

National Beekeepers Association of New Zealand (Inc.) 211 Market Street Sth, Hastings, New Zealand. POSTAGE PAID PERMIT No. 384 HASTINGS, NZ.

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

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Peter Burt, 27 Murphy Road, Wainui, Gisborne. Tel. (06) 868-4771 Tel/Fax (06) 867-4591

Rob Johnson,



President's address to Wanganui NBA Conference, 17 July 1996.

I take pleasure in presenting the President's Report to this, the 82nd Annual Conference of the National Beekeepers' Association of New Zealand.

I'd like to start my address by taking you far back into our Association's history. The year was 1913, the venue was Wellington, and it was time for a beekeepers' conference. Over the previous few years, several conferences had been held. They probably didn't bear much resemblance to what we do today — I won't go into the more obvious details.

The difference I want to highlight is that these were conferences of the New Zealand Beekeepers' Federation. That is, groupings of beekeepers around the country were free to form autonomous groups, very much like today's branches. It was this loose knit association, strictly speaking a federation, that would come together to discuss the problems of the industry of the day.

And the problems? AFB, of course. And marketing. To read some of the items from those days you'd have to ask yourself if we have come very far.

As far back as 1913, the Federation decided that that wasn't enough, that the unco-ordinated efforts of individual independent branches did not provide the national voice, the expression of the whole industry. It was out of that desire that the National Beekeepers' Association was founded, 83 years ago. The advantages of a single voice to speak for the industry brought with it a downside, too. The branches, independent and self-governing, had to change their methods of operation. In order to get action on new projects, the Association had to accept it, and the branches were then bound to the decisions of the Association.

Compared to similar organisations, we allow considerable leeway and put few constraints on the operations of our branches. But at the end of the day, the membership is not of the branch, but of the national association. And it is in that national association that our strength and value resides.

Once our members and branches have used the varieties of democratic expression inherent in our rules, we must learn to respect the decisions of a national body. The last few years have been rife with issues that have resulted in a variety of opinions and positions. I'll mention marketing, disease control and the levy system as only three. While I appreciate and value the diversity contained within our industry, it appears that some branches and some individuals within our industry simply do not recognise that they are out of step with the wishes of the majority. Rather than pull the organisation apart, or threaten to form alternative organisations, I believe it would be of more long term value to acknowledge the reality of majority opinion, and get on with the future.

Commodity Levies

Now let's move forward forty odd years. Here's one that's bound to elicit some groans: The Seals Levy.

Prior to the Seal's Levy, the NBA existed entirely on voluntary membership. Reading about those times, the reports are peppered with comments that until all beekeepers are required to contribute to the Association, we could never expect to make real progress. As many know from first hand or from history, the Seals Levy did not turn out to be the right method of levy. Let's leave it at that any of you younger (us younger?) beekeepers who haven't heard the story should just collar one of the older beekeepers and suggest that we go back to using the Seals Levy and I'm sure you'll get a chance to hear about the shortcomings...

Then, sometime in the mid 1970s, the idea of levying based on hive numbers emerged. It was a big unknown, and came at a time when the NBA was near bankruptcy. Some beekeepers at this Conference were involved in the original ideas - Ivan Dickinson, Mervyn Cloake, Keith Herron, Malcolm Haines, Mike Stuckey were all on the Executive during that period. The Hive Levy Act 1978 followed, providing for a compulsory levy for beekeepers with more than 50 hives. It was administered and collected in the first years by the Honey Marketing Authority. After the demise of the HMA, the Act was amended to leave it to the NBA as at present.

It hasn't been a perfect levy mechanism, either. While there is a perception of widespread under and non-reporting of hive numbers, my analyses do not support that. The few people who are known to abuse the levy have, however, created a general degree of mistrust in its fairness and enforcement. During my time on the Executive, I have heard some creative explanations related to levy payment. One guy was overseas every winter and had one full time employee, while declaring only 300 hives. Another beekeeper claims to have given away 49 hives to each of 10 friends, who then allow him to run the hives on their behalf. Another maintains a truck fleet of eight or nine vehicles to service his 800 hives.

Nick Wallingford

Next year, there will be no more Hive Levy Act. The NBA has now conducted the referendum to gauge support for our Commodity Levies Act application, and we plan to have the new levy into place for the coming year. The numbers participating in the referendum were disappointingly small, but significantly in support of the levy proposal. Again, I have heard some creative explanations to try to turn the figures around to say the support wasn't <u>really</u> there. Some people use statistics the way a drunk person uses a lamp-post — for support rather than for illumination.

Frankly, I'll admit to being nervous at the setting up of systems and the amount of explanations and education that will be required. It is going to be a challenging several years until we are confident that the new levy has been suitably implemented.

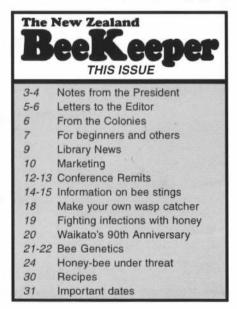
Pest Management Strategy

Last year's Conference gave an 81% vote of support for the strategy to eliminate American foul brood. Since that time, the PMS has been through several more versions and more and more consultation and consideration by the industry.

A public discussion document was released late last year, followed by a final version that was submitted to the Minister concerned in February. As you'll hear from the Chairman of the Disease Committee later, little has happened since that submission.

The various parts of the Apiaries Act and other acts due to be sunsetted by the Biosecurity Act were due to expire at the end of June. The NBA worked consistently and determinedly to meet that deadline, to ensure that AFB would not be, effectively, deregulated.

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When the Government found itself unable to deliver a workable Act for the use of industries such as our own, they moved to extend the AFB control provisions of the Apiaries Act. While our industry appreciates this extension, I would have to express disappointment at the additional costs that have been placed upon us. I believe we acted in the only responsible manner, attempting to meet the requirements to change that were imposed upon us. To complain about the treatment is futile.

I look forward to seeing the Pest Management Strategy put forward by our industry accepted by the Minister and ultimately implemented. I believe the development and the final strategy reflects well upon our professionalism. While it is a forelorn wish, I would have to say I'm sorry we were ever called upon to have to do it. I still maintain that biosecurity is a national asset, and should be managed as such for the benefits of all in our society. While I believe we have done the best job possible, I cannot help but think a future generation of beekeepers will look back and wonder why it was forced upon us in the first place.

Executive Activities

I would like to give particular thanks to my fellow Executive members in this address. Executive members don't generally take on the job to be thanked, which is just as well. With the contentious issues of the last year, there have been times of disagreement and even strong words. Descriptions of Executive activity have not always remained within the Executive, which is not necessarily a bad thing, in my opinion. I believe an industry must be robust enough to tolerate the airing, at least to its members, of the full process of decision making. Again, however, I believe the NBA could benefit by a greater degree of acceptance of validly made decisions.

The year has seen more absences from Executive meetings than at any time in the past. The culmination was the failure of the May Executive meeting due to a lack of a quorum. I believe the NBA must be aware of the demands of being on the Executive, and what is being asked of your fellow beekeepers who serve on the Executive. I don't have any real solutions, but believe we have moved in the right direction in more extensive use of committees to deal with NBA business.

The committee structure allows for involvement of members outside the elected Executive. I don't have any problems with this, as I still see the Executive and President as ultimately accountable to the NBA membership.

Into the future, I would like to see even more devolvement of activities to such committees. I see it as an effective and cost efficient use of levy money, allowing the Executive to act more in the form of a board of directors, directing and monitoring progress of the activities carried out by the various committees.

Conclusion

The three topics I have chosen to concentrate upon — industry democratic expression and acceptance, the proposed Commodity Levies order and the Pest Management Strategy — are far from a complete or even representative description of the activity of the organisation during the last year. They are, however, indicative of the nature of the work of the NBA during the year, and it is for that reason I have concentrated upon them.

In closing I would like to extend thanks to those people I have called on for help during the year. I won't even think about trying to list them, for fear of leaving someone out.

I will, however, thank my immediate family. My partner Averil and my two children, Sophia and Fern, are well aware of the demands on my time and thoughts. Their willingness to continue to allow me to do these things I like so much that contribute nothing to our family life is heartening.

I've learned some very important lessons in the last two years serving as the NBA President. Two of them have been of particular value. First, don't immediately blurt out everything you know and feel about a subject.

Thank you very much.

BEE PROTEIN

Mixed and ready to use the complete bee food protein providing nutritional requirements for bee colonies.

Well proven with many beekeepers able to testify to the benefits.

An analytical laboratory result sheet, by AgResearch, that lists the amino acids is available. Showing all the essential amino acids needed for brood development. A more complete report will be available when I can get someone to translate the date into a readable format.

15kg buckets at \$62.00

plus GST and freight

"Protein in a bee is like honey in the tank!"

Contact:

Bryan Clements Waikato Honey Products Ltd 8 Short Street KIHIKIHI

Phone: (07) 871-4709 Fax: (07) 871-8885



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

Thanks, Ed

Dear Harry

I run a 600 hive pollination and bee breeding operation in the Okanagan Valley of British Columbia. (According to *Time Magazine*, "The most desirable place on earth to live)".

My operation was built on and around myself and my two daughters as the qualified help. Now they have both finished their university studies and will be leaving the family business. This leaves me without qualified help and there is none to be hired here. Both Cliff and John believe that there may be New Zealand beekeepers who would be interested in spending their winters with us for experience, earnings and perhaps as part of a holiday.

My beekeeping starts in April

April 10-14 until April 20 — Unpacking hives, varroa check and treatment, preparing for pollination, usually 12 hour days of finding queens, ending up, feeding and disease check.

April 20 to May 20 — Pollination — 50-70 hours of night work, driving bees into orchards. This requires good orientation and the ability to follow simple maps and schedules. The driving is done in small old trucks which are however fully mechanized with cranes able to load 4-6 bundles of four hives. Some property maintenance is also done at this time.

May 16-20 — Preparation and selection of 20 breeders and four starters commencing grafting at a rate of 480 cells each two days. Total 6-7 rounds. Knowledge of queen rearing would be an asset. (*I do the grafting with a brush and New Zealand plastic cups*).

May 20 to June 10 - Shaking swarms - 12-18 hour hard work days with some night loading on shipping days. During this process we create artificial swarming by shaking the whole population of two hives into two customer's units and by incubating the brood over the third hive. In 10 days we come back to the incubator and shake it as well, creating another swarm. At the same time we make 7-10 eight frame replacement colonies or six frame nucs from this incubator. This is combined with a comprehensive queen rearing schedule because on June 10th all our old queens and old bees are gone including the breeders. We are left with 900 nucs all with cells and caged virgins hopefully to be mated. Good eyes in spotting eggs and queens are essential.

June 15 to July 1 or 10 — Moderate 10 hour days. We clean up, check all replacement hives for queens, unite queenless ones, catch surplus queens, slash hives together to create 280 honey producing colonies and 300 six frame nucs to develop over the summer. After this is all over it is up to the Lord and the bees to survive the summer. This valley is an extension of the Great American Desert so hauling honey is very seldom an issue. Also our colonies are mostly still building up.

July 1 to September 10 — We run a bed and breakfast and a canoe outfitting business.

This would be the time for the New Zealand beekeepers to do some touring and sightseeing. We can help to arrange their trip. For those who want to do more work, we will arrange for the two months to be spent with our clients who run 3000-7000 colonies up north. There is always a need for another hand in extraction and pulling honey. We may also be pulling our honey at the end of August.

September 10-20 — Moderate 10 hour days. We bring 120 hives home from the summer yards, weigh all hives and nucs, mark them and commence feeding to assure desired wintering weight, do varroa check and treatment, move nucs on to the main hives and pack the unit in winter packs, (result: Four main hives and four nucs overwintered together in one winter pack).

By the end of September we are done. The New Zealand beekeepers may do their last sightseeing and return home for spring and the New Zealand bee season.

The wages in Canada are between \$8-10 per hour depending on experience, with some 300-400 hours of work to be had at our place. We provide room and board with quality food for \$17 per day from April to the end of June and again in September. During July and August if the workers are travelling they will be able to camp almost anywhere in British Columbia for free or by paying a minimal parks fee.

Yours truly

Bill Ruzicka Bill's Honey Farm 2910 Glenmore Road, N, Kelowna, British Columbia, V1V 2B6. Phone/Fax: (604) 762-8156

If you are interested, contact Bill directly on the above address or phone/fax. *Ed*

Sir

Begging your kind indulgence, please kindly refer us to the New Zealand bee suppliers or companies that are in an experienced and reliable position to export Italian queen-bees to us in the Philippines; more preferably, if this delivery could be undertaken by the said supplier on a "door-to-door delivery basis" through their reliable international courier system. We have never tried any Italian queen-bees imported from New Zealand; but, we would like to try this with any New Zealand bee firms that you would kindly recommend, having been duly informed that their export of Italian queen-bees are devoid of diseases unlike other sources or other countries of origin.

We will greatly appreciate your kind help and assistance.

Thank you. Best wishes of the day.

Francisco R. Lopez #74 Boston, Cubao, Quezon City, Metro Manila, Philippines 1109. Tel: 721-83-69 and 721-83-90

Please apply direct. Ed

Dear Sir

I was wondering if you know of a beekeeper in New Zealand who would be interested in swapping their *BeeKeepers* journal for the Australasian Beekeepers journal each month, when they've finished reading it.

If you do happen to hear of someone that would be interested in a swap then could you please pass on my e-mail or address to them.

Many thanks Mal Ramage C/- Post Office Burnie Tas 7320 Australia or Mal Ramage C/- Uni of Tas North West Centre 16-20 Mooreville Road Burnie Tas 7320 Australia user1ostoffice.newnham.utas.edu.au (mal ramage)

Mal Ramage

Dear Sir

I am a poor Nigerian and wish to find a sponsor to fund me to study at Telford Polytechnic. Due to my financial difficulties, because of my environment, I am unable to save to fund myself.

I wish to bring to your attention that Beekeeping as a career is not available in my country.

My name is Boniface Abogonye, C/- Paul Okopi, Box 452, Otukpo Benue State, Nigeria, West Africa.

Please contact him direct if you can help. Ed

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Dear Harry

l'm Naomi, daughter of Peter and Barbara Dalby.

I will be coming to New Zealand on December 5th and wondered if you could put me in touch with some beekeepers, as I would love to find out how they do things out there, and maybe take some photos.

I would also like to go to a few bee meetings and maybe bring some slides of our operation here in England, and show them to a group at a bee meeting.

Yours sincerely

Naomi Dalby, 37 Cecil Road, Cheshunt, Herts. EN8 8TN. Tel: 0992-622-645 Mobile: 0850-427-470

Can any New Zealand beekeepers help? Ed

Dear Sir

Decommoditising honey seems to be the track that honey marketing is taking at the moment. This probably isn't a bad thing but first we must be sure that the people in charge of describing honey types to the consumers are doing the honey type justice.

In the article "A taste of honey" by Allyson Gofton in the July 1996 edition of 'Next Magazine', honeydew is described as:

"...It comes from an insect that eats the black sooty coating on the outside of beech trees. Bees feed off the insect's droppings."

This is factually wrong. New Zealand Beeches Ecology Utilisation and Management describes honeydew as being produced by a coccid insect *Ultracoelostoma assimile* which lives in a hard, waxy capsule in the bark of mainly black and mountain beeches. During this immobile stage of its life cycle, it feeds from a stylet inserted into the phloem cells of the tree. The coccid requires a balance of protein to carbohydrate that is different from makeup of the beech sap. In order to fulfil its diet, it must get rid of large quantities of excess carbohydrate to gain protein. As this secretion is mostly beech sap, it could be likened to maple syrup. This is what the bees gather. Since the bees do not gather all the honeydew produced, a lot is washed down the trunks of the trees. The black sooty coating present on the trees is in fact fungi that live on honeydew.

Furthermore, in the March 1996 issue of *The New Zealand BeeKeeper*, Mr Floyd writes of the reaction of a prominent food writer to his description of honeydew.

"Honeydew... even though she had to overcome the thought of just exactly how honeydew is created. The mental image of bees and wasps gathering the honeydew from the nether ends of an insect was an intriguing thought for her."

Surely a professional marketer could come up with a more tasteful way of describing a product. After all, he doesn't market floral honey as bee vomit gathered from the reproductive areas of plants!

B.A. Wardle



Southern North Island Branch

The thank you letters are on their way and most of us have now filed everything away and settled down back into maintenance mode. My message is don't — read everything again so you retain it and plan to act on what you have learnt.

We've just started copying the seminar video tapes for the library and these should be there by the time you read this. (We'll also do last year's too — I got the hint John).

It was good to view them and to pick up the little things I missed the first time around. Ron's talk on "the pitfalls of making wills" was very effective. The shocked look on some of your faces meant you were really taking it in.

— For Sale — Queen Mating Nuc's ★ Expandable to 1600 gaps ★ The quad system as used in California. ★ Phone: (03) 578-7744 This week I saw an advertisement for a free, three hour seminar on business and marketing, advertised in the newspaper, so went along.

Brad Sugar is from Brisbane and is a very young 25 year old. He was earning \$400 a week at fifteen, \$70,000 a week by twenty one, has had many business failures and successes (runs about seven now), and is passing on his knowledge.

You can do twelve months with him, learning the best sales, marketing and advertising and customer service training through lectures, tapes and newsletters, etc, for \$1503 or on the night for \$500 (because of sponsorship).

Some of the information put forward was given to us during last year's seminar by fellow beekeepers and guest speakers: "Know the actual cost of a project, goal setting, keep your life in balance, etc". (We got it all for \$30).

What came out of it for me was that a business plateaus financially when the person running it has reached the peak of their knowledge, but keeps going if one keeps learning.

Ideas and knowledge can come from friends, other beekeepers, books and magazines or through professional advice. Conference has all this and it's pretty good value for money. We had a great time — see you in Nelson next year. South Canterbury Branch

In December, South Canterbury beekeepers were in a very optimistic mood for a cracker season.

Excellent rainfalls had been recorded, the countryside was white with clover, and hive bee strengths had not been knocked by nor-west winds, so were in good condition.

All we needed was normal January weather. Unfortunately January was wet and overcast for the first three weeks, so by the time some summer arrived hive strengths, particularly along the coast had deteriorated along with the crop prospects. However, average honey crops were gathered, while the high country produced an excellent crop.

In mid-March we held an EDPR exercise in conjunction with the MAF. For two days eight teams comprising of a MAF team leader, and two or three beekeepers travelled throughout South Canterbury, inspecting hives for AFB.

It was an excellent opportunity for beekeepers to acquaint themselves with the disease response procedure, to meet other beekeepers and have a day out with a few drinks afterwards.

Many thanks to all those who helped out, particularly the Canterbury branch members who travelled some distance and gave freely of their time, making the exercise a great success.

Frank Lindsay

Peter Smyth

For beginners and others

Requests for books, video tapes or other material from the library arrive here from time to time. These come from a pretty wide range of people, hobbyists and commercial beekeepers, teachers and students. Sometimes it goes a little further, the library request becomes a letter asking for an opinion or advice to help solve a beekeeping problem. At that point one wonders if honorary librarian changes to honorary apiary instructor (not hon. Ap. Advisory Officer or Consultant, they may be expensive and have their hands too full to be burdened with little day to day guestions). The days when one could have a quiet natter with an apiary instructor are now well into the past, for better or worse, depends how you look at it. All the same I do miss it. A little nostalgia of course. No doubt those fellows did a good job: Trouble shooting, personal contact, "hands on" practical education. One of them could have been of real value to a recent library customer.

This person asked for info on queen rearing. He wrote that he was a hobbyist and had picked up 30 swarms (yes thirty!) during the past summer. This meant of course that he had invested a fair amount of money in equipment to house the beasties. He felt that re-queening the lot was much needed but money was running out and buying in 30 expensive queens coming spring was not on. So he wants to raise some himself.

Very understandable but...

Simple to send up a few books but it makes one feel uneasy knowing full well that the guy would be heading likely for trouble and disappointment. Better to share personal experience backed by expert writings.

Compliments as to the endeavour of picking up all those swarms. Great job. If we all did the same there would be a lot less trouble with feral colonies in awkward places. Then, for the record, running 10 plus hives puts one out of the hobbyist class. Yet at present there are still those with 50 hives, or more, who pay the hive levy, but hopefully that will change soon. A hobby is not pursued with the thought of making monetary gain, it is an interest, a pleasure and in the case of gardening, some poultry or beekeeping, a little return for the household or to give away. Different from running 30 or more hives which may well have the potential to produce a surplus of 1000-1500kg of honey. No longer a hobbyist, still an amateur. Nothing derogatory about that! A hobbyist is not necessarily an amateur, a good few know more about the ins and outs, the whys and hows than some who call themselves professionals but are in fact amateurs and perhaps bad ones at that. No one will dispute the necessity to requeen the lot. It is the right thing to do for some of those colonies may be bad tempered, are poor performers and it may well be that the majority of the present queens are old, going to cause problems if not replaced. However I don't think that the plan to start raising queens for replacement self at this stage and with these 30 hives as the basis is a very hot one.

First there is the apparent lack of some queen raising experience. Sure one has to learn by doing it, by trial and error. By all means try but in the given circumstances do not depend on an uncertain outcome. It's important to get those new queens in and at the right time. Secondly these 30 plus hives cannot provide the basis for selecting the right queen to breed from. Having been swarms nothing is really known about their general background, individual characteristics s.a. brood development,

spring buildup, swarm tendency, store economy etc. Even by selecting the "best looking" queen from this lot for use as a breeder will offer a lot less than even odds for securing satisfactory offspring. To select a breeder all these points, and then some, should be known and can only be learned by observing and comparing hives over a relatively extended period of time. Thirdly the mating factor. If this person happened to be successful in raising the required number of queen cells, introduce them to made up nucs or splits (divides) he is still faced with getting them mated. Given the weather and environment are favourable it may happen alright but where did the drones come from? Probably from the 30 colonies or from something in the neighbourhood. Very haphazard to say the least.

To solve the problem at this stage of the game I suggest two solutions.

Preferably dig deep and find that extra number of dollars for the purchase of 30 mated queens. Order these now for spring delivery from a good queen breeder. Use these for re-queening the lot and finish up with good colonies in the shortest possible time. Radical, least time consuming, best results including probably a reasonable return on the investment. Some time to spare to dabble in cell raising as practice for the future.

Second choice. Arrange with a queen breeder for a supply of ripe queen cells, 30 plus extras to cover for failures. Much smaller amount of money involved. Make up adequate number of nucs to receive these cells. Locate nucs somewhere where there is a good chance of mating with good quality drones. In other words seek the assistance of an established beekeeper with good hives who is prepared to help out with the mating process. Then after that is completed use these nucs with the young queens to requeen the original swarms. More work, time and hassle but an interesting exercise.

Not the same certainty but all the same it should result in good improvement.

Regardless of which scheme is followed contact with an experienced beekeeper will be beneficial now we cannot call on those apiary instructors any longer. So I did give the bloke an address and am sure he will be welcomed.

Hopefully this ramble will be of benefit to more than this catcher of 30 swarms. Good luck to him, God loves a trier.





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Now available, Pollen Moisture Meters, compact electronic instrument simple to operate, a must for the serious pollen producer.

> For further information contact Trevor at Ceracell.

We have good stocks of all sizes of foundation on hand —

So be in now and avoid that late SEPTEMBER early NOVEMBER RUSH.

We are buying beeswax and will trade wax for equipment and services.



An In-depth Look at the Honey Industry by Regan Stirling. (1995, 47 pp, NZ).

Regan was a Hawke's Bay 7th former last year and picked on the Honey Industry for her assignment. A lot of work went into it and the reward was 100 out of 100. One would class this more as a research document than a high school assignment.

Up to a point the research gone into this is a little one-sided, Hawke's Bay orientated. However that is not Regan's fault. She writes under What I hope to achieve: "through these avenues I managed to cover the information I required for my national perspective but unfortunately could not complete my inquiries of the regional production as fully as I intended due to the lack of support," and further on "out of approximately 50 letters I sent away I received 30 replies ranging from short, rude and not very helpful to extremely generous with their time and services." Now New Zealand beekeepers I think in general we could do a lot better than that, especially the "rude" hurts.

Regan has gone on to Canterbury University, our very best wishes to her.

It's the same in the United States

On February 25th this year all the big groups of honey related industries combined for a summit meeting. Represented were The American Beekeeping Federation Conveners, The American Honey Producers Association, Sioux Honey Association, the National Honey Packers & Dealers Association and Package Bees & Queen Breeders.

Their three key questions were:- Where are we now, where do we want to be and how will we pay for it? Sound familiar?

What did they discuss? Research on pesticides and bees, promoting honey in other countries, markets and prices, value added honey products, the need for young blood in the industry, industry fragmentation and distrust and the functions and constitution of their National Honey Board. Doesn't it read like our own conference with a Yankee setting?

What were the decisions? 8% of the Honey Board's assessment revenues would be allocated to research. A programme of voluntary honey testing will be set up to allow for "seal of approval" with testing for enforcement. Packers and producers will be levied at a rate per kilogram (pound). The board will in future have a wider base of levied members. Industry trade organisations will work with Congress to amend legislation with a referendum of affected parties before changes are implemented. Other points raised applied particularly to the American scene. For more details see *Bee Culture June 1996* page 376.

It all sounds rather familiar and shows that improvements can be implemented when beekeepers all pull in the same direction. Let's all get behind our executive to make progress with the changes that have been forced on us and even to be "pro-active" if that word isn't worn out.

Pesticides in wax

Watch those pesticides residues! It has been claimed that every kilogram of wax in Europe is contaminated with fluvalinate. Also that this product of treatment for control of the varroa mite will remain in recycled wax for the next 50 years even if the use of Apistan stopped tomorrow.

There are two important conclusions. We should be actively exporting our wax labelled in large letters "Drug free". Also, we must maintain our border vigilance to keep out varroa mites.

Effect of feeding syrup with Vitamin E on the development of worker's royal jelly gland

This experiment, which used Italian bees as material, dealt with two treatments feeding sugar syrup with Vitamin E and feeding pure syrup. The development degree of special age worker's royal jelly glands in each treatment was measured dissecting them. The results showed that feeding 2.5 ppm V_E syrup could promote the development of worker's royal jelly gland significantly, and could make the royal jelly gland between 10 and 18 days old 47-76% heavier than that of the control group, and prolong the development peak duration five days at least, also.

Thanks to Dot and Ben Rawnsley

Industry reaffirms support for the AFB PMS

Arguably the most important remit on the agenda from conference was remit number one. This remit sought the industry's endorsement of the PMS, that is now before the minister of agriculture, and a reaffirmation that the executive continue to support the disease control committee in the ongoing task of seeing the PMS through to the stage of implementation. A poll vote was called for and the remit was passed with 889 votes for and 214 against.

With 80% of the votes from conference in favour of the PMS it will again send a very clear message to executive and indeed to Minister Lockwood Smith that this industry remains committed to the PMS. Of interest it should be noted that the high level of support remains almost unchanged.

To the minority to continue to oppose the PMS we can only plead that it is now time to respect the democratic process of our association and now get in behind the effort. Speaking for the remit Mr Peter Berry summed it up very well when he pointed out that no one is going to be completely happy with all aspects of the fine detail of the PMS, but it is now in the wider good of the industry to support the PMS. That is what consensus politics is all about!

Members of the disease control committee are presently working on a series of articles for inclusion in The New Zealand BeeKeeper with the intention of providing all beekeepers with information on how the new PMS is going to operate.



Marketing

In this month's Marketing column:

Floyd on the sticky end of some valid criticism about honeydew marketing.

Honeydew a star attraction of the 1996 NZ Chefs Association Conference.

NBA Conference delegates surveyed to gauge Marketing Column's interest and value.

New Zealand's Inaugural Interpolytechnic Honey & Pork Culinary Competitions a Great Success; but then so was everything about Conference 96!

Predictions of higher prices and an international shortage of honey prove to be very true!

Dr Molan's work continues to put honey to the fore; and not just manuka!

.....and did you see that kilt (or was it a swarm) on that beekeeper at Conference?

Floyd on the sticky end of some valid criticism about honeydew

Beekeepers who read the excellent 10 page colour feature on NZ Honeys in "Next" Magazine will see that I put the writer wrong on how honeydew was produced. My mistake... I saw it as soon as I read it; won't happen again! (I did know the difference; but didn't explain it properly). However, one honeydew producer is not happy with the current strategy of making a feature of the way honeydew is collected (or more importantly, where from!): See the letter to the editor in this issue.

The writer's reaction is similar to when I used what was seen as a disparaging way of describing Kamahi's aroma two years ago. But for me the real issue is one of using our very limited resources in innovative ways to get attention and then, arouse sufficient curiosity to have a person look for, buy (at other than a discount price) and then use and re-buy the product.

In the tastings that I've done with chefs and foodwriters (and they're starting to add up) it's now proven that the novel approach to showing/tasting our honeys works!

Beekeepers may be intrigued (or revolted) to know that the most expensive coffee beans in the world come from Indonesia; where the natives collect monkey droppings and retrieve the semidigested beans from those droppings... apparently the coffee tastes superb... it certainly sells for 50 to a 100 times the price of 'normal' coffee; in some of the world's most exclusive trendy cafes.

I don't know how many beekeepers object to the approach I've been taking... where I do dwell on the fact that honeydew is collected from the nether end of an insect's alimentary canal... but I do know that it works; that chefs will reach for the honeydew at the end of a tasting session; foodwriters do ask for more detail about the honeydew after hearing about its unique origins (Has any honeydew producer worked out the cost/ value of buying that *"Next"* Magazine publicity as an advertisement?).

Honeydew a star attraction at the Chefs Conference

I've just finished a presentation/tasting of honeys to the NZ Chefs Association Conference. As a result of my highlighting honeydew (and its origins!), in the tastings, one of New Zealand's top sauciers (a chef specialising in sauces) wants to experiment with honeydew and create what he believes will be some magical flavours. The big problem the chefs/foodwriters (and I!), have is that honeydew is not readily available throughout New Zealand; and I'm, normally having to beg/borrow/send product to them.

I do believe there's a real opportunity for someone to start putting out a range of catering honeys; incorporating the more esoteric types...eg... kamahi, honeydew, rewarewa... AND, a moorish, fullflavoured versatile general applications honey... like some of that good mid-North Island clover-pasture I keep hearing isn't getting a good enough price (but that's another story).

Whoever does this would look at a unique distribution channel, perhaps innovative packaging and labelling (with suggested uses); and pick up on the novelty interest that we're creating through these tastings... unfortunately I can't help any individual do this... but the time must be right for someone?

So back to the issue of how I'm presenting honeydew. I'd like to say: "Trust me... let me do what I believe is right... and isn't it working already?!... however, I work for the industry; and I have to work within an overall set of parameters determined by the industry: I'll be asking the Marketing Committee for their comments on this issue.

As to the correspondent's suggestion that it's like calling honey "bees vomit... from the reproductive organs of a plant." I wish he hadn't suggested that! In the right environment, and for an off-the-wall/ in-your-face, marketer, that could be a surprisingly successful niche market strategy... it would certainly create what (professional) marketing people call a paradigm shift; a shift that may perversely appeal to a significant market sector.

NBA Conference used to survey this Marketing Column

Whew! It looks like I get to stay on as

columnist of this part of the magazine. A survey was given out to delegates at Conference... a few had some criticisms... and I've taken them on board... especially the need to precis the stories in the headings. But the majority was very complimentary. Details of the survey are being assessed by the Marketing Committee now; results in the next *BeeKeeper*. I'll also publish the questionnaire in next month's *BeeKeeper* so that if you want to have your say (but weren't at Conference), you can do so.

New Zealand's Interpolytechnic Honey & Pork Culinary Competitions a Great Success

The following letter from Frank Lindsay, secretary of the Southern North Island Branch of the NBA lets non-Conference attendee appreciate the success of the competition:

Mr Allen McCaw

Chairman, Honey Marketing Committee Dear Allen.

Thank you for your committee's generous sponsorship of our Conference. The behind the scenes work of Bill Floyd, Dennis Taylor and Pip Duncan in setting up the Culinary Expose amongst our branch's polytechnics was most appreciated. Bill Floyd's sensory perception exercise with honey has definitely added to the knowledge of those taking part.

This has certainly bought the status and use of honey in cooking and an awareness of the honey industry to Wanganui. Our local beekeepers have had many inquiries regarding different types of honey.

Even our local judge, Joe Power, was not aware of the differences different honeys could make to a dish. He quickly capitalised on this and the next day was advertising on the radio "Manuka Honey and Pork" as one of the dishes of the restaurant.

Once again, thanks for all the work your committee did for us. It is very much appreciated and helped make this a most successful conference.

Yours... Frank Lindsay, Secretary, Southern North Island Branch, NBA.

Thanks for your comments Frank. And I'd like to put it on record that right from day one Rob Johnson, Frank and Mary-Ann Lindsay and John Brandon were a delight to work with. They set out to make sure that Conference 96 was a successful showcase for our marketing activities. And it was. A good team to work with; I'm pleased for them that it all went so well.

Continued on page 11

Continued from page 10

Predictions of higher prices and an international shortage of honey prove to be very true!

First, I need to say (again) that I don't take credit for the increase in honey prices... there are a whole lot of factors that contribute towards many beekeepers doing better (and some doing worse); but I did get some flak for soothsaying the world honey supply/ price trend back in December... so I don't mind saying now... there are a lot of people who are glad they forced their buyers to pay (a little/a lot) more, or shopped around for better prices.

I know that a priority for a number of beekeepers is to dramatically improve the demand for medium-colour meadow honey; we're working on it; watch this space. On the subject of which: the issue of MMF honey (see last month's Marketing Column) is clearly one where there are very strong differences of opinion within the industry; ie just how much there is; to what extent beekeepers can de-MM their crop etcetera. There's quite a lot of work to do just quantifying the problem, without trying to solve it.

In next month's issue of *The BeeKeeper* we'll be showing (in graph form) the current export stats year-to-date, it makes for very good reading!

Dr Molan's work continues to put honey to the fore; and not just manuka!

A feature of the Wanganui Conference was Dr Peter Molan's presentation. Unfortunately most delegates missed his second presentation (to a group of doctors and medical staff at Wanganui Hospital). This was organised by John Brandon; and very well received by the medical staff.

Peter Molan is aware of the increased value of manuka; especially active manuka. He's had a team at Waikato University working on finding unique values in other honey varieties. But, as most *BeeKeeper* magazine readers have been told; virtually no one has sent samples to him so as a result, no new finds... <u>except</u>, some rewarewa honeys have been shown to have very strong antibacterial properties (different to the manuka type properties). So, it looks like another honey variety may start to get an enhanced value and price in the near future.

Next month... Sensational Sausages and a Super Hot Sauce are Honey Champions! And we tackle the vexing issue of varietal honey definitions and standards... have a good month!

One last thought: Wasn't that a phenomenal photo Harry (NBA Secretary and *BeeKeeper* magazine editor) had at Conference... and what a brave beekeeper, wearing nothing but a swarm!, and will Harry publish it... tricky one... don't know what I'd do! Except that I do know it wouldn't help sell honey; so I probably do know: Harry... don't!

> Regards, Bill Floyd, Marketing Committee

Capital duo cooks up a storm

Wellington Polytech student chefs Shaun Woodroofe and Colin De Munnic have won the inaugural Interpolytechnic Culinary competition in Wanganui.

The competition, sponsored by the New Zealand Pork Industry Board, was organised by the Wanganui Beekeeper's Association for the New Zealand Honey Food and Ingredient Advisory Board to coincide with the National Beekeeper's Association conference in the River City.

While the Wellington students won the inaugural competition beating three other two-man polytech teams from Taranaki and Wanganui, honey was the real winner on the day.

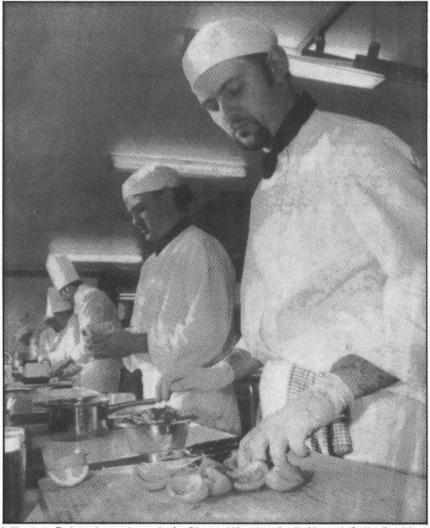
Advisory board service manager Bill Floyd said the competition was designed to promote the differences in flavour between New Zealand honeys and their wide variety of uses with foods.

The Wellington team won the event championship with an interesting dish using honeydew.

The dish was a mille feulle of pork, pumpkin, aubergine and polenta with tara quenelles.

Second in the competition was the Taranaki team of Sally Tonner and Dion Laing with pork brochettes served on a fresh salad with garlic honeydew mayonnaise.

Mr Floyd said the event was a success and the advisory service would continue to develop the concept with the Pork Industry Board, particularly in the provincial regions where trainee chefs do not get the same opportunities that students get in the larger centres. "There is a growing cafe society developing throughout the country and this type of concept using honey really lends itself to this," Mr Floyd said. Acknowledgement Wanganui Chronicle



Wellington Polytech student chefs Shaun Woodroofe (left) and Colin De Munnic combined honey with pork to create a winner in the kitchen to win the inaugural Interpolytechnic Culinary competition in Wanganui.

Outcome of the Remits before Conference

Remit 1 -

That this Conference recommends to the Executive that it continue to support the work of the Disease Control Committee toward a Pest Management Strategy, express satisfaction with the consultation and communication carried out by the committee, and affirm support for the objectives and methods proposed for the PMS.

Remit adopted

Remit 2 -

That this Conference recommends to the Executive that a contract with MAF for Disease Control not be signed until after the conference has had an opportunity to discuss what is required in the contract.

Remit lost

Remit 3 -

That this Conference recommends to the Executive that the Executive does not encourage the spending of trust money on the PMS.

Remit adopted

Remit 4 -

That this Conference recommends to the Executive that they investigate the costings of the PMS where up to 60% of the total costs are in paper work and not in the inspection of hives and in no way add to the reduction of disease.

Remit lost

Remit 5 -

The Chairman moved, Peter Berry seconded That we move into committee to discuss this Remit.

Motion carried

Remit 6 -

That this Conference recommends to the Executive that the National Beekeepers' Association of New Zealand maintains the maximum pressure on Government to increase the effectiveness of border control measures even if this requires an increase in Government funding.

Remit adopted

Remit 7 -

That this Conference recommends to the Executive that a review of the information on EFB be undertaken as a preliminary step to a planned response to a likely outbreak of EFB.

Remit adopted

Remit 8 -

That this Conference recommends to the Executive that it increases its efforts on the appropriate Government authorities to improve surveillance of illegal honey and bee products importation.

Remit adopted

Remit 9 -

That this Conference recommends to the Executive that the Executive look at rule changes to require all future members

of the Executive to be beekeepers who rely on the beekeeping business for a living.

Remit lost

Remit 10 -

That this Conference recommends to the Executive that all sub-committee members stand down after serving a maximum of four years for at least twelve months.

Remit lost

Remit 11 -

That this Conference recommends to the Executive that they investigate ways to increase their accountability by arranging opportunities for members to ask questions of the members of the Executive.

Remit adopted

Remit 12 -

That this Conference recommends to the Executive that they look at selling the magazine to groups or individuals outside the industry.

Remit adopted

Remit 13 -

That this Conference recommends to the Executive that, over the next three years, a strategy be implemented to encourage new beekeepers into the industry.

Remit adopted

Remit 14

That this Conference recommends to the Executive that they support the proposal of the NBA Marketing Committee under the Marketing Plan, to establish a set of suitable quality standards for New Zealand manuka honey.

NOTE: This is not about 'active' manuka but 'table' manuka honey.

Remit adopted.

Remit 15 -

That this Conference recommends to the Executive that they continue to support the work of the NBA Marketing Committee as provided for under the NBA Marketing Plan and annual budget and carried out on behalf of the NBA membership.

Remit adopted

Remit 16 -

That this Conference recommends to the Executive that they encourage the NBA Marketing Committee to continue to seek additional funding for their work on behalf of the NBA membership from alternative sources other than NBA Levy funds.

Remit adopted

Remit 17 -

That this Conference recommends to the Executive that the Honey Marketing Committee become self-funding within three years.

Remit lost

Remit 18 -

That this Conference recommends to the Executive that it be recorded:

- 1. That the current administration reserves have accrued from the reductions of payments to the marketing effort from the originally planned 50 cents per hive to 35 cents per hive.
- 2. That the accrued money be held in reserve for the marketing effort.

Remit adopted

Remit 19 -

That this Conference recommends to the Executive that the Marketing Committee consists of three members appointed annually and that they be an Executive member, a producer and a packer.

Remit lost

Remit 20 - (Waikato Branch).

That this Conference recommends to the Executive that the Marketing Levy be a maximum of 25 cents per hive.

Remit lost

Remit 21 -

That this Conference recommends to the Executive that it arrange a National Committee to organise a Beekeeper of the Year Competition as part of future conference.

Remit adopted

Remit 22 -

That this Conference recommends to the Executive that it support, in principle, the possibility of another offshore conference.

Remit adopted

Remit 23 -

That this Conference recommends to the Executive that the Poverty Bay (East Coast) branch host the year 2000 Annual Conference in Gisborne.

Remit adopted

LATE REMITS:

Late Remit 1 - (Hawke's Bay Branch). That this Conference recommends to the Executive that the NBA supports research into alternative to the use of carbaryl based sprays.

Remit adopted

Late Remit 2 - (Nelson Branch).

That this Conference recommends to the Executive that Executive prepare and supply to branches a "National Policy Statement" on the keeping of bees near dwellings so that such a National Policy Statement can be used by branches in their submissions to their local bodies "Proposed Resource Management Plans".

Remit adopted

Late Remit 3 - (Auckland Branch).

That this Conference recommends to the Continued on page 13

Continued from page 12

Executive that it look favourably on the Auckland proposal, whereby the Auckland branch runs the Auckland District part of the contract for the AFB Control.

Remit lost

Remit 4 - (Waikato Branch).

That this Conference recommends to the Executive that the Executive look very carefully at why the beekeeper voting on

the Commodity Levy was so low (24%) and investigate ways to promote not only the advisability of industry participation but also the necessity.

Remit lost

Late Remit 5 - (Auckland Branch).

That Auckland bring back this remit back to the 1997 Conference.

Remit lost

Late Remit 6 - (Auckland Branch). That this Conference recommends to the Executive that this Conference is in favour of branch run AFB Control/ Eradication programmes.

Four Delegates objected and it did not reach the floor of Conference.

Late Remit 7 - (Nelson Branch).

That this Conference recommends to the Executive that the Nelson Branch host the Annual Conference in 1997 in Nelson.

Remit adopted

Bull Number 2

Most beekeepers know how frustrating it is to have their truck stuck in the mud in a farmer's paddock. I had my share of that experience, so about 1955 I decided to invest in a four-wheel drive. As usual I had to make do with a second-hand vehicle, so I bought something that was very second-hand — a 1942 wartime Willys Jeep which had been used in the Pacific by the USA Army.

Someone had rounded up a lot of rusty GMC trucks and jeeps etc and brought them to New Zealand to sell. I removed the back seats and built a tray and plywood roof from the back up to the wind shield, bolted the spare tyre on the back of the tray and painted everything red. It looked very smart. Because the jeep was very light with 16 inch mud grip tyres, it could go anywhere without getting stuck. One disadvantage of the jeep was that it was a very cold vehicle to ride in because it had no side doors. On one occasion after a long journey on a cold, frosty morning, I arrived at a farmer's gate, swung my legs over the side of the jeep to find they would not support me. I immediately fell forward on to a live electric fence by the roadside. I don't know if you have ever knelt in wet grass with a live electric fence under your chin, but I can assure you it is a quick fix for frozen legs.

It was not too many years after this that my wife and I, with our five children, decided to get away from the Waikato with its heavy frosts and fog, and shifted over to Tauranga where the sun always shines — except when a good honey flow starts and then it rains and rains.

When I shifted to Tauranga I bought 1000 hives from Charlie London, Ken Harrison and Ron Parkes. An important observation was that I did not find one case of Foul Brood even though the area was once badly infested with the disease. These beekeepers had cleared their hives of it and I was free from the dreaded disease for years afterwards. It goes to show what beekeepers can achieve when they really try.

I met my second wild bull about this time. I had just started to drive across the first paddock after coming from the road gate, when a large bull with long horns started prancing alongside the jeep. I put my foot down on the accelerator and he chased the jeep until I came to the second gate which was open as usual. I stopped in the gateway to see what the bull would do. It didn't take long to find out. He immediately put his horns under the spare tyre and tried to lift me out of the gateway, but I kept my foot hard on the brake. After a while he gave up and went up along the barberry hedge somewhere, so I moved across the second paddock and down a steep slope to my hives which were on a flat piece of ground by a fence. I had my head down looking in a hive when I heard the bull bellow. I looked up and there he was on top of the hill, pawing the ground. I slammed the lid back on the hive, threw my smoker on the back of the jeep and took off up the hill passing the bull on the way, which was by now charging down the hill. I started breathing again when I got through the gate and shut it behind. That was probably the fastest time I ever left an apiary in my life.

When I took the rent honey to the farmer's house that winter I commented that I had not noticed the young bull with the big horns about lately. He informed me with a grin, that it had started chasing his wife when she was going to the milking shed, so he had to get rid of it. Even dairy farmers listen to their wives when they have to.



Bee Stings — Information I wish I had known earlier

I collected a swarm in a 20 litre ventilated can from a tree branch and placed the bees in a deep super above an established active hive with a newspaper in between the two boxes to facilitate joining the two colonies. This hive was located in a residential section of Montgomery. The next morning bees were cruising the neighbourhood stinging anyone within 50 metres of the hive, even people walking by on the sidewalk. Neighbours started complaining and I was forced to relocate the bees in the middle of the day to an isolated place, even though the bees left behind continued to maraud. I contacted a more experienced local beekeeper, "Wildman" Ted Vail for an explanation. He enlightened me with his wisdom: Combining the swarm with queen and an established queenright hive irritated all the worker bees and two queens, thus creating a local war zone. I should have removed the swarm queen before joining the two colonies.

I have noticed after working several bee yards and then returning home to work my garden that the bee alarm odour remaining on my person attracts honeybees, which follow me, awaiting an opportunity to sting me on exposed skin. It is untrue, as many non-beekeepers believe, that if you disregard these bees, they will go away; or, if you are afraid of their sting, the bees recognise this fear and will surely sting you. If the circling bees become too threatening, the victim can back into the inside corner of a building; the bees will usually go away.

The one question beekeepers are asked consistently at schools, churches, civic and garden clubs bee talks is, "Do you ever get stung?" The bee sting demonstration using observation hive bees is always the most remembered and commented on part of a programme. It leaves the listener with a healthy respect, and less fear of honey-bees. Since medicinal value of bee stings is claimed, the bee's life sacrifice is not useless

It is my belief that bees are able to 'sense' the heat coming from the human body and attack these vulnerable areas. Since more heat leaves the body from the top of the head, bees seem to home-in there, even crawling under a bee veil draw string. The next area of body heat attraction is a perspiring underarm, where bees can sting through several layers of clothes. Failing there, the worker bee may seek redress at the exposed hands or lightly clothed ankles of the 14

beekeeper.

Another erroneous belief by the uninitiated is that bees sting people because the bees are 'mad', assigning this human trait to worker bees. Bees do only what the Lord programmed them to do millions of years ago at creation. This is evident when bees who have never lived through a winter, know how to keep warm: likewise, bees know to air condition the hive in summer, although they have had no opportunity to learn this in their short lifespan.

In removing feral bees from outdoor cavities, many bees are sticky with honey and on the throes of death. No matter a worker bee will sting a human as the last act of defending her colony. Even after decapitation, the bee will sting if given the opportunity as a result of programmed muscular reflex.

A chain link fence separates my home from my neighbour, who had two dogs. A half dozen of my hives were adjacent to and faced away from the fence. On a hot summer afternoon after a good rain, the wet odorous dogs irritated my bees which proceeded to sting the imprisoned canines. Both dogs had to be taken to the veterinarian for treatment. One dog died and I had to pay the vet bill. Moral: Keep beehives away from dogs, horses, etc.

I used to teach that queen-bees do not sting people, until one day when I was handling queens, one stung me on my leg through blue jeans cloth. I now know why. If a virgin queen is handled before a laying queen is handled, the latter reacts to the virgin queen pheromone smell on my hand and goes into a defensive stinging posture and stings the handler.

Honey-bees often innocent

The usually gentle honey-bee gets blamed for all the mischief of other stinging insects wasps, hornets, bumblebees and yellow jackets, which are easily disturbed and strike without warning. And the pain of a honey-bee sting is far less than those of the latter insects. Also, the latter quickly can sting multiple times bam, bam, bam, whereas the worker honey-bee can only sting once, since she loses her stinger and dies. Bumble-bee nests are found in the most unlikely places, ie. bird nests, cardboard boxes with excelsior inside, underground caves, behind power panels, in the insulation beneath mobile homes floors. Wasps, hornet and yellow jacket nest locations are consistent. I approach non-honey-

by Col. Fred F. Fulton, Montgomery, AL

bee stinging insects wearing double bee clothing, and frequently can feel these painful stings that leave no stingers. Carpenter bees live in 12mm horizontal bored holes in dead but not rotten wood. They are not a stinging threat, but may be if handled. The feral honey-bee nests are found in cavities above ground with small openings, like holes in trees, eaves of houses, barbecue grills and even 20I drums. Their comings and goings to the nests are usually more frequent than other stinging insects.

Honey-bee stings for non-infectious rheumatic disease

I had a window observation hive with me on an academic visit to Auburn University where I was to give a bee lecture. Unexpectedly, my arthritic knee collapsed on me with accompanying pain. The orthopaedist would not give me another shot of cortisone, so he prescribed physical therapy. That day I started treating my knee with 15 bee stings with bees from my observation hive. I continued this for three days, after which my knee gave me no more trouble. As I understand this alternative medicine from bee venom therapy literature, the venom causes the adrenal gland to produce cortisone, a natural antiinflammatory chemical without side effects, unlike artificial commercial cortisone. Also, body-produced cortisone is of a higher quality than the synthetic product.

The Multiple Sclerosis (MS) Association of America and the Arthritic Foundation have for the first time funded the manufacture of bee venom extract to be used for research trials. I was asked by the local MS chapter to discuss this subject. Several months later a family contacted me and asked if I would give a 23-year-old lady who was bedridden with MS the bee sting treatment, since all conventional medical effort had failed. Her physician had no objections. After the signing of a medical liability release, I gave her a test sting for an allergic reaction, which was negative. I began with 19 stings the first day, and increased them to 40 stings a day twice a week, from head to toe, front and back. This continued for four months, up to a count of 1687 stings in 48 sessions (without remuneration, of course).

At this time the 'patient' decided that she had reached a plateau and further stings would not be beneficial. Her body colour had improved; her eyesight improved for

Continued on page 15

Continued from page 14

short periods of time; muscular control had improved so that she could stand alone to take a shower and enter an auto. Bladder control was better. What could not be measured is how the bee venom had slowed the progress of this disease of the nervous system during the four months of therapy. The pain of the stings diminished with each session, except on the head where two stings were given each treatment. Direct application of ice or canned refrigerant on the sting point reduced the pain there. The American Apitherapy Society, a non-profit organisation publishing the trade paper, *Bee Informed* is promoting the distribution of medicinal information of all products of the hive, including bee venom therapy. It can be reached at telephone 800-823-3460 in Hartland, VT 05049.

Hippocrates (BC 460-337?) "Father of Medicine" extolled the virtues of the honey-bee sting as a preventative and curative agent. Dr B.F. Beck, MD, believed that high temperatures increases the

A FULL HOUSE

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potency of venom; type of flowers also affect the strength of venom; bee stings are aseptic; bees refuse to sting a corpse; bees have a passion for stinging alcoholics; beekeepers, after a hearty meal and in a rundown condition, can suffer serious effects from a single sting; most bee sting deaths occur after a meal or during menstruation; the longer time required for acquisition of immunity, the more permanent it is.

> Acknowledgement American Bee Journal

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A Fred story

"Young people today are born idle — in our younger days we had our jobs around the place to attend to and woe betide us if we slacked off!" This was the greeting Fred received when he called in for a glass of froth at Joe's place. The room at the rear of the garage was a regular meeting place for the local beekeepers at the end of the week.

It transpired that Joe had finished off a bad week when Harry his worker, quit after being reminded that the job was not finished until the last remaining super of honey was stacked in the shed. Harry's religious observance of the daily working hours meant he finished at 5pm. Come hell or high water, those were the hours in the contract and those were the hours to be worked, whether the job was finished or not.

Fred listened to the subsequent mutterings on the shortcomings of the late helper, moistened his dry lips with some suds and then asked the reason for the late finish to the day. A fault with the truck meant a late start from the yard, and while they were loading supers the truck winch packed a sad, causing further delays. Joe it seems became more and more agitated as the day wore on, then decided to finish off the day with an unscheduled visit to Murph's yard. This resulted in twenty more supers being loaded. This extra weight was, for the truck, the last straw. A mile from town a spring collapsed, and meant restacking the load and crawling home in low gear. With half the load off the truck the magic hour of 5pm rang out. Harry promptly walked over to the shed, doffing his beesuit on the way. That's when Joe reminded him of the unfinished nature of the day's work, and none too gently at that.

The slanging match that followed was, according to Joe, liberally laced with curses and oblique references to the lack of socially suitable parentage for Harry. With that Harry announced his resignation from the job, leaving Joe to finish the unloading by himself.

At the end of the recitation of the defects contained within the younger generation, Joe proceeded to lubricate his parched throat, then complained the beer was too warm. Not his day thought Fred.

The following day saw Fred calling in on Harry's parents home with a small welding job he wanted done, his own plant was out of gas. Harry was out in the workshop working on his racing bike when they entered, and Fred asked him to stay and give him a hand. After finishing the weld for Fred they moved into the house for some of Martha's cheese scones, where Fred casually asked why Harry was not out with Joe in the truck. The other side of the story then came out, and not all in Joe's favour.

Joe was not a good employer. Always complaining, never organised, and totally disregarded the working hours of the contract. He was not prompt in payment of wages on the due date and the last tirade was too much for anyone to put up with. Never mind that Harry wanted to meet up with his racing bike mates after work. By the time they arrived back in town the mates were long gone down the road on their training runs. Harry only began finishing off at 5pm to drive home to Joe that the contract was a two sided affair.



Fred pondered the situation, both were a little stubborn in defence of their rights, so how to resolve the situation?

The weekend had been organised by the Bee Club as a workday to clean up the section around the clubhouse. Virtually everyone turned up and Fred organised the workgangs, taking particular care to make up one gang from himself, Joe and Harry. Their task was to clear the back boundary fenceline. Before commencing work Fred sat the others down and produced a written plan of their work for the day. Despite the scowls they were giving to each other, he made them both read the document, asked for comment and listened to the small changes that Harry suggested. The lack of mention of a barrow in which to carry off the rubbish saw Fred surprised that he had forgotten such a basic requirement.

Joe queried why the times for breaks differed so much from the normally accepted hour. Lunch would be well and truly over back at the house if they waited until 1pm for their lunch break. Again Fred was agahst that he had made such an error. Work commenced with Joe and Harry well separated along the fenceline, but gradually their paths merged to the point where they had to combine their strengths to move a bundle of rubbish on to the barrow. The call for lunch came at this point. Joe was famished and promptly dropped his end of the load, whereupon Harry, left holding the bundle, loudly let forth on being left to finish the loading. Fred got Harry to let go his load, called them together and asked each of them to consider the situation. At work, Harry left Joe holding the bundle, today, Joe left Harry holding the bundle. Now each had the feeling of being let down by the other.

Lunch was a snorter, lashings of cold meat and salad, savouries and fruit salad. Fruit juice only, beer would not be on until the job was finished.

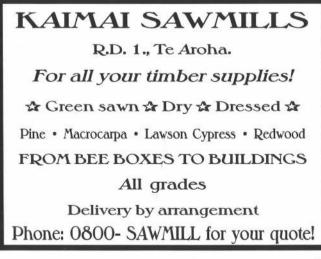
The afternoon spell went well, Joe and Harry combined their strengths and moved a mountain of rubbish. The beer was on for an hour and the day finished with the clubrooms being cleaned thoroughly.

Fred got Joe and Harry aside in the committee room, sat them down and asked them to think hard about their work together. By working to a written plan, having discussed the plan, and by mutual effort putting the plan into effect, they had together accomplished something worthwhile. The club had benefited from their efforts.

It transpired that Joe, weary from the day's work, often put off the paperwork until tomorrow. This meant late payment of Harry's wages. Fred suggested an automatic bank payment would overcome this problem, and so it proved to be.

Joe and Harry are still together, still have spats, but are both now aware that nothing can be achieved if mutual understanding and consideration for the other bloke's point of view is ignored.

Ham Maxwell, Levin



Wasp attack

Introduction

Wasps in Hawke's Bay are troublesome to orchardists and vineyard growers.

They damage crops, thus affecting people's income, and pickers are prone to get stung.

Aim

My aim is to help orchardists and vineyard growers find out the most economical substance to attract wasps to an easily constructed trap.

Hypothesis

My prediction is that the wasps will be attracted to sweet substances. Also, I am interested to find out what coloured trap they are attracted to.

Method

Trap

Using a plastic soft drink bottle, cut off the top third, put in a 'substance' as a bait in the bottom two thirds and invert the top into the bottom. Attach the bottle to a post inside/outside the orchard/ vineyard. In traps, that substances are not liquid, drill two small holes to drain the rain-water.

I chose a plastic soft drink bottle because:

- a) They are cheap and easily obtained.
- b) The top is small enough for the wasp to crawl in to, but it is unable to fly out.

Substances

Sugars		Sugar + water
		Glucose + water
		Honey
Fruit	_	Apples
		Grapes
Other		Vinegar
		Flowers
Control		Water
		Empty

A small quantity of each substance was put into three bottles and the bottles were put into three sets ie three sets of nine substances. Two of these sets were then painted (yellow and red/purple).

Conclusion

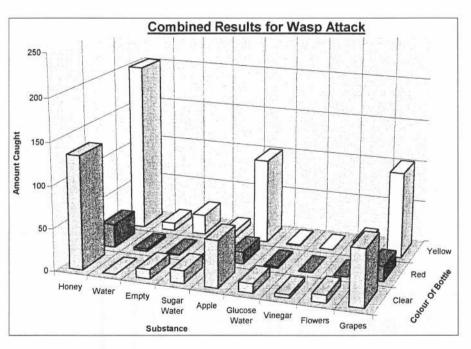
I have come to the conclusion that the best substances to attract wasps to a trap are honey, apples and grapes. The trapping results are enhanced when using a yellow coloured container.

The number of traps recommended would be influenced by the severity of the wasp problem.

Combined results	Clear	Red	Yellow
Honey	134	28	202
Water	0	3	9
Empty	11	1	24
Sugar water	15	0	8
Apple	55	14	101
Glucose water	11	2	1
Vinegar	4	0	0
Flowers	9	0	13
Grapes	66	18	102

Separate results 24 143 Honey 90 Water 0 3 8 Empty 11 1 15 Sugar water 10 0 6 Apple 42 8 63 0 Glucose water 1 0 Vinegar 4 0 0 7 9 Flowers 0 Grapes 37 12 61

Internal orchard			
Honey	4	1	3
Water	0	0	C
Empty	0	0	C
Sugar water	0	0	C
Apple	5	3	10
Glucose water	0	0	C
Vinegar	0	0	0
Flowers	0	0	C
Grapes	10	1	17
Vineyard			
Honey	40	3	56
Water	0	0	1
Empty	0	0	9
Sugar water	5	0	2
Apple	13	3	28
Glucose water	5	2	1
Vinegar	0	0	(
Flowers	3	0	4
Grapes	19	5	24



The results

I did note that the number of wasps trapped started increasing rapidly in the last few weeks of the project. So I formed the opinion that the wasps may also be attracted by the sounds of other trapped wasps. However, the increase may also have been due to the natural breeding cycle for that time for the wasps.

Extensions

My research has attracted serious interest amongst orchardists and their consultants, especially from Central Hawke's Bay where the wasp problem has resulted in orchardists only picking parts of certain blocks.

Manuka honey effective in fighting infections

by lain Hyndman

The anti-bacterial qualities of manuka honey were to the fore at the National Beekeepers' Association conference in Wanganui.

During Tuesday's seminar, Dr Peter Molan, a researcher at Waikato University, outlined the results of work he had been doing with the honey variety over the past six years exposing some interesting uses for the natural product.

Six years ago while on sabbatical leave Dr Molan began his research into the qualities and properties of manuka honey and in particular as a wound dressing.

Continuation of that work will be allowed through a \$20,000 a year grant from the Honey Industry Trust.

Dr Molan said his work began by measuring the growth patterns of the seven main bacteria types that affect skin and by matching this with different strength concentrations of honey applications he was able to find the minimum concentration required to halt that growth.

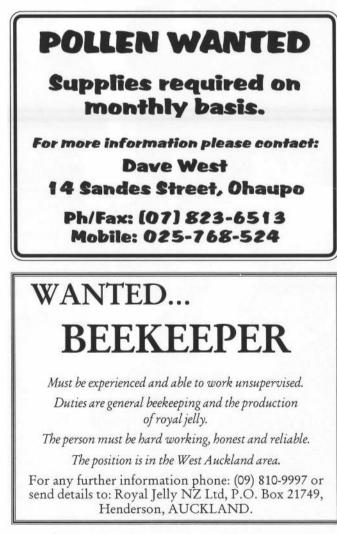
Staphylococcus aureus, he said, was the most common bacteria active in burns and open wounds and manuka honey was found to be a very potent weapon against it.

"We found that very little manuka honey was required to halt its growth and the honey is harmless — you can even use it in and around the eyes without problem," Dr Molan said.

"We found manuka honey has a very potent anti-bacterial ability.

"Wounds we worked on were found to be completely sterile after one week and sloughs and gangrenous tissue separated painlessly from the wounds, odemas subsided, exudation ceased, bad odour was removed and regrowth of the skin around the affected area was rapid with no adverse reactions," he said.

Dr Molan issued a word of warning to beekeepers however, that they should not build honey up as a cure-all. He explained that the anti-bacterial strength of manuka honey was determined by its floral source and that research had only



concentrated on its anti-bacterial properties at this stage. Treatment for fungal infections, such as athlete's foot and jock itch, had been looked at briefly and pasture honeys were shown to be potential weapons.

Honey has been regarded by many as a cure for all sorts of medical conditions as far back as Aristotle who recommended honey as a medicine. India, and in particular, lotus honey, was prescribed for a wide variety of medical problems.

However, without the proper research to back claims Dr Molan said the potential was there for people to become wary of unsubstantiated claims.

Dr Molan showed association members graphic slides of open wounds and burns that had failed to respond to traditional forms of medication.

The before and after shots following application of manuka honey showed not only marked improvement, but in most cases complete recovery of the wounds.

The product was also found to be an ideal medication in the treatment of infantile gastroenteritis, shortening the life of bacterial diarrhoea. It has been used instead of glucose and oral rehydration fluid.

While the medical use in humans was limited, due in part to scepticism in many circles, its use as an alternative antibiotic for pig diarrhoea had potential.

Dr Molan said increasing preference for residue-free food products could prove beneficial for promoting honeys as an ideal alternative for traditional antibiotics.

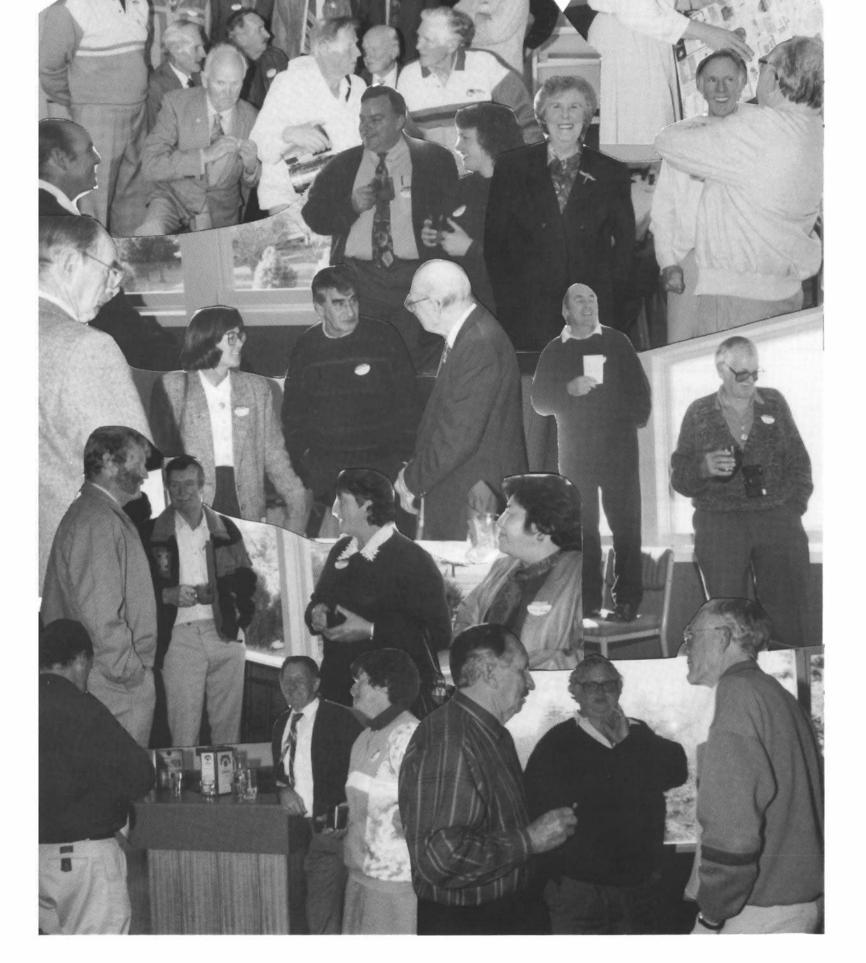
Chicken and pig fees were often mixed with antibiotics and if those industries decided to use honey in their mixes instead of traditional antibiotics demand for the natural product would increase significantly.

"Imagine silos of honey being built on poultry and pig farms — honey producers would be hard pressed to supply the demand," Dr Molan said.

Acknowledgement Wanganui Chronicle







Science — Bee Genetics The Business of Bees

DRONE zones, virgin daughters and the ritualised mating of queens sound like the stuff of ancient Celtic legend. But the terms are part of the language of New Zealand's thriving queen-bee industry.

Thousands of queen-bees from New Zealand are sent each year to Canada, Japan, England and Korea, and, at \$12 to \$15 per bee, by weight they are this country's highest value agricultural export. The demand for queen-bees has resulted in a nationwide genetic bee breeding programme.

Inland from Taipa in the Far North a key player in queen-bee genetics, David Yanke, is quietly breeding 9000 queens.

New Zealand's highest value agriculture export isn't beef or trees — it's bees. In a Northland country setting, one couple is using artificial insemination to improve the genetic pool of our bee population — and build a thriving export business in queen-bees a year.

David — "Raising queen-bees is fascinating. But it is an exacting and intensive business, needing an odd combination of skills. We become slaves to a biological factory."

What he doesn't say is that he happens to be very good at doing something very difficult. David Yanke is one of the few people in the world artificially inseminating queen-bees in a closed population rearing programme.

The artificial insemination is a pivotal part of the genetic breeding programme. "The reason is to broaden the narrowing gene pool of our queen-bees, but this is complicated by peculiarities of their sex habits and their physiology."

Earth mother

The queen-bee is quite a woman. As well as being the egg layer for the whole colony, her hormones govern the mood and movements inside and outside the hive. She is the matriarch of a matriarchal society. She is born to mate, and having mated will spend the rest of her life — up to 5 years laying eggs. Her mating ritual is brief but spectacular. At about ten days old, she takes to the air for her mating flight. This happens in the 'drone zone' — a specific area where drones (male bees) naturally congregate. David "We're not quite sure what features are important, but it seems to be related to certain topographical combinations and maybe electromagnetic fields."

The virgin queen will fly up 10-30 metres in the air, emitting a strong sex pheromone. This attracts drones from miles around. She mates on the wing with several drones in succession. For the drone the mating is literally explosive. His genitalia are blown apart and he falls dead to the ground.

After mating, with usually at least seven drones, in one (sometimes two) mating flights, the queen-bee returns to her hive and begins her lifetime of laying thousands of eggs, never to fly again —unless the colony later swarms. From the mating flight she has an internal organ (spermatheca.) full of mixed sperm, viable for 3-4 years, with which she fertilises each of her own eggs.

Fooling nature

That's a pretty hard act to replicate artificially. David Yanke does just that. He collects semen from selected drones and with it hand fertilises virgin queen-bees. "Nature goes to a lot of trouble to ensure genetic diversity. Queen-bees mating high in the air with drones that come from miles around is nature's way of keeping plenty of external variables. We're trying to increase the gene pool but also trying to control what that pool consists of. We don't want it overrun with the dark feral bee. Hence artificial insemination."

All the bees he uses are carefully chosen from 25 beekeepers throughout New Zealand — participants in the New Zealand

Story by Wendy Laurensoii

Bee Genetic Improvement Group, a commercial company set up in 1990.

David — "This became necessary because of narrowing stocks of the Italian yellow, bees our commercial honey-bee industry is based on. They are a gentle bee so are put under constant mating pressure from the more aggressive dark feral bees. Beekeepers were producing a lot of queens from too few queen mothers.

"By the mid 1980s our gene pool of Italian yellow bees was losing its disease resistance and lacking vigour. We had to do something and the obvious choice was to import other European races."

That, didn't happen. David Yanke and some other beekeepers wanted to bring in a gentle but dark coloured European bee, the Carniolan. A popular honey-bee in Europe it is resistant to brood diseases. "Here, dark coloured bees are synonymous with aggression so we couldn't convince the authorities to import them."

Instead David brought in semen from a genetic improvement programme in Western Australia. The semen was of another Italian yellow bee and its introduction resulted in a big improvement in New Zealand honey-bee colonies.

"After becoming aware of the Australian genetic programme I proposed setting up a breeding programme here, but commercially based rather than state funded like theirs. Their funding has since stopped and the breeding programme has gone with it."

David set up the N.Z.B.G.I.G. using foundation stock from queens all over New Zealand and from Western Australia. "The 25 participants send me their best queens every November, selected for over wintering ability, brood viability, temperament, hygienic behaviour and colour."

Virgin birth

David rears ten virgin queen daughters from each mother queen, and these are inseminated with selected pooled semen. The inseminated daughters are returned to the owners in February and form the test population for the next season. The process sounds simple. It isn't.

Artificial insemination of bees has been around since the early 1950s. The big change in recent years has come from pooling and homogenising the semen. In nature the queen's sperm store keeps sperm from different drones separate. But by mixing the sperm from different drones with a saline buffer solution, each artificial insemination draws genetic material from all 25 lines being maintained in the programme.

David gets the drones by forcing each queen to lay lots of drone eggs. "I confine her to a drone cone which has bigger sized cells. Eggs fertilised by the queen become workers or queens, while unfertilised eggs become drones. All the males are genetically haploid (genetic material from the mother only) not diploid (genes from both parents). In fact the appearance of diploid drones is an indication that the queen is failing, and the colony cannibalise them at just a few days old."

Healthy drones take 40 days to develop. "Before they emerge I move the frame into a hive above a queen excluder so they can't get access to her. The hatched drones take 10 days to sexually mature and in that time they are confined to the top of a hive."

Murder most foul

To collect the drone semen David has to crush their heads. "It sounds horrible, but they then emit their semen, which I collect in a thin glass capillary tube attached to a syringe."

Continued on page 22

Continued from page 21

The most semen from one drone is 1 micro-litre. Each queen needs 10 microlitres so to fertilise his 250 queens each year David needs about 3,000 micro-litres of semen. "There's a lot of waste of drones to get that amount as many emit no semen."

The semen is mixed with the saline buffer to homogenise it. A centrifuge exerts huge forces on the combined fluid to separate the homogenised semen back out, ready to inseminate the virgin queens.

David manages the growth cycles of drones and gueens so both are sexually mature at the same time. He rears the 10 daughters from each of the 25 selected best queens (250 total) using standard queen rearing techniques.

Tricks of the trade

Queen-bee rearing involves encouraging nature to do something it doesn't normally do. Usually there is only one queen per colony and only if something happens to the queen is she replaced. Queen-bee eggs are laid in a cell bigger than ordinary worker bee cells and she becomes a queen largely by being fed royal jelly by the attendant bees.

Queen-bee breeders trick the bees into emulating this by transferring normal eggs into artificial queen-bee cell cups. The bees recognise the specially shaped cells and feed the larvae copious amounts of royal jelly until they cap them over. They are then put in an incubator until they are 10 days old.

Each queen needs her own home and colony in which to develop, from which she would normally make her mating flight. So each ready-to-hatch virgin queen has to be placed in her own nucleus hive (nuc), much smaller than a honey producing hive but complete with her own new support colony of bees. David leaves her there to hatch at day 12 and then for a further 6-7 days. He removes her from the nuc just before her mating flight and artificially inseminates her.



Inseminating in miniature

A day before insemination David exposes her to C02 gas for 10 minutes which anaesthetises her. He clips her wings, marks her abdomen with a tiny numbered disc then returns her to the nucleus hive. The next day he anaesthetises her again and carries out the insemination under a microscope.

"We put the queen in a plastic tube with her abdomen sticking out. Under anaesthetic, we use forceps to open up her abdomen, pull back the sting, expose the vagina, and pull back the protective flap covering it."

At the same time, the homogenised semen is inserted into the queen from the glass capillary tube, a fiddly job needing speed and dexterity. A Kerikeri queen-bee breeder, Bruce Stevenson, and a technician help David collect the semen while he does the inseminations.

"The survival rate of queens now is nearly 100 per cent, but there are differences in the results of artificial mating compared to that on the wing. The homogenised semen only stays viable for about a year. Another peculiarity is that the queen before she will begin to lay eggs. "Once inseminated the queen is released back into the nucleus hive to start laying before Rachel Kearney, David's partner, packs and distributes the inseminated daughter queens. They are caged in a tiny plastic cage (complete with candy for food, and attendants for support) ready for the trip home. There the selection cycle starts again for the following season.

Booming business

At the moment demand for queen-bees far exceeds supply, and quality control for queen-bee export is strongly market driven.

David — "We have to meet the strict standards of the Canadian bee industry. The Canadian honey industry is booming and USA gueen-bee breeders were forced out of that market due to pest and disease problems. We are relatively disease free. We can also supply them with queens early in spring after their cold winters. Northland is ideal for queen-bee breeders in that regard. We have an extended season and a good supply of pollen year round." David and Rachel and their three daughters live and work on a five acre block. David Yanke is Canadian himself and started to train in bees in Ontario. "I worked in honey first then was captivated the first time I saw queen-bee rearing. In 1984 I went to California to learn about artificial insemination. I think the combination of having both queen breeding expertise and the insemination techniques is unusual."

It makes him comfortable in both the world of nature and the laboratory. And somehow, the echoes of ancient Celtic vocabulary fit comfortably into his world as well.

Acknowledgement Growing Today



Two ships in collision plus the aftermath

About 1950 a small coastal freighter was on a trip from Dunedin to Auckland with calls at a number of South Island ports. Its cargo consisted of tea, several tons of honey and other sundries.

The freighter was leaving the Wellington port when she crossed swords with the large UK ship "The Taranaki". The freighter (I can't think of her name now) as a result of the collision suffered quite extensive damage. She was assisted back to the wharf and there the hold showed more clearly the extent of the results of the accident.

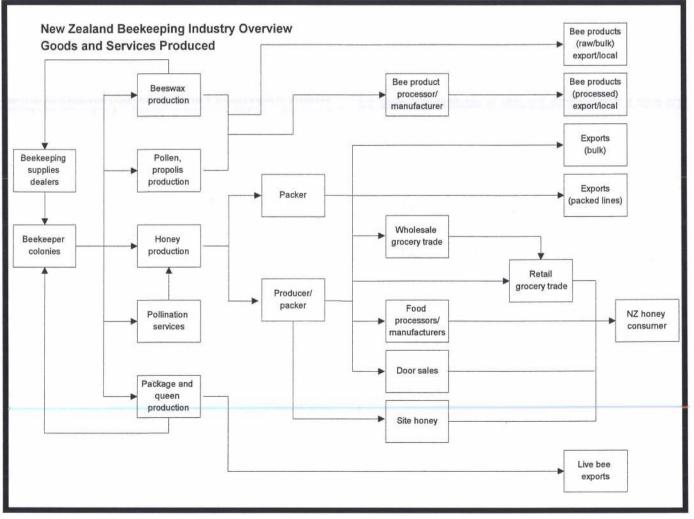
The bulk honey was consigned to the Internal Marketing Department, (IMD) in Auckland. The honey was packed in 60 tins and as may be expected a member had been briefed. It all looked a mess.

The official reaction and action that followed was that ordinary insurance would replace "a declared average" insurance on the whole cargo. One official was appointed to manage the recovery, and sale and disposal of the cargo as appropriate. The IMD for where I worked at the time had no direct involvement other than offer advice and assistance to other offices concerned. I was fortunate to meet another shipping officer who outlined to me the procedures and steps that would be taken in the disposal of the cargo including the honey. Because of the number of people who would be concerned with the cargo he suggested that I set up a special file and record all phone calls and meetings held. This was done so all facts were assembled, times, dates and names of the apiaries concerned. In due course the honey was duly railed to Auckland. Sometime later the IMD received an account for rail freight. As the IMD had never consigned the honey it did not accept the account. The account was disputed and the matter then rested between the cartage firm and the 'General Average Officer'.

In the end I was the officer in the sandwich when both endeavoured to have IMD accept the freight account. However, a general meeting was convened and my detailed records of all events clearly absolved IMD of any responsibility in the matter. It also indicates the need to keep a good system of detailing happenings in such cases as they occur. Finally I believe most of the honey rescued from the wrecked freighter was able to be used.

Graham Beard





The Honey-bee under threat

The varroa parasite is devastating Britain's hives, with disastrous knock-on effects

by Daniel Butler

Mike Williams, of the Bee Farmers Association (BFA), is understandably worried as he contemplates the ravages of a parasite that is rampaging through Britain's beehives. "The environmental impact could be far, far worse than myxomatosis - rabbits are a pest while bees do nothing but good. The effects on farming and wildlife could be devastating." His fears, however, are nothing compared with the concern of fruitgrowers.

"The only real solution is to develop self-pollinating varieties of apple," says William Barnett, manager of Tillington Fruit Farm in Herefordshire. "But to do this we should have started work 40 years ago - now we are stuck with a terrible problem."

The villain is a tiny mite, varroa, which originated in South East Asia where it lives harmlessly on a native wild bee. Around the turn of the century, however, it managed to transfer hosts to the honey-bee, Apis mellifica mellifera, which had been imported by European imperialists. From there it slowly leapfrogged back through colonies across Asia until, in 1992, it was first noticed in Devon.

What it lacked in speed arriving, it has made up with the ferocity of its impact. Although at first an infected hive shows few signs of damage, after about three years the colony collapses under the combined pressures of falling reproduction and secondary viral infections. Last year's warm weather helped the mites increase — a problem compounded by the cold winter which further weakened host colonies.

As a result, varroa is now sweeping across southern England and reports of the parasite are also coming in from Wales and as far north as Cumbria. The mite appears to be causing the most devastation in the south-east.

"Around my home in Sittingbourne, losses among local bee hobbyists are 100 percent," says Mr Williams. "Commercial keepers have lost fewer, but we're still talking about 80 percent."

A partial cure is possible if varroa mites are detected early enough. However, this involves insecticides which for obvious reasons have to be used in minute doses. Consequently, an infected colony can never be completely cleared of the pest and even if it were, once the mite is established locally, the colony would be open to reinfection from untreated local hives. Soon all colonies will have to be treated regularly or face extinction.

This could mean the end one of the oldest forms of farming. Bees have been exploited for honey for thousands of years,



but increasingly have become valued more for their beneficial by-product: pollination, necessary to transform flowers or blossoms to seed and fruit.

Although wind and wild bees can also perform the task, Brian Stenhouse, general secretary of the BFA says domesticated honey-bees are easily the best pollinators. "Not only are there far more of them than wild insects at the vital time of year, but once they latch onto a pollen supply, they stay with it," he says. A typical hive, which starts the year with 35,000 bees, will systematically milk an orchard of pollen before turning to alternatives.

In comparison, the tiny colonies of bumble-bees (any "wild" honey-bees are really feral colonies which have swarmed) are inefficient, wandering randomly from hedgerow flowers to blossom.

"Bees are vital for pollination - particularly in cold weather such as the spring we've just had," says Janet Chapman, an apple farmer in Gloucestershire.

Not surprisingly, the disappearance of honey-bees has worrying implications for agriculture: "Our local apple farmers are beginning to panic," points out Mr Williams of the BFA. As pollination secretary he liaises between hive owners and farmers, administering bee contracts where fruit farmers hire colonies from professionals at £25 a hive for the month trees are blossoming. "Traditionally they might rely on a couple of hobbyist hives," he says. "These could be helped out by contracting in more for the pollination period, but this spring there are almost no bees at all in many orchards, and farmers are finding they can't get hold of alternative supplies."

The effects could also be serious for oil seed rape growers where bees are not essential, but greatly speed up pollination. This ensures an even seed set, with the result that everything ripens at the same point. As a consequence, Britain's 350 professional beekeepers are in constant demand throughout the summer, shuttling their 35,000 hives between strawberries, beans, commercial green-houses and rape fields. The process culminates with the heather contracts in late summer and the Ministry of Agriculture, Fisheries and Food advises fruit farmers to provide one hive per acre in apple orchards, rising to four in the more insect-dependent cherry orchards. Although no one can put a firm value on this work, one estimate puts it at £900m every year (in contrast, the honey is only worth £15-20m).

Now a wide range of crops whose success is based on natural pollination are under threat. "Every one of my 300 colonies in Kent is affected, although my 150 Scottish hives are still clear," confirms Mr Stenhouse. "I'm lucky not to have lost any, but I'm almost unique - I know one farmer who's lost all but 19 of his 400 colonies."

Others are still fighting hard: "I'm taking steps to guard against the danger," says fruit farmer Mr Barnett who keeps 20 hives of his own. "I won't touch anyone else's swarms and won't allow hives from outside on to the farm." He adds, however, that varroa has been found just to the south and east and admits he is probably struggling against an unstoppable tide.

Further west, Pam Gregory, bee inspector for Wales, is resigned to the parasite's arrival. Because sheep and cattle are the mainstays of local farmers, agriculture is unlikely to be as hard hit as in England, but she says ordinary gardeners face falling yields: "There's no doubt bees make a difference - I know, for example, my broad and runner bean crop is much better thanks to local hives." Far more important, however, is the potential damage to wildlife. "Bees are vital pollinators for many wild flowers and trees," she says. "Without them, many nuts and berries will fail and the effects on birds and animals could be terrible."

Acknowledgement The Independent Weekend

Bee Products for Human Health — the problem of Apitherapy

by Jost H Dustmann

Nieders. Landesinstitut für Bienenkunde, Wehlstraße 4a, D-29221 Celle, Germany

There are many reports about honey, pollen, royal jelly and propolis, which reveal various human health-promoting effects. These attributes, well known and often proclaimed by folk medicine are not accepted by health organisations and medical schools because the scientific clinical proof under modern medical standards is insufficient. Also, the fact that bee products are not uniform but of variable and complex composition; that they are not purely synthesised but genuine, natural compounds, does not promote the official acceptance by medical science.

For these and other reasons the apitherapy movement has not made great progress in recent years in many Western countries to the disappointment of many beekeepers who demand a better reputation of bee products. What has to be done to solve this problem? Before answering this question let me present some examples of biological effects of bee products which are well documented in the laboratory and which are closely related to health-promoting effects.

The antibacterial effects of naturally preserved honey are well proven by many laboratory tests and scientifically undisputed. Besides the osmotic effects of single sugars and active agents of plant origin, as for example pinocembrin (Bogdanov, 1989) there are mainly the so-called inhibines of honey responsible for the antibacterial and inflammation inhibiting property of honey (White, 1966). The inhibines originate from the activity of the heat and light-sensitive bee enzyme Glucoseoxidase, which is produced by hypopharyngeal glands of worker bees. In diluted honey solutions the activity of this enzyme causes the formation of antibacterial-acting hydrogen peroxide. Honey samples which are rich in inhibines as for example naturally preserved cornflower honey (Centaurea spec.) show an antibacterial effect even at very low concentrations: Staphylococcus aureus-bacteria are inhibited in their growth even by a hydrous honey solution (Centaurea) of 0.25% (Dustmann, 1979). Medical reports of our time confirm the laboratory dates for antibacterial effects of honey (Zumla and Lulat, 1989). Another - compared to honey - much stronger antibacterial activity, equally dependent on glucoseoxidase, we find in bee bread (naturally preserved pollen in the comb) (Dustmann, 1982).

A typical example for biological effects of bee products which can be clearly demonstrated in the laboratory is propolis. Despite many chemical, pharmacological and folk-medical publications, up to now propolis has not received that reputation in medical science which it deserves. My former co-worker B. König mainly analysed the anti-viral effect of propolis, which is of particular interest for medical science. Using poultry herpes viruses, he succeeded in giving the proof, that within the numerous flavonoids and cinnamic acid derivatives of propolis, only those compounds show a strong anti-viral effect which are related to the chemical structure of caffeic acid (König and Dustmann, 1988). These chemical compounds, especially the caffeic acid and its derivatives, dicaffeolycs, Quercetin and luteolin, highly inhibit specifically the replication of various virus types.

We can also prove that a certain combination of two more weaker anti-viral constituents of propolis shows a much stronger anti-viral effect than would correspond to the total amount of anti-viral effects of single components. This socalled synergistic effect could even be enhanced by using a combination of three compounds.

These biological effects of certain bee products are only some examples from many laboratory tests. They are not sufficient for general acceptance and practical application of bee products. Neither the chemical and biological laboratory tests nor the gathering of countless folk medical reports about health-promoting effects meet the requirements of establishing a better reputation with health professionals. What is really needed are exact clinical tests, which satisfy modern scientific standards, ie. medical and nutritional scientific double blind tests.

I want to call on the beekeepers associations and the institutes of apiculture, to intensify their contact with medical doctors and nutritional scientists and to persuade them that the medical value, the health-promoting effect of bee products is worthwhile to be tested in clinical experiments.

As far as honey is concerned, such a clinical test could enter into the following question, e.g.: What kind of effects has the regular consumption of honey on the general human metabolism, blood circulation or the immune system? Only after those tests have been made can a better reputation of bee products be obtained. This would also bring great advantages for apiculture in general.

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COMVITA — PROMOTING APITHERAPY FOR MORE THAN 25 YEARS IN NEW ZEALAND

Annual honey report — China

The honey trade in China has been under close scrutiny for the last several years due to the anti-dumping suit brought by the United States. The Sino-US Suspension Agreement of 1995 ended the anti-dumping case but there are still numerous articles in the Chinese press that address the export of Chinese honey. The Ministry of Foreign Trade and Economic Co-operation (MOFTEC) has continued to monitor and regulate the honey trade. In addition, experts in honey production and honey processing are being encouraged to increase the guality of honey, especially the honey for export. Honey is one of 27 commodities which will be affected by China's changes in public bidding for export quotas, which were revised early in May 1996, by the Foreign Trade Administration under the Ministry of Foreign Trade and Economic Co-operation (MOFTEC). This is the second time the quota system has been revised since its beginning in 1994. The first change will make it easier for a company to qualify as a bidder. In the original 1994 version, the rules required a company to be a member of a Chamber of Commerce and to have actually traded the merchandise in any of the three years prior to the bidding. This meant that if a company had not handled a product in the past three years, they could never gualify to handle it in the future. In the new version, the company will automatically qualify as a bidder two years after getting permission from MOFTEC to handle foreign trade. They do, however, still have to be a member of a Chamber of Commerce.

A second change this month concerns the actual bidding. In the original 1993 version, the veteran state traders often lost out in the bidding because they were slow to adapt to new methods and were more accustomed to State allocations. This was a problem because these were the exporters who between them had the most sales links abroad. It was decided that their failure to win quotas threatened to inflict damage to China's links with trading partners. This problem was corrected last year when a clause was added that stipulated that 50% of the export quotas would be set aside for the companies whose combined transactions accounted for 50-70% of China's



total exports in any given commodity. This percentage was reduced this month to a maximum of 40%. This part of the bidding is conducted after the bidding for the remaining quotas, which are subject for public bidding. This will prevent the problems with the original regulation which enticed bidders to compete with bids so high that the final winners found it impossible to proceed with any transactions. Tenderers cannot win unless their bid approaches the average of all prices quoted in the bidding.

This new revision ensures that the quotas are high enough to push overseas sales prices beyond levels that would be considered "dumping" but not so high that traders would not be able to use their quotas. Bidders will be forced to weigh their future rate of returns and the intensity of competition to decide how much they will offer. Winners will also be forced to prove to authorities that agreed upon sales prices with overseas buyers are satisfactorily high before they win a quota. In the original version, 13 categories of commodities were included under the regulations in order for the state to export control over the export price. In 1995, MOFTEC expanded the categories to include 24 products, and this year the number has reached 27. According to this source, the 24 categories of exports subject to bidding, rose in value in 1995 from an average of three to 72%.

Compared to 1994, honey prices in 1995 increased nearly 20% and honey export volumes dropped about 16%. Royal Jelly's prices, compared to 1994, dropped about 60% and volume dropped about 70%.

In an article concerning honey, published by MOFTEC's International Trade News on May 13, 1996, it was announced that a circular on strengthening quality management of export honey is available from China Commodity Inspection Bureau, (CCIB).

According to the circular, there are nine items of importance. They are as follows:

- 1. All enterprises dealing with honey processing for export must register at local CCIB in accordance with "Export Food Plant and Warehouse Hygienic Regulation."
- It is necessary for processing plants to set up a stronger, improved system for controlling the quality and inspection of processed honey.
- Foreign trade companies must carefully check honey quality before accepting it for procurement.
- As part of improved quality processing, recycled barrels must be carefully inspected.
- Beginning July 1, 1996, a white code must be printed on honey barrels prior to inspection. The first line of the code is the hygienic registration number. The second line is the grade-company code. As an example of line two, 3100/ 06001, ELA'S, 3100 represents Shanghai, 06 means honey, 001 is Shanghai Guanshengyuan Food Plant, ELA is the honey grade, S is the Shanghai Native Produce Import/ Export Corporation.
- Before procurement, foreign trade companies must be sure that the processing plant has a valid Hygienic Regulation Certificate issued by CCIB.
- 7. China Commodity Inspection Bureau should strengthen the supervision of management of the registered honey processing centres. This includes making sure that all honey is carefully inspected and that the certificates conform to the commodity. Any product that is questionable will be prohibited from export.
- 8. If a processing plant has a hygienic registration number, this number can be used on any barrel for export. It cannot be transferred or sold to, or borrowed by another processing factory. If abuses occur in this regard, CCIB in co-operation with China Chamber of Commerce of Import/Export of Foodstuffs will investigate and act.

US Department of Agriculture

This regulation should be followed by all factories who process mature honey for export.
 Acknowledgement National Honey Market News,

Possum meat on top of Asian hotel menus

After years of fighting bureaucracy, a small Northland company has gained access to Asian markets for exports of vacuum-packed possum meat, and has secured financial backing from a Hong Kong company.

NZ Meat Game Company Ltd - up until now a virtual one-man band conducted by director Mark Rodgers - has begun exporting several tonnes of the delicacy to top hotels in Hong Kong and Taiwan.

But with the financial and marketing support of Yifan Holdings of Hong Kong secured in the past few weeks, Mr Rodgers plans to build a new \$1 million processing plant in a remote bay in Whangarei harbour and tackle the Chinese market.

"The potential is huge, but we must ensure that we learn to walk before we run," said Mr Rodgers.

"Because of TB, the business of exporting possum meat is a very sensitive one in New Zealand, and for authorities in Asian countries."

"One slip-up, and years of hard work will be wasted."

But Mr Rodgers is confident that his company will soon be exporting up to 20 tonnes of possum meat a year, and it will establish a new export market for New Zealand.

Wild meat is a delicacy in Asia; the locals cube it and slowly cook or stir fry it.

Northland has 15 million possums, and is the only area in the country where the environmental pest is free from TB - an important prerequisite for exporting.

Mr Rodgers is trapping possums in areas

north of the Brynderwyn Hills, near Whangarei, working with the Department of Conservation to ensure he traps in areas not poisoned for possums.

The animals are then guarantined for 28 days. MAF inspects the animals before and after they are slaughtered at an abattoir at Parua Bay in Whangarei Harbour to ensure they are disease-free.

Attempts to farm and export possum meat are not new, but Mr Rodgers' venture is possibly the first one to show potential to succeed. Ten months before the 1987 sharemarket crash, the Kiwi Bear Company, backed by Smart Group among others, was formed to farm and market possum meat.

That company was voluntarily wound up in 1989 after backers admitted their experiment had failed.

Three years later, a Bay of Islands company was formed to export possum meat. It hired Mr Rodgers to help manage operations.

When that company bowed out in late 1993, Mr Rodgers took on the task himself. He sold his assets, borrowed \$20,000 from the Methodist Mission, and began the task of gaining consents within New Zealand to export possum meat, and find markets overseas.

It took him three years and \$360,000 to get the necessary protocols in place to allow him to export possum to Hong Kong (April 1995) and then Taiwan (May 1996).

It took so much time because the product was new, meaning governments had to agree to the development.

Once protocols were established with

by Gary Sherran

Taiwan last month, Yifan Holdings bought 50% of NZ Meat Game Ltd, and Mr Rodgers began to smile again ... "I had debts of about \$160,000 at that stage".

Overseas markets were initially sought through Auckland food exporters and Tradenz contacts, but finding buyers was the least of his worries.

"We are selling to hotels, but also shops and other traders. Asians are used to wild game, and they like our possum meat."

As word begins to spread in Northland of NZ Meat Game's initial success, Mr Rodgers has had many people wanting to join him. But he is cautious.

"By failing to keep up the standards we have set, we could jeopardise the whole enterprise overnight," he said.

"We won't refuse help, but we certainly want to keep the cowboys out."

One little marketing plug he hopes to secure is a recommendation from the Heart foundation for possum meat. It has a protein content higher than beef, and is free of fat.

The New Zealanders who cook and eat it say it has a gamey tang, and tastes like a cross between veal and pork.

It is a moist meat that doesn't fall apart when cooked and it is cheap.

Does that mean Mr Rodgers will attempt to persuade New Zealanders to start eating possum meat?

"We wouldn't waste our time; There are too many opportunities overseas," he said.

> Acknowledgement Sunday Star Times

rmers retain ban on access

Dunedin - Legislation proposed to soften landowner liability for accidents on farms may not go far enough to convince 13 farmers to open public access to their properties.

A spokesman for the group New Zealanders for Workable Law Association, Mark Feary, said the proposed amendment to the Health and Safety in Employment Act would still mean farmers could be liable for accidents to all people on their property.

They were keeping locks on their gates until Wanganui farmers Keith and Margaret Berryman, who have fought the Occupational Safety and Health Service for two and a half years following an accident, are compensated.

Last week OSH announced it was no longer appealing a District Court ruling which went against it.

The case related to the death of a

beekeeper who crashed off an access bridge to the Berryman's property.

OSH claimed the bridge was the beekeeper's place of work but the judge said it was not.

Mr Feary said the Berrymans were seeking more than \$1 million from OSH. as reimbursement for direct and associated costs incurred by the threatened legal action.

Nationally 13 landowners have closed access to the public and agencies such as MAF and Telecom, fearing they would be liable in the event of an accident.

He said a proposed amendment still included the phrase "work-related purposes" which he said could mean farmers were responsible for accidents to Telecom or TransPower staff working on a farm or MAF staff testing cattle for tuberculosis.

Group members also feared they would

be liable for accidents to recreational visitors.

Mr Feary said the proposed amendment also failed to address confusion over landowners' obligations to warn visitors of potential hazards.

> Acknowledgement New Zealand Press Association



Drive against global trade barriers

Apec trade ministers setting tone for range of topics by World Trade Organisation

The Hon Philip Burdon chairs the Asia Pacific Economic Co-operation forum, previewed by Greg Ansley.

The most powerful grouping of trade ministers ever to meet in New Zealand will plan strategies for an Asian-Pacific drive against global trade barriers ahead of the first ministerial meeting of the World Trade Organisation in Singapore in December.

The Christchurch meeting of ministers from the members of the Asia Pacific Economic Co-operation forum including the economies of the United States, Japan, China, Canada, Australia and the Asian tigers — will be handed an agenda crucial to New Zealand.

It will help to determine whether Apec can revive the momentum of the 1994 Bogor summit, at which the region agreed to achieve free trade and investment by 2010 for developed members and by 2020 for developing countries, and if it can transfer that energy to the fledgling World Trade Organisation (WTO), the successor to the General Agreement on Tariffs and Trade as the overlord of global trading rules.

More specifically for New Zealand, the meeting will test the strength of the Cairns Group of agricultural trading nations against the intransigence of Japan, China, Taiwan and South Korea. Those countries oppose not only clear action on the liberalisation of farm markets within Apec, but also the renewal of farm negotiations under the World Trade Organisation.

Christchurch also will help to set the stage for debate in Singapore over some of the most difficult issues bedevilling international negotiators: increased market access; the broadening and acceleration of tariff reduction and elimination; new agreements on intellectual property rights, information technology and telecommunications; WTO membership for China; and linkages between trade, labour standards and the environment.

Beyond the formal meeting, ministers will be huddled in back-room discussions on other pressing issues not on the agenda. Indonesian and United States representatives, for example, will discuss Indonesia's national car plan which is opposed by Washington because of conflict with WTO principles.

There also is likely to be out-of-hours discussion on an informal proposal from the Philippines to "multilateralise" the Association of South-east Asian States' free trade area by the turn of the century. This concept is expected to be defined at further Apec meetings in Manila and Subic Bay, in the Philippines, later this year. Within the Apec process itself there is the key question of translating the commitment to free trade and investment made at Bogor, Indonesia, two years ago into immutable national policy. Under the Boger Declaration, members were to present individual action plans spelling out the process they would use to implement the commitment — to a meeting at Osaka, Japan, last year. Instead, the first emerged earlier this year and the rest are believed to fall well short of expectations.

Beyond this, the Christchurch meeting will attempt to achieve a substantial common regional front to present to the WTO in Singapore on issues ranging from market access and border impediments to trade, to more contentious subjects such as agriculture. The United States also will push hard for Apec support for new trade regimes for information technology — which last year presented Washington with a \$US72 billion import bill — and telecommunications.

A wider objective will be to encourage the WTO to adopt the ambitious aims of the Boger Declaration as its own, a goal pooh-poohed by the European Union and which has only tepid United States support.

Dorothy Dwoskin, Washington's key WTO negotiator, told an international satellite forum: "While this is an admirable goal, a lot of time can be spent pursuing agreement on a goal rather than dealing with the issues that are on the table at the WTO and are moving forward now."

There are other areas almost certainly beyond early resolution. Dorothy Dwoskin gave notice that the United States will continue to pursue the inclusion of labour standards on the WTO worksheet, a proposal vehemently opposed by Asean and other Asian nations, and dismissed even by Australia.

"To not include discussion of trade and labour standards in the WTO sends a false signal that trade ministers are not concerned about the effect of trade on the workforce and disregard the need for domestic support for an open and rulesbased trading system," she said.

United States support for Cairns Group efforts to put agriculture on the WTO agenda, with Apec backing, is likely to be less enthusiastic, particularly with a presidential election hanging over Washington.

The Cairns Group, a coalition of 14 countries formed by Australia in 1986 to force agriculture into the Uruguay Round of Gatt negotiations, saw that campaign eroded in the final stages of the round by trade-offs between Washington and Brussels, although it achieved notable

gains. And, while under the ongoing WTO programme farm negotiations are supposed to resume in three years, the road is uphill.

Facing continued opposition, the Cairns Group trade ministers met in Cartagena, Colombia, to plot a new campaign with at least nominal support from Washington.

"We clearly believe that agriculture has to be part and parcel of the result that comes out of Apec and we work very hard with our partners in the Cairns Group to make sure the Apec process moves along in the right direction," Dorothy Dwoskin said.

"The WTO agricultural agreement envisages that in 1999 the reform process for agriculture will continue. There has been a lot of attention focused on that in Geneva and we would expect that to continue as we prepare a package for ministers in Singapore."

> Acknowledgement Christchurch Press

Smart men 'owe it all to mum'

Intelligent men get their brains from their mothers, says research published today.

If a man wants to have smart sons, he should marry an intelligent woman, says Australian geneticist Gillian Turner.

As intelligence determining genes are on the X chromosome, any changes — detrimental or enhancing — will have more effects on a man.

With a woman there is a greater chance of an intelligence enhancing gene being cancelled out, she concludes.

Her research says that a man only has one chromosome inherited from his mother. It is paired with the much small Y chromosomes from his father.

Therefore an intelligence enhancing X gene has more of a chance of becoming the predominate gene, determining the man's basic intelligence, looks and character.

It also works the other way, if the predominate gene is not as strong as it should be, the man is more likely to suffer mental retardation.

Said Doctor Turner: "If the gene is the one that increases intelligence then its full effect will be seen in men, while in women the benefit is less pronounced. This explains why some men are extraordinarily intelligent."



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Steak Jamaican

tsp grated lime peel

- 1/3 cup fresh lime juice (about 3 limes)
- cup salad oil 1/4
- 1/4 cup honey (Suggestion: Clover Honey) 2 tbsps prepared mustard
- 2 cloves garlic, minced
- 1/2 tsp coarsely ground black pepper
- tsp salt 1/2
- 2 lbs top round, sirloin or flank steak Lime wedges for garnish

In a small bowl, whisk together all ingredients except steak and lime wedges. Score steak across top. Place in shallow pan and pour over lime juice mixture. Turn to coat all sides. Refrigerate 6 to 8 hours, turning occasionally. Remove steak from marinade and broil 3 minutes on each side for medium rare or to desired doneness. Slice thinly on the diagonal. Serve with lime wedges. Makes 6 servings.

Marinated Seafood Steaks

- "Use a mild soy sauce to reduce sodium content"
- 1/2 cup white wine cup mild flavoured honey (Suggestion: Clover 1/4
- Honey) cup soy sauce, regular or mild 1/4
- cloves garlic, minced or pressed 2
- 1/4 cup sesame oil or salad oil
- 1/4
- tsp crushed rosemary or tarragon 6
- swordfish, shark, halibut or turbot steaks

Combine all ingredients except seafood in shallow non-metal dish. Add steaks and turn to coat all sides. Cover dish and refrigerate several hours or overnight, turning fish occasionally. Broil 4 to 6 minutes on each side. Heat remaining marinade and pass separately. Makes 6 servings.

Hint: Especially good served with steamed rice and crisp-cooked vegetables.

Ad Lib Teriyaki

- "Add any little goodie of your choice"
- cup soy sauce, regular or mild
- cup mild flavoured honey (Suggestion: Clover 3/4 Honey)
- tbsp grated fresh ginger
- large clove garlic, minced
- lbs cubed sirloin, top round steak, boned 2 chicken or turkey chunks

Whole water chestnuts, green pepper and pineapple chunks, as desired

Combine soy sauce, honey, ginger and garlic. Mix well. Pour over meat and marinate 4 to 8 hours, turning occasionally. Alternate meat on bamboo or metal skewers with your choice of water chestnuts, green pepper and pineapple chunks. Broil or grill to desired doneness. Makes 6 servings.

Onion Lovers Twists

- package (1/4 oz) active dry yeast 1
- 1/4 cup warm water (105-115 degrees)
- 4 cups flour
- cup honey (Suggestion: Clover Honey) 1/4
- 11/2 tsps salt
- 1/2 cup hot water
- 1/2 cup milk
- 1/4 cup softened butter or margarine 1
- egg

Filling:

- cup butter or margarine
- cup finely chopped onion or 14 cup instant 1 minced onions
- tbsp grated Parmesan cheese
- tbsp sesame or poppy seeds
- 1/4 tsp garlic powder
- 3/4 tsp salt
- tsp paprika 1

In large bowl of electric mixer, dissolve yeast in warm water. Add 2 cups flour, honey, salt, hot water, milk, butter and egg. On low speed, blend until

moistened. Beat 2 minutes at medium speed. Stir in remaining flour to form a soft dough. Cover. Let rise in warm, draught-free place until double in size (about 45-60 minutes). To prepare filling: Melt butter in saucepan. Add remaining ingredients. Set aside. Stir down dough. Place on floured board. Knead until no longer sticky. Roll out to 12 by 18 inch rectangle. Spread with filling. Cut lengthwise into three 18 by 4 inches strips. Beginning with the 18 inch side, roll up each strip and seal edges and ends. On greased cookie sheet, braid the three rolls together. Cover. Let rise in warm, draught-free place until double in size. Bake at 350°F 30 to 35 minutes. Makes large loaf or cut braid into 12 rolls; bake, after raised, 20 to 25 minutes.

West Coast Five Bean Bake

"Party size"

1

1

1

1

- can (1 lb. 15 oz) pork and beans
- can (15 oz) butter or lima beans
- can (15¼ oz) small red kidney or lima beans
- can (1534 oz) white beans
- can (1534 oz) barbecue style beans
- 1/2 Ib bacon, cut into 1 inch pieces
- 3/4 cup honey (Suggestion: Clover Honey)
- 1/2 cup cider vinegar
- cup minced onions 1/2
 - tsp dry mustard
 - tsp garlic salt

Combine all ingredients in 4-quart casserole. (Do not drain beans). Bake, uncovered at 350°F for 21/2 to 3 hours. Makes 16 to 20 servinas.

Devilish Pecan Pie

"Extremely evil"

- 11/2 cups coarsely chopped pecans
- package (6 oz) chocolate chips
- 9 inch pie shell, unbaked 1
- 3 large eggs
- cup mild flavoured honey (Suggestion: Clover Honey)
- tsp vanilla 1/2
- cup (1/2 stick) butter, melted and cooked 1/4

Sprinkle nuts and chips over bottom of pie shell. In medium bowl, whisk together eggs, honey and vanilla. Blend in butter and pour mixture into pie shell. Bake at 325°F 50 to 60 minutes or until firm. Serve slightly warm or at room temperature. Makes 8 rich servings. Hint: Even more "evil" served with whipped cream with honey or country style ice cream.

Cherry Tomatoes Saute

Melt 2 tablespoons butter or margarine in skillet. Add 2 tablespoons mild flavoured honey, (Suggestion: Clover Honey) and one basket washed and stemmed cherry tomatoes. Saute just until glazed and heated thoroughly, shaking skillet occasionally. Season to taste with salt and pepper if desired. Sprinkle with 1 tablespoon minced fresh parsley. Makes 3 to 4 servings. Hint: Add a little grated fresh ginger.

Whipped Cream With Honey

cup (1/2 pint) whipping cream

tbsps mild flavoured honey (Suggestion: Clover Honey) 2 tsp vanilla

Chill beaters, bowl and cream. Whip until soft peaks form. Slowly beat in honey and vanilla. Makes 21/4 cups.

Honey Dessert Topping

- large egg white
- cup mild flavoured honey (Suggestion: Clover Honey) 1/4

In small bowl, beat egg white until soft peaks form. Add honey. Continue beating until stiff enough to hold shape. Makes about 1 CUD.

Acknowledgement American Bee Journal

"In this month's BeeKeeper we have suggested just one honey type for every recipe. That's because it's important to remember that although it's fun to experiment with different honey varieties... (and some honeys suit some situations better than others)... when in doubt you can always reach for one of New Zealand's clover or clover blend honeys... and it'll never let you down!

Recommending honey varieties for specific applications should never become so serious that we end up with a type of honey snobbery ... it's just a game; and good fun to experiment with different flavours. Hope you enjoy this month's recipes"

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Copy/advertising deadline

1st of month

COMING EVENTS...

1996-1997 CALENDAR

September 7th	12.30pm	Hive Spring Clean, nuc establishing, swarm control
October 12th	12.30pm	Swarm Control, prepare for expansion
November 9th	10.00am 12.30pm	Working Bee Hive expansion
December 7th	12 noon	Christmas BBQ Check honey flow

Visitors and intending members: The club apiary is at Unitec. From Pt Chevalier take entrance number 2 and turn left into the horticultural area. The apiary will show up clearly.

Contact: (09) 342-9415, Peter Silcock. AUCKLAND BEEKEEPERS CLUB INC.

$\star \star \star \text{CLUBS}_{\dots}$ put your meeting date in here... FREE $\star \star \star$

AUCKLAND BRANCH

Remit Discussion meeting August 2nd at 6.30pm. Venue: Rob and Janey Johnston's property Runciman Road, Ramarama. Signposted, North side 1½ kms from Great South Road. Secretary — Jim, phone: (09) 238-7464

> CANTERBURY BRANCH Phone: Brian (03) 318-0732

CHRISTCHURCH HOBBYIST CLUB

These are held on the 1st Saturday each month, August to May, except for January on which the 2nd Saturday is applicable. The site is at 681 Cashmere Road, commencing at 1.30pm.

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

POVERTY BAY BRANCH

Diseaseathon Saturday the 21st of September. Details contact: Barry Foster (06) 867-4591 Support your Branch and learn at the same time, all welcome.

SOUTHERN NORTH ISLAND BRANCH Phone: Frank 478-3367

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

WAIKATO BRANCH

Next meeting Friday 30th August at 10.00am, held at the Green Room, Raukura. Guest speaker Robert Rice. (Queen raising and nosema). 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. Convenor Arnold Esler. Ph: (06) 379-8648

WELLINGTON BEEKEEPERS ASSOCIATION

Meets every second Monday of the month (except January) in Johnsonville. All welcome, contact Frank Lindsay (04) 478-3367.

August 12: A talk by Stephen Ogden (MAF) on beekeeping in Vietnam.

September 9: Dr Penny Fitzharris (Wellington Hospital) reactions to beestings.

Are you interested in working on one of the NBA Committees?

We are looking for new people who would be interested in joining our committees. The names will be presented to the Executive meeting in September for a decision. No guarantee that you will be selected but by putting your name forward you will increase your chance by 100%.

Names to your branch secretary or directly to me.

Numbers on the inside front cover.

Harry Brown

Unique employment opportunity

New Zealand's largest and most progressive beekeeping enterprise requires an experienced beekeeper.

Due to business expansion and the retirement of Richard Baker after working with us for 31 years.

Family house probably available for suitable applicant. Must be honest, hardworking, able to supervise staff and have a wide experience in beekeeping for this senior position.

Good wages and working conditions.

We also require a young strong person with approximately two years commercial beekeeping experience.

We farm 11,000 hives of bees, many two-queen, place hives into kiwifruit orchards, produce cut comb, raise 20-30,000 queens each year and export over 10,000 tube packages of live bees each year.

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