrowed down our search immensely just by observation.

To find the most mite resistant colonies, we could just leave these high producers untreated and let nature point them out via "survival of the fittest." We like to keep losses low so we opt to run a couple of tests that give us a better chance of picking out the more mite resistant colonies before we subject them to the ultimate test - untreated survival. We don't run the tests on every colony we have - that would be impractical and unnecessary - we only run tests on the best of the high producers. Then we only leave untreated those that pass both the preliminary tests we currently employ. Untreated survival is the final and ultimate test given to those that pass our two preliminary tests.

The first test we run is the 48 hour frozen brood HYG (hygienic behaviour) test. We cut an approximately 2" x 2" section of sealed brood from each colony to be tested and place it in a ziplock bag with the colony identification number written on it with permanent marker. We place a thumbtack in the frame we cut the sample from and place that frame in the centre of the broodnest (no matter where it came from). We freeze the brood samples in a OdegF freezer for twelve

hours minimum (but not over 24 hours). DO THEM ALL THE SAME WITHIN A TEST BATCH. Then we put the freeze-killed sealed brood back in the very frame it came from (which is now in the centre of the broodnest). We check it in 24 hours and again at 48 hours and record what percentage of the killed brood has been removed. Then we retest only those that remove OVER 80% in 48 hours. Highly HYG colonies will remove 100% in 48 hours and some will do it in 24 hours, as did an artificially inseminated (AI) queen tested late Summer 1995. She is a daughter of one HIP breeder bred with one drone from a second HIP breeder and two drones of yet a third HIP breeder. If we were looking for HYG alone, we would insist on 100% removal - since we are looking for a combination of traits, we cannot always be so picky while keeping our number of tested units at a reasonable level. Our hope is that eventually we will be able to insist on 100% removal in under 48 hours and it appears we are moving that way using our current procedure.

The second test we run is the mite chewing test - it only needs to be run on just the highest producers that have twice tested over 80% HYG. However, we tend to run this test simultaneously with the HYG test to save time. We place a sticky board trap under the brood nest. The sticky board trap is simply a piece of posterboard (or heavy paper) made sticky on one side with either insect glue (Tanglefoot) or aerosol cooking oil (PAM) which is protected from bee contact by 8x8 mesh (eight squares per inch each way) hardware cloth held a minimum of 3/8" above the posterboard surface (make it deeper as the hardware cloth will sag). It need not be fancy nor take long to build - we used old 3/4" deep bottom boards to make the first couple - we put them on with blocked entrance to rear and let colonies use upper entrances for the test period. For those on pallets I suggest making up a set of test pallets that allow enough room beneath the frames for the trap (but you already thought of that didn't you?). The sticky board catches the debris the bees drop including mites that they groom off and drop as well as mites that fall naturally. Once we have left the trap in place long enough to trap at least 50 mites (1-3 days - do them all the same within a test batch), then we pick 50 mites at random and inspect both sides of them for damage. Do they have legs amputated? Are their backs cracked? Do they have large dents in the shell? Are large pieces of the shell missing? You need to have some type of magnifying device to see the damage. Magnification of around 20X is what you need and it can be obtained inexpensively from some of the more powerful hand lenses or pocket microscopes used by farmers to identify insect pests in their Integrated Pest Management (IPM) programmes. A binocular dissecting microscope, especially a long arm one, works even better, but costs considerably more (a cost that could be shared by a more localized group working together such as a bee club). In a pinch you can use a reversed camera lens off a 35mm camera as I did initially (at Dr. Roger Hoopingarner's suggestion). The reversed camera lens isn't the best alternative due to low magnification, but it can be done that way if that is what you have at hand. Using the camera lens you can see the large dents, cracked backs and missing pieces of shell, but I know at least I couldn't accurately tell about amputated legs - do what you can with what you have! We run a second mite-chewing test on those that severely damaged over 20% of the mites. (While 20% is our bare minimum cutoff - we prefer over 40%). Then we each leave untreated in our isolated yard just those colonies that we feel have a better shot at actually surviving this ULTIMATE test - the ones that are the ultra high producers over 80% HYG - over 20% mite chewers. The few that come through the untreated phase of the test still looking healthy and vigorous - still strong - still making lots of honey - these few are the breeder queens. We graft off each of them about equally to requeen our operations. We trade stock various ways among cooperators to help each

other cut in our common effort also. By working together our stock base is much larger, allowing us to greatly increase the level of selection pressure employed and decreasing the risk of unrecoverable loss of the breeding stock.

A couple of our Cooperators are finding it difficult to test stock in their "high producers only" yard before Autumn. Accordingly, they are experimenting with leaving all their high producers untreated, then testing those that survive in excellent condition) to determine which are best for breeders. OR, they may just leave them to prove they can produce a second excellent crop then pass a second winter untreated. They assume those that survive (and thrive) do have what we need, whether they are HYG-mite chewers or not (both these alternatives increase risk exposure). Another cooperator is planning to add "mite infertility" to the HYG-mite chewing traits he already tests for. When enough time has elapsed to tell which way works best, we will adjust our basic testing protocol accordingly.

Well, now you know how the cooperators in the Honeybee Improvement Programme are breeding toward Varroa mite resistance. So how is it going for us? We seem to be making progress, but we never figured this would be a quick or easy project. I suspect it may take 10-20 years for us to reach our goal of 80% untreated survival among naturally mated daughters of HIP breeders. This is a l-o-n-g-term project. Along the way we expect to reap other benefits that come only to those who selectively breed stock to better fill their needs. We already have cooperators reporting higher honey yields using HIP stock-one cooperator who just had a banner year reported his HIP test yard had a 163 lb. avg. against a 150 lb. operation wide average - remember his test yard was untreated yet competing against treated units in the rest of his operation. We hope to pull a breeder or two out of there in Spring 1996 if they survive this second winter untreated. We have found a couple lines this past year that are superb comb drawers - nice, straight comb - nice white cappings. We hope 1996 finds them among the thriving survivors as these traits are important especially to our comb honey producers. We have noted a decrease in chalk brood, in some lines more than others. We have seen colonies that eventually became HIP breeders enter Winter untreated and not only survive but thrive the next Summer and Autumn, while others crashed around them. We believe there is hope to achieve our goal based on what we have seen these past three years.

With help and instruction from Susan Cobey (Summer 1995) we have now begun to test some AI stock. We have also donated virgins and drones to Drs. Hoopingarner and Harbo for use in their Varroa resistance research which is funded by a grant from the Michigan Department of Agriculture (the grant was acquired with help from the Michigan Beekeepers Association).

We take this opportunity to publicly thank Drs. Harbo and Hoopingarner for donating A1 breeder queens they have finished using to HIP - we thank them for answering a host of questions also. We also thank Laurence Cutts and the Florida State Department of Agriculture for granting us a special compliance agreement in 1994 to help further our work. We also thank Mike Hansen and the Michigan Department of Agriculture for help in gathering queen shipping regulation information needed to include out-of-state Cooperators into our programme.

Many of you have already experienced several years with some pretty high losses due to mite-related problems. Even more of you have joined the "50-100% loss" club this winter. Are you ready to help yet? Send me the results of the tests you have run on your stock using our HIP protocol and we will welcome you aboard as a HIP Cooperator. Each HIP Cooperator needs to be able to follow the HIP protocol to select a minimum of 20 colonies/year to leave untreated - it takes several hundred naturally mated daughters of good breeder queens to find 20 good enough all around to face the "untreated survival" test - maybe two to five of the 20 will be good enough to be a HIP breeder queen. Once a queen is promoted to breeder status, we do everything we can to keep her usable for grafting as long as possible.

As I said before, "We are all in the same boat being sunk by Varroa mites (and other problems), so why don't we band together to work out a long-term solution? Our bees have to cooperate with one another to make a crop of honey. Perhaps we should take a clue and cooperate too!" (March 1995 ABJ pg. 182). We desire to work cooperatively with all those willing to cooperatively breed high producing, excellent overwintering, gentle, Varroa-resistant stock. Pitch in - your help can make a difference in the race to develop mite resistant bees before we have chemical resistant mites.

Also, if any of you fellow beekeepers (in the USA) should find any multi year UNTREATED thriving survivors (an abandoned yard in a mite-infested area for instance), please send us the queen even if you don't test her. Test her and graft off her first if possible. (Due to severe bee stock import restrictions - please don't send us queens from outside the USA.) When you write requesting information, enclose a self-addressed stamped envelope for the reply. When calling, ensure your questions are answered on your phone bill by calling between 9-10 p.m. Eastern Time - we thank you for helping us keep the costs of HIP down we receive no government funding.

Acknowledgement, American Bee Journal

Professional beekeepers founded the "European Professional Beekeeper Association"

On the night of October 25, 1997 in Donaueschingen/Bavaria the presidents of the Professional Beekeeper Associations of Austria, Italy and Germany have founded the European Professional Beekeeper Association (EPBA).

The temporary administration is as follows: President: Mr Harold Singer (President of the Austrian Professional Beekeeper Association, OEIV). 1st Vice-president: Mr Luca Bonizzoni (President of the Italian Professional Beekeeper Association, AAPI). 2nd Vice-president: Mr Gunter Stecher (President of the German Professional Beekeeper Association, DBIB). Secretary: Mr Karl-Rainer Koch.

The provisional headquarters of the EPBA is at Oppenau/Germany. The first general meeting will be held on January 1, 1998 in Strassbourg/France.

The appointment of the representatives of the Professional Beekeeper Association of Spain and France will be shortly.

The EPBA asks for membership of other European countries.

The policies of the EPBA are following:

1. Bundle of interests of European beekeepers
2. Existence protection of the professional and semi-professional beekeepers
3. Definition of an European standard of the quality of honey
4. Labelling of the honey between non-European honey and European honey
5. Graduation of the honey in "Industry Honey", "Bee Honey" and "Honey of High Quality"
6. Influence of the European Union for a suggestive distribution of the money given by the EU

Klaus Nowottnick, Germany

No inquiry into bee pest required says Luxton

The Associate Minister of Agriculture, Hon John Luxton, has decided that there is no need for a board of inquiry into the proposed national pest management strategy (NPMS) for the major honey-bee disease American foulbrood. It is only the second NPMS proposal under the Biosecurity Act 1993 to have reached this stage. The first was for Bovine Tb.

The Biosecurity Act requires the Minister to decide on the need for an inquiry before he can consider whether to recommend that the strategy be approved. Public submissions opened on 3 July and closed on 14 August. On the basis of submissions received, Mr Luxton has decided there is not sufficient opposition to require a board of inquiry.

Under the Biosecurity Act, a board of inquiry must be appointed unless the Minister is satisfied on reasonable grounds that:

a) there is no significant opposition on the question of whether to have a strategy;

and

b) there is no significant opposition to the proposed form or content of the strategy.

Mr Luxton said that prior to calling for public submissions, the National Beekeepers' Association (NBA) had conducted full consultation with beekeepers during the development of the proposal. The Minister said he was further satisfied about the adequacy of the consultation process on the notified proposal and the content of submissions.

Fifty submissions were made on the proposed NPMS for AFB. Submissions demonstrated no significant opposition to the need for a strategy, Mr Luxton said.

"While opposition was expressed on significant aspects of the strategy proposal, the extent of opposition was insignificant relative to the total group of people likely to be affected by the strategy", Mr Luxton said. "I am therefore satisfied that there are reasonable grounds why a board of inquiry is unnecessary."

The specific aspects of the strategy proposal which attracted most opposition were: the stated goal of elimination of American foulbrood rather than reduction; the cost of implementing the strategy and a perceived under-estimation of cost; the effectiveness and cost of the Disease Elimination Conformity Agreement in the strategy; and the use of an apiary register.

Today's T.I.P. Some drink at the fountain of knowledge others just gargle

Please Return

New Zealand Post supply mailing bags for queen-bees and sometimes they don't come back. This part of the service is free of charge - so if you would like it to continue, please return any bags you have, either the new gauze type or older canvas type to New Zealand Post and ask them to send them to the Hawke's Bay Mail Centre. These bags belong to New Zealand Post and we're running short.

Thanks

Colin McLean

Propolis Processing

by John Iannuzzi

For the 'beginner,' who wants an easy way to prepare sticky substance for sale or personal use, here's the step-by-step process.

Introduction

Described as "the most mysterious hive element," that resinous substance which the honey-bees collect from the buds and bark of trees to keep the wind and rain, light and vibration out of the hive, as well as to fight the permicious wax moth and to make antiseptic each cell before the royal lady lays an egg, propolis (PROH-poe-less) is very easy to collect by using a hive tool to scrape the hive body and/or frames, but a devil to clean and prepare for home use or sale.

My five-step process developed out of necessity (I have been selling it from my front door at $2 an ounce for the past eight years) will make this tedious chore much more manageable. Repeat: for home sales or home use on a very small scale.

This article will show the budding beeman how to float, dry, clean, bag, weigh and package that substance which literally translates, from the Greek, as "before the city" (pro/before + polis/city), because of the propensity of honey-bees, or so the ancients thought, to restrict the opening of the hive (the city) with what Cuban author Moises Asis has dubbed el oro purpura (purple gold).

Step 1: FLOATING (Photos 1, 2 & 3)

Photo1. First step: floating propolis and agitating with fork.

Equipment * Plastic tub, 1/2- gallon
* Sufficient water
* Fork
* Strainer

Procedure

Dump the propolis collection into tub, fill with cold tap water and stir with fork. What floats is removed with a strainer and discarded. Refill again and pour off what floats, after agitation with the fork; repeat process until there are no more floats.

Comment: The floating debris is wax bits, slivers of wood, paint chips and bee parts. What sinks and remains at bottom of the container is the real McCoy.

Photo 2. First step: removing debris with strainer.

Photo 3. First step: pouring off dirty water.

Step 2: DRYING (Photo 4)

Supplies Sheets of wax paper

Procedure

Put wax paper on flat surface, dump tub of propolis, after it has been sufficiently drained through a strainer, onto the wax paper. The pieces will dry within 24/48 hours provided humidity is right.

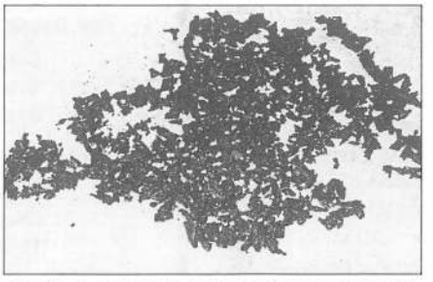


Photo 4. Second step: drying propolis bits on a sheet of wax paper.

Step 3: CLEANING (Photo 5)

Equipment Tweezers
Wax paper
Saucer

Procedure

Dump the dry pieces onto another sheet of wax paper, place on a table, sit down, and go through the bits, piece by piece, removing anything that is not propolis, using the tweezers for the purpose. Store trash on saucer.

Comment: What is removed are wax bits or slivers of wood or paint chips or bee parts adhering to the pieces. Also discard anything off colour, especially black, even though propolis.

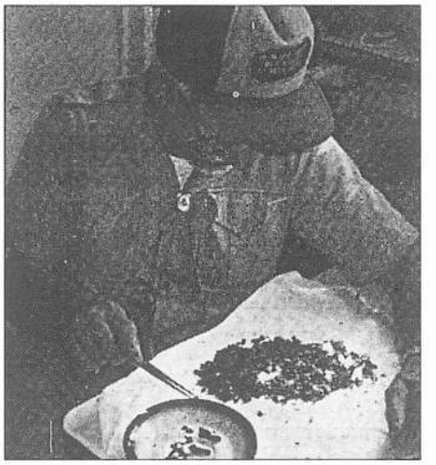


Photo 5. Third step: picking debris out of the dried propolis with tweezers.

Step 4: Bagging/Weighing (Photos 6/7)

Equipment * Plastic sandwich bags
* Tablespoon
* Small diet scale
* Seal-A-Matic

Procedure

Using the tablespoon, dump three loads of the pieces into a sandwich bag and weigh to one ounce on scale. Adjust contents as necessary. Seal using sealer of choice.

Photo 6. Fourth step: weighing out an ounce of propolis for packaging in a plastic sandwich bag using a dietetic scale.

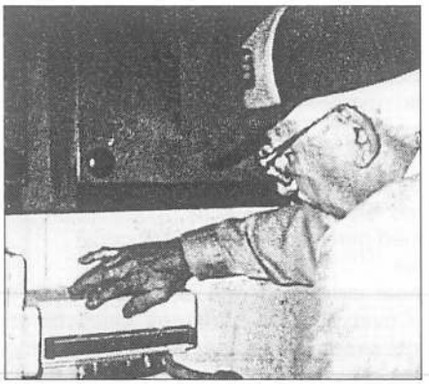


Photo 7. Fifth step: sealing the bag in a Touch-a-Matic Sealer that handles plastics up to eight inches wide.

Step 5: PACKAGING (Photo 819)

Equipment
* Recycled baby food jars, junior size
* Labels
* Price stickers

Procedure

Put a sealed plastic bag into the jar, rolling up the surplus plastic so that it's at the top.

Put circular sticker on lid (your choice) to cover original printing, and suitable label on jar front. Attach price sticker.

My computer-designed label shows a skep with flying bees, and has this wording:

(top line) **Natural Honey-bee**

(middle) **PROPOLIS 1 ounce**

(bottom) **Howard Honey Farms Ellicott City MD 301/730-5279**

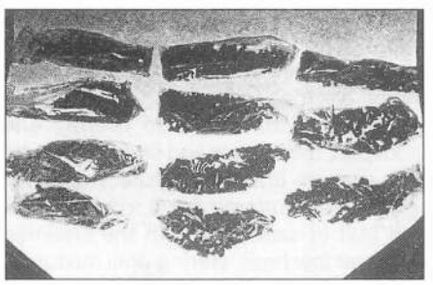


Photo 8. Fifth step: eight sealed plastic packages.

Comment: I have a master of these labels, sixteen to a sheet, Xerox it, and cut the copy for use. A thin line of liquid Elmer's Glue-All, with suitable pointed spout, is placed only on the perimeter back of the label. Only each corner is spread with the right forefinger which is then placed in the middle of the label to pick it up for application. Finally, I apply a circular price sticker reading: "I oz $2.00."

FREQUENTLY ASKED QUESTIONS (from potential customers at my front door or at a honey festival)

1. What's that (pointing to a bottle of propolis for sale)?

That's bee glue, called "propolis," that the bees collect from the bark and buds of trees to use as a plaster within the hive, to seal cracks to keep out the wind, rain and light and seal parts together to eliminate vibration and fill up tiny spaces they can't manage, to control the enemy wax moth and, most important, to coat each cell interior to make it antiseptic before the queen lays an egg therein (she's laying up to 2000 a day). An epidemic would wipe out the colony.

2. How do you use it?

People use it internally and externally. Internally, chew it, swallow the juices, spit out the solids: it is reputed to be good for mouth, throat, stomach problems. I use it thusly.

3. Does it really work?

Honestly, I don't know. I know of no controlled American (i.e., scientific) studies that have been published.

For external use, I do know that when mixed with rubbing alcohol to form a salve, it's as good as any commercial preparation from the drugstore, like Unguentine, Bactine, iodine, etc., when rubbed on the body for a rash. True, it's kind of messy because of its colour.

One bee lady told me that she puts a few drops of a solution, made with consumable alcohol, onto a cube of sugar, and uses it that way internally.

It's like taking a vitamin pill. Does one actually feel the difference? I never have.

SUMMARY

And that, my dear readers, is how one hobbyist processes propolis for sell/home use and replies to inquisitors. The stuff does NOT sell like hot cakes (30 bottles so far in 199S and 35 in 1994): it takes a Looooooong time to develop a market. Since I started on this venture in 1985, I've only had to buy the commercial product once to keep my customers supplied.

About the author: Beeman for 35 consecutive years in his own backyard, never operating more than 30 doublebrooded colonies at one time (currently 16 are on tap), the author collected his first propolis in 1982 and started selling it three years later, using hive scrapings and Bell Boards, a slotted device made specifically for harvesting clean propolis (and not the new plastic grid introduced last year, a precursor of which he purchased in England in 1987 and never used because he had tested the principle years before and found it ineffective—it takes all season to fill; to be practical, one would have to use perhaps a dozen to collect six ounces of propolis per season, versus the much simpler Bell Board).

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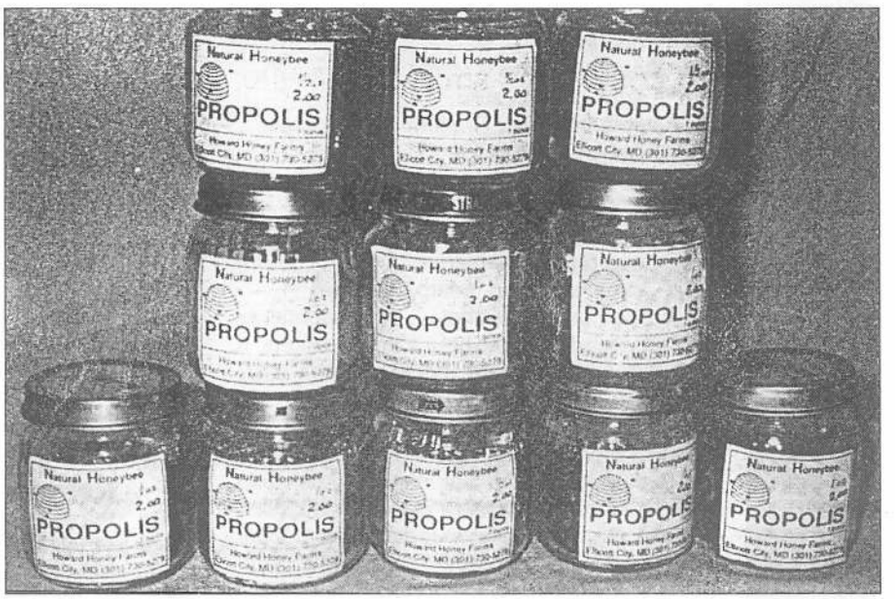

Photo 9. Fifth step: the finished product ready for sale.

RECIPES

Christmas Ornaments

The idea of wax Christmas tree ornaments is not new. Before blown-glass ornaments were popular, colonial women moulded Christmas tree ornaments from beeswax. At one time wax ornaments imported from Germany were an important part of our Christmas tradition. Order beeswax and moulds from candlemaking suppliers. "Pourette" and "Deep Flex" carry an extensive line of Christmas applique moulds. Antique candy and cookie moulds make interesting forms.

General directions

Step 1: Melt the wax to 165deg (in a double boiler arrangement). Cut a 6-inch length of gold cord or ribbon. Make a loop by gluing the ends together or by dipping 1/2 inch of both ends into melted wax. Hold the ends together until the wax cools.

Step 2: Pour wax into the mould and wait until about 1/8 inch of the outside is cool and opaque, but the centre is still hot, liquid and translucent. Insert the joined ends into the wax, leaving the loop extending out of the mould.

Step 3: When the wax is cool, remove the ornament from the mould. Note that wax ornaments should not be stored in a hot attic. Beeswax melts near 146 degrees F., but thin ornaments can warp at a much lower temperature.

Also, I have included several holiday recipes which may help you; if you are like me, you are running a little late! A VERY MERRY CHRISTMAS TO ALL!! ! !

Frosty Nesserrode Pie

During the holiday season, it is the perfect time to have family and friends in for dessert and coffee. It is a most popular and easy way to entertain. A wise hostess plans ahead and stacks her freezer with gourmet desserts. High on the list will be this recipe for Frosty Nesselrode Pie.

Take a pie from freezer just before serving and top with a snowcap of whipped cream and a garnish of Maraschino cherries. This will be a delight to the eyes as well as the taste.

- 1/4 cup halved Maraschino cherries, drained
- 2 tablespoons brandy
- 3/4 cup milk
- 1/2 cup honey
- 2 eggs, well beaten
- 9 inch prepared Graham cracker crust
- 1/8 teaspoon
- 1/2 cup chopped mixed glace fruits and peels
- l/2 cup chopped walnuts
- 1/2 cup chocolate pieces
- 1 l/2 cups whipping cream, whipped

Place cherries and brandy in small container and let stand several hours or overnight, if possible. Combine milk, honey, beaten eggs and salt. Cook over low heat, stirring constantly, until mixture comes to a boil and thickens slightly. Pour into medium-sized bowl and chill thoroughly. Stir cherries, candied fruits, nuts and chocolate pieces and chilled custard. Gently fold in whipped cream. Pour into graham cracker crust. Freeze until firm. Cover with aluminium foil or plastic and return to freezer until ready to serve. Serve frozen. *Makes 8 to 10 rich servings or as the waistline dictates.*

Honey Beverages

Christmas Punch (Wassail)

- 6 cups apple cider or juice
- 1 cinnamon stick
- 1/4 teaspoon nutmeg
- 1/4 cup honey
- 3 tablespoons lemon juice
- 1 teaspoon grated lemon peel
- 1 can unsweetened pineapple juice (2-1/4 cups)
- cinnamon sticks

In large saucepan, heat cider and one cinnamon stick to boiling; reduce heat. Cover; simmer 5 minutes. Uncover; stir in remaining ingredients except cinnamon sticks and simmer 5 minutes longer. Serve in punch bowl. Use cinnamon sticks as individual stirrers. *Makes 16 servings (about 1/2 cup each).*

Christmas Champagne

- 2 cups honey
- 2 packages strawberry kool-aid
- 2 8 ounce cans frozen orange juice mixed with 3 juice cans water
- 2 8 ounce cans frozen lemonade mixed with water
- 2 28 ounce bottles ginger ale
- 1 bottle maraschino cherries

Mix kool-aid with 4 quarts water and 2 cups honey. Combine with juices about 4 hours before serving. Chill. Add ginger ale. Pour over ice ring or cubes in punch bowl. Add cherries.

Noel Confections

"Holiday Tempters"

- 1-2/3 cups honey graham cracker crumbs (30 crackers)
- 1/2 teaspoon salt
- 1 tablespoon brandy or cranberry juice
- 2 tablespoons creamed honey
- 2 tablespoon soft butter or margarine
- 1 cup semi-sweet chocolate chips

Filling

- 1 cup finely cut pitted dates
- 1/2 cup golden raisins, chopped
- 1/2 cup finely cut candied cherries
- 1 cup coarsely chopped walnuts
- 2 tablespoons creamed honey
- 2 tablespoons brandy or cranberry juice
- 1/4 cup halved candied cherries for garnish

Mix graham cracker crumbs with salt. Add brandy and creamed honey. In a saucepan, melt butter and chocolate chips over low heat. Work into graham cracker mixture. Press half of the mixture over bottom of a buttered 8 x 8 x 2 inch pan. For filling, put prepared fruit in saucepan with the creamed honey and brandy. Cook over low heat, stirring until mixture is simmering hot. Remove from heat, cook and fold in walnuts. Pat fruit mixture onto graham cracker base. Cover with the balance of graham cracker mixture. Press top firmly onto the filling. Chill in refrigerator, then using sharp knife cut into bite-size squares. Decorate squares with halved candied cherries. Confections stay crunchy if stored in refrigerator. *Makes about 30 squares.*

Christmas Pie

Cook together:

- 4 tablespoons cornstarch
- 3/4 cup honey
- 2 cups boiling water

Add:

- 1 teaspoon vanilla
- 1/2 teaspoon almond extract

Pour hot mixture over 3 stiffly beaten egg whites. Continue beating about 10 minutes or until stiff. Pour into baked pie shell. Cover with whipped cream. Garnish with coconut, cherries, nuts, or as desired. Chill for several hours or overnight. This makes 1 very large or 2-8" pies.

Finitron Wasp Bait

Finitron Wasp bait sold under an experimental usage permit from 1994 until last year will no longer be available.

This is the formulation which was stored in a frozen state.

A replacement Finitron concentrate by Griffin NZ (see below) has been tested by Landcare Research with pleasing results. This formulation has been submitted for registration to the Pesticides Board and we are hopeful for a restricted use permit by December 1997 in time for use this season.

A big advantage of this formulation is that it can be stored in a normal chemical store from time of purchase to time of baiting, and mixed with meat or fish by the operator just prior to placing in the field.

FOR PROFESSIONAL USERS ONLY

Finitron Wasp Bait Concentrate for the preparation of baits for the control of common and German wasps

Contains: 200g/kg sulfluramid in the form of a dispersible powder.

Registered pursuant to the Pesticides Act 1979, No 4332.

Proprietor: Griffin (NZ) Ltd., 470 Parnell Road, Parnell, Auckland.

Distributed By: Elliott Chemicals Limited, PO Box 18-417, Glen Innes, Auckland. - 45 Kitchener Road, Pukekohe. Phones: (09) 238-3170, (09) 521-1562, Fax: (09) 238-4226.

Net contents: ®-Registered Trade mark of Griffin Corporation, Valdosta, GA, USA

Current Research

Carbohydrates as attractants to protein baits

Improving existing baiting strategies by determining:

* the effect of toxin concentration
* the effect of faster acting toxins
* how big an area to control
* feasibility of aerial baiting

Pathogens in baits

Current products for wasp control

Type	Product	Active Ingredient	Supplier
Powder	Permex Insect Dust	Permethrin	Environmental Health Products
Powder	Wasp Killer Dust	Permethrin	Yates NZ Ltd
Powder	Rentokil Wasp Killer	Carbaryl	Rentokil Ltd
Spray	Actellic 50 EC	Pirimiphos-methyl	Crop Care
Spray	Ficam W	Bendiocarb	Key Industries Ltd
Bait	Finitron Wasp Bait	Sulfluramid	Elliott Chemicals

Limitations of current control methods

Nest poisoning	* effective but nests difficult to locate
Trapping	* little or no impact on population
Baiting with Finitron	* expensive
	* not effective in all habitats
	* not effective early in season
Alternative baits	* non-target problems
	* none currently registered

Information supplied by "Landcorp Research"

N.B.A. MEMBER BENEFITS

AVIS RENTAL CARS

will give all N.B.A. Members 30% discount off your rental vehicle WORLD WIDE.

Contact the Executive Secretary for the necessary details.

WHITCOULLS OFFICE PRODUCTS

have agreed to give us a whopping 30% discount on all stationery.

Free Phone: 0800-806-429 FAST, FREE DELIVERY

CLEAR COMMUNICATIONS

OFFER MEMBER BENEFITS

As an Association member you can take advantage of CLEAR's Partnership Association Plan to automatically qualify for the following outstanding savings:

CLEAR Toll Free on 0800-555-500, 24 hours a day, 7 days a week.

For Sale

Going Concern Beekeeping Business

Independent and Profitable!

Situated mid North Island, currently only for honey production

* Between 450-500 beehives on pallets (for easy shifting with crane)
* Own Queen rearing unit with 125 4 frame nucs
* Queen rearing shed and store shed
* Honey shed with all stainless steel extracting plant (17x16m)
* Cutting plant for comb honey
* Approximately 1400 full depth supers
* Approximately 450 cutcomb supers
* Complete woodworking shop (include thickneser, radial arm)
* Extra care has been given to the use of durable materials of the hives, macrocarpa boxes, matai floors and the last few years we have been using totara timber for the lids.

Part of turnover sold via retail shops and tourism outlets.

The business is situated on 4.35 hectares of prime land, planted with trees for self sufficiency (nut trees, fruit trees, timber trees and bee-trees). Fenced in 8 paddocks. Several house sites to choose from, the property is very private, however only 3km from town.

* Optional for sale: Homestead on 5750 square metres with large implement shed.

Please phone Gerrit at Pink Sun Apiaries

PINK SUN APIARIES

Mangarino Road
RD 6
Te Kuiti 2500
New Zealand

Phone/Fax: (07) 878-6416

The effect of honey upon calcium retentions in infants

A research paper "The Effect of Honey Upon Calcium Retentions in Infants" was published in the Journal of Paediatrics (USA) in 1941. This paper showed that honey can increase the amount of calcium absorbed from milk. In the trials honey and milk, honey and sugar (corn syrup) and straight milk was compared; the honey and milk combination produced a better result.

This research has never been used to create a consumer benefit .... probably because osteoporosis wasn't an issue back then.

Dr Peter Molan, co-director of the NZ Honey Research Unit at Waikato University believes the research has considerable significance for people concerned with calcium uptake now.

The NZ honey industry will take the Journal of Paediatrics paper and use that as the basis for investigating how honey could help modern women at risk of osteoporosis to increase their calcium uptake.

There are a number of added values in the exercise says Bill Floyd, NZ honey industry spokesperson. When honey is added to a low-fat milk it makes the milk taste "creamier" even though the fat content isn't increased. This benefit means that companies could develop calcium enriched low-fat milk, yoghurt and icecream products with honey: and the products would taste better.....have less fat.....and increase the calcium uptake for the consumer from the milk.

Research will start early next year. Once we've been able to link the USA research to present day dietary needs we'll work with a dairy products marketeer on the project. There's no reason why a commercially successful product couldn't be in place fairly quickly, says Bill Floyd. The need is certainly there for it.

HELP WANTED

"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: (250) 785-4808
FAX: (250) 785-2664

FEBUARY 1997

MARCH 1997

APRIL 1997

MAY 1997

JUNE 1997

JULY 1997

AUGUST 1997

SEPTEMBER 1997

OCTOBER 1997

NOVEMBER 1997

DECEMBER 1997

IMPORTANT DATES FOR 1998

BRANCHES SEND YOUR MEETING DATES IN FOR 1998. NO CHARGE.

EXECUTIVE MEETING DATES

MARCH 98 - 3rd and 4th - AUCKLAND

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

COMING EVENTS...

NELSON BEEKEEPERS CLUB — Contact Pete and Kevin 546-1422

Diary Now!! 1998 Conference

1998 NBA Conference is being Hosted by the Far North and Northland Branches. It will be held at the "Quality Resort", Waitangi (Bay of Islands).

Dates:
Specialties meetings, Monday 20th and Tuesday 21st, Conference Wednesday 22nd and Thursday 23rd of July.

Hotel Phone number:
(09) 402-7411
Fax: (09) 402-8200.

Branch contact details on the inside the front cover of the magazine.

Diary NOW 14th, 15th, 16th of August 1998 for a BUZZ weekend

A full weekend of training and hands on for all you budding beekeepers and those who need to feel comfortable working with bees.

Venue: Porongahau Valley Camp.

Full cooking and accommodation facilities.

Cost to be advised soon
(it will not be expensive).

Another Southern North Island
venture to assist you.

Any questions call: P.J. (alias BUZZ) on (06) 378-7632.

AUCKLAND BEEKEEPERS CLUB INC. — SECRETARY - Terry Buckley Ph: (09) 415-9853

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

AUCKLAND BRANCH
Call: Jim (09) 238-7464

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

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

CANTERBURY BRANCH
Meets the last Tuesday of every month.
February to October.
Field Day November.
Contact: Trevor Corbett
Phone: (03) 314-6836

CHRISTCHURCH HOBBYIST CLUB
These are held on the first Saturday each month, August to May, except for January on which the second Saturday is applicable.
The site is at 681 Cashmere Road, commencing at 1.30pm.
Contact Peter Silcock
Phone: (03) 342-9415

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

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

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

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

NELSON BRANCH
Phone: Michael
(03) 528-6010

NELSON BEEKEEPERS CLUB
Phone: (03) 546-1422

OTAGO BRANCH
Phone Bill (03) 485-9268

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

POVERTY BAY BRANCH
Contact Barry (06) 867-4591

SOUTHERN NORTH ISLAND BRANCH
Phone: (04) Frank 478-3367

SOUTHLAND BRANCH
Contact Don Stedman,
Ph/Fax: (03) 218-6182

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

WAIKATO BRANCH
Call Tony (07) 856-9625

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

WELLINGTON BEEKEEPERS ASSOCIATION
Meets every second Monday of the month (except January) in Johnsonville. All welcome.
Contact: Shauna Tate, 6 Martin Street, Porirua East.