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Notes from the Executive

Fellow beekeepers

The Executive of the National Beekeepers' Association held a meeting on September 2nd and 3rd at which we dealt with the business of the beekeeping industry. Information from this meeting has been advised by the Secretary in a new brief to branch presidents and secretaries for your next branch meeting.

With the introduction of the Commodity Levy Act and the levy on apiaries (rather than beehives as previously) the membership of our Association has increased by several hundred. To the new members of the Association I would like to say welcome to the National Beekeepers' Association.

In our journal, *The New Zealand BeeKeeper* you will read of many areas of concern to our industry. There is also a list of the names, addresses and phone numbers of branch presidents and secretaries. Please feel free to contact these people to find out about branch meetings and field days in your area. Your participation at branch level would be welcomed. It is certain that some new members will have skills, experiences and knowledge that will be very valuable to other members of our Association. The industry will be stronger with full participation of all beekeepers.

If you pay an Apiary Levy or subscription you have the right to have your say in this organisation. This could be by moving a motion to the Annual Conference of Delegates (this normally requires branch support). Your vote can be recorded at a branch meeting and carried to Conference by the branch delegates. You have a vote at the time of election of Executive members. It all sounds very businesslike but these are some of your rights. You also have responsibilities as do all other beekeepers — like inspecting every beehive annually and making a declaration on the health status of your hives. The reality is that you can only expect good results from your hives if you tend to them regularly. Some new members may already be members of hobby beekeeping clubs - these clubs provide a good opportunity to learn more about beekeeping.

The National Beekeepers' Association tries to improve the beekeepers position at national level, for example by lobbying for border protection to keep exotic bee diseases out of New Zealand. We also contract MAF to provide inspection for diseases that we already have in New Zealand. The main area of concern here is American Foulbrood.

The Association also helps fund research in a number of areas usually through the Honey Industry Trust that provides money for approved projects. The Trustees invite applications for funding for suitable projects. As a new member you may have a concept that could improve our industry. An application for funding to the Trustees, if successful could turn a concept into reality and improve the future of all beekeepers.

The National Beekeepers' Association also has a good postal library service for members, with many books, magazines, research and discussion papers relating to beekeeping.

To our "older" members please remember that the new members will normally have between 10-50 hives. When they attend meetings, field days and beekeeper gatherings please cater for the fields of interest that these new members may have, ie beehive management, looking into beehives explaining the points of interest. Some of the new members may have little experience at inspecting, queen rearing, hive manipulation etc. Please keep your eyes open as there must be some very good potential out there for new branch secretaries, presidents, executive members, and I have no doubt there are some very highly qualified people in the ranks that could help speed up our industry and give it an even better buzz. I wish you a good beekeeping season. ***Keith Herron***

Don Bell

Born: Owaka, 21 years ago - give or take a year or two!!

Married: To Gwyn, two married children, Sandra and John and three grandchildren.

Trained in Horticulture at the Christchurch Botanic Gardens and Nursery; however have never practised in the profession to any great extent.

Twenty eight years with the then Lands and Survey Department specifically working in National Parks. Initially at Arthurs Pass National Park then as Chief Ranger at Mt Cook and Urewera National Park, concluding my service as District Ranger in the Nelson and Buller regions.

With the advent of Department of Conservation was Principle Conservation Officer for the Nelson Marlborough Conservancy.

My start with bees dates back to the early 1950s when as a school boy living in Waikato the late Bill Heron introduced me to bees and gave me a book on beekeeping and a hive. The book survived (I still have it) but I'm afraid the hive didn't last very long. Sad to say.

Interest stayed rather inactive until 1970 when the late Peter Regram kindly donated a couple of hives plus plenty of advice on "what not to do with bees."

Repeated restructuring of DOC made it apparent in 1989 that time had come for a change of lifestyle and with it the opportunity to purchase a small beekeeping setup based at Sheffield in mid Canterbury, where despite all, we are still here and just as enthusiastic for the job as ever. We are very much a partnership setup with my wife spending almost as much time in the field actively beekeeping as I do.

If nothing else my 30 years of living and working in small isolated communities have taught me two things; firstly — no man is an island and no matter what pursuit one undertakes there is always the need to function within a "community of interest," and secondly — you receive from the community, irrespective of what it may be, a return which is in direct proportion to what you put into it.

Like all beekeepers I need to know there exists a strong progressive and functional industry backing, such as I believe the NBA should and can provide. Hence my allowing my name to go forward for the Executive.

I am not a crusader neither do I bring to the Executive a sack full of axes to grind, rather it is a case of making a contribution to the Industry through the skill, training and experience that I have acquired.

Front cover...

Dimitria Kyriakaki releasing the bees into a plum orchard for pollinating the flowers — September 1997. (Photo courtesy Hawke's Bay Herald-Tribune).

The New Zealand **BeeKeeper**

THIS ISSUE

Canterbury Field Day

(Wet or fine weather - $5.00 per person, $10.00 per family)

Look for the signs

Date: Sunday, 9 November 1997

Time: 10.00am

Place: Golden Vale Honey, Tom Penrose's place, Loburn Road, North Loburn. 15kms from Rangiora, North Canterbury.

THEME: Shifting Hives

1. On display and operating: Trucks displaying and using the latest hive lifting gear and equipment.
2. 10.30am: Welcome by Geoff Bongard and introduction of speakers.
3. 11.30am: Disease Recognition by Robert Rice, MAF QUAL.
4. 12.30pm: Lunch - Barbecue - honeydew marinated veal steaks supplied by S. Ecroyd. Bring own salads etc. Tea, coffee, refreshments provided.
5. 1pm: Competition - Beekeepers proving different methods of shifting hives **(no sticky boxes please)**.
6. 2pm: Auction - (Compulsory: Canterbury members to bring items for auction - a percentage commission to go the Canterbury Branch).
7. 3pm: Raffle drawn - (Compulsory: Members to bring items for raffles. Does not have to be bee related. $5.00 fine for noncompliance).
8. Please bring a plate for morning and afternoon teas.
9. Queen cells available for hobbyists to buy (not for commercial beekeepers).
10. Games, lolly scramble and soft drink for children young and old.

NB: If you would like to show your truck's hive lifting capabilities at the field day please let the secretary know in advance.

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National Beekeepers' Association of New Zealand Inc
Canterbury Branch
October Evening Meeting
Date: Tuesday, 28 October 1997. Time: 7.30 sharp.
Venue: Burnside Cricket Club, Avonhead Road, Christchurch.

Library News

HONEY BEE DISEASES AND PESTS, Canadian Association of Professional Apiculturists, 2nd Edition, 1996, 25pp.

Covering diseases and pests as they affect Canadian beekeeping, the ones we have here and those we try to keep out plus predators at large in Canada. Contributions by a team of experts. Clear print and text, colour photos.

BEEKEEPING, an H.S. Assignment by FR. Walker.

A well done project. Illustrated with diagrams and some humoristic sketches, 1997.

It is really nice to receive a copy of this sort of pupil's endeavour. From time to time the library helps schools or individual students with material for projects on beekeeping. Of course we oblige plus usually a letter with info. Seeing the results is appreciated indeed.

Diary NOW 14th, 15th, 16th

of

August 1998

for a

BUZZ

weekend

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

Venue: Porongahau Valley Camp.

Full cooking and accommodation facilities.

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

Another Southern North Island venture to assist you.

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

Advertising rates to increase

After nearly four years with no change in advertising rates and a doubling of the circulation numbers, the Executive accepted the Publications Committee recommendation to increase the cost of advertising as from the November issue of the magazine — the new rates will be:

Full page to increase from $178.00 to $400.00.

1/2 page to increase from $113.00 to $250.00.

1/4 page from $83.00 to $150.00.

Small adverts currently $20.00 to increase to $40.00.

1 page inserts currently $45.00 per thousand shall increase to $300.00 per thousand inserts.

4 page inserts currently $45.00 per thousand, to increase to $450.00 per thousand inserts.

Committee Members ARC

Tony Taiaroa, Chairman - Ph/Fax: (03) 314-4569

Don Bell - Ph: (03) 318-3869, Fax: (03) 318-3862

Allan Richards - Ph: (06) 327-5039, Fax: (06) 327-5078.

Letters to the Editor

Dear Sir

The Executive has failed to apply an interpretation of the NBA rules provided by the Association's solicitor. The issue involved is not of critical importance, but the indifference to the rules demonstrated by the Executive should concern the NBA membership.

The Executive has failed to appoint a replacement member to fill the casual vacancy on the Executive. It was been done with the best of intentions - to save money - but that doesn't excuse ignoring the advice of the Association's solicitor and acting contrary to the 'intention and spirit' of the rules.

1. I gave notice in June of my intention to resign from the Executive following the July Annual Conference.
2. The Executive Secretary wrote to the Association's solicitor on June 21. He asked for an: *"...opinion as to whether the NBA Executive is required to fill the vacancy caused by Nick Wallingford's resignation; and if not, whether it can continue with only five members until the next election of the Executive members in May 1998."*?

   The Executive Secretary did not inform me that this opinion was being sought (though I was President at the time...) nor who had asked for the clarification?
3. The Association's solicitor replied on June 30:

   "... (I)n our view it is clearly the intention of the Association rules that six members, three from each island, are to be on the Executive to represent the beekeepers of their respective territories... (T)here is an onus on the Executive to appoint a sixth executive member... Our opinion might be more equivocal if it were only a short time until the next Executive election. However, where the election is a considerable time away it is clear that the intention and spirit of the rules is best met by the Executive exercising its powers of appointment... It is our opinion that the Executive does have an obligation to fill the vacancy..."
4. I resigned from the Executive following the Annual Meeting in July.
5. No appointment was made to fill the casual vacancy at the September Executive meeting. Unconfirmed minutes of Executive meetings are no longer made available to our membership, so the reasoning used by the Executive may not be provided until December.

Though the NBA Executive might prefer or choose to continue with only five members, for whatever reasons, the rules do not provide for that preference. Having sought a legal opinion on the matter from the solicitor the Executive should feel obliged by the rules and to the membership to follow the advice provided.

Such a casual approach to our rules and to legal opinion does not reflect well upon the professionalism of our Association.

Yours faithfully

Nick Wallingford

Dear Nick Wallingford

Immediate Past-President of the NBA and member of the Bay of Plenty Branch.

In reply to your letter.

I agree that any indifference to the NBA Rules being perpetrated by anyone or any group within the NBA, should be taken seriously and we, the Executive, will give any such indifference brought to our notice, consideration at the next Executive meeting.

I believe the Executive has not shown any such indifference to the Rules of our Association by not appointing a sixth member to the Executive after your resignation.

I quote part Rule 16 f: "in the event of a casual vacancy in the membership of the Executive the remaining members may appoint a person...." The word 'may' being the significant word.

Russell Berry, President

Dear Sir

My feelings on the subject of the imposition of hive levies is very similar to that of another correspondent, Neil Fraser. Unless as a *'hobbyist'* my number of hives and hive sites drops below some arbitrarily decided number the levy exceeds the value of the honey I could expect to produce from those extra hives in this nectar-low area.

There may be people who look forward to the receipt of your magazine and who find its contents both interesting and informative. If so then I suggest it is those people who should pay for its production and mailing. In this household its arrival is perceived as an addition to our accumulating pile of unsolicated glossy garbage. I believe the world needs trees more than it needs magazines. **Please** don't bother sending me any more.

Volume 4, Number 7 mentions diesel fuel being used to kill off grass around hives! This is merely another example of where the desire for commercial-gain outweighs concern for the environment.

Have we *'hobbyists'* **really** any need for guidance by 'serious' beekeepers and their paper mouthpiece?

Yours sincerely

Neville Sinclair

Dear Sir

The Low Table

Many years ago I was a production planning engineer in Kolster Brandes, the television factory for Standard Telephones and Cables. I was running a production line making hearing-aids and my team of women sat at high benches on tall stools. The stools had a conveniently placed bar for them to put their feet on. By about 4 o'clock they were getting tired, production rate fell slowly, they would get off their stools for a bit of a stretch or go to the toilet for a while.

At this time we were planning a new factory at Rochester and one of my mates from the production planning office had the job of laying out the production lines. He came out with the brilliantly simple idea of lowering the seats so that the smaller women could put their feet flat on the ground, thus taking their weight off the back of their thighs. The seats were small arm chairs with polished arms, and the womens' arms in the sleeves of their overalls would slide easily back and forth while they worked. What about the taller women? Well, if you assume that 1/3 of a woman's height is in her legs, 1/3 in her thighs and 1/3 in her body and that the taller woman is 27cm more than a short woman, sitting down she will only be 9cm bigger. Now the women can all sit at a table but this must be lower than the usual table to match the lower sitting position.

The idea of the lower chairs and table made quite a difference, production in the last hour or two in the day improved, the women liked their polished arm chairs and the tables which gave them feeling of working at home. Flowers in the centre of the tables helped as well, providing that we still had room for resistors and capacitors.

Some time ago I went to visit a producer of comb honey. Here the women were hard at work packing, all standing up round a table of normal height although chairs of normal size were provided. I am certain that, in the last hour or two of a busy working day, they will be unnecessarily tired and productivity will slow down.

George Nichols

Honey Industry researching crops and plants

New Zealand's honey industry is investigating the potential implications that an influx of genetically-modified field crops and pasture plants will hold for the honey industry and production of high value bee products such as pollen and propolis.

National Beekeepers' Association president Russell Berry said Government-funded research was being carried out to determine the effects of genetically-modified plants on bees.

But he hoped that when the Government's powerful new Environmental Risk Management Authority (Erma) began operations next year it would set regulations that would protect bees from genetically-modified plants.

Overseas, millions of dollars have been spent over the past decade by companies mixing plant's natural genes with others to boost yields or increase resistance to insects and disease.

Some of these added genes are known to be toxic to humans as well as insects; others can cause violent allergic reactions.

Few such plants have so far been grown outdoors in New Zealand, but industry observers have said there is likely to be increasing economic pressure for the use of transgenic plants in the next few years.

Environment Minister Simon Upton recently said the use of genetic engineering technologies will be essential in the long term to keep New Zealand agriculture internationally competitive.

Many traditional agricultural chemicals, such as pesticides, might have to be abandoned to achieve the necessary quality levels, he told a conference of agricultural chemical manufacturers.

"Genetic manipulation both for producing a new generation of protection products, or for the modification of crops, or the organisms associated with them, to resist disease will be one of the ways ahead."

New Zealand's science academy, the Royal Society, will hold a scientific forum in Wellington to discuss genetic engineering issues, including genetically-modified foods.

Mr Berry said, in a personal view, that he would not want to see New Zealand produce any pollen from transgenic plants which was potentially damaging to humans.

So far there had been no problems. One transgenic trial crop, of maize, had been planted in an isolated site well away from other crops. Another, of oilseed rape, had been covered with netting to exclude insects, and in other cases, plants had had their flowers cut off.

Asked if there was scope for beekeepers to insist genetically-engineered crops were not grown in areas where hives were deployed, or to insist on compensation for moving their hives if such crops were grown. Mr Berry agreed they should be taking a stand.

"We don't want these crops to be grown where bees can get at them if there is any risk from the pollen they produce," he said.

Honey Exporters' Organisation chairman Peter Bray said such problems already happened rarely, but naturally, with unmodified plants, as different pollens could affect a few people with specific allergies.

There was a background discussion of the implications in overseas markets, but some of the debate involved scientists trying to "mine" research funds.

"Speaking personally, it's not an issue that's been raised in markets to date — but there's been a lot of speculation by scientists."

Britain's Sunday Telegraph newspaper has reported botanists at Leicester University have found bees can pick up mutant pollen from "transgenic" crops — crops altered to carry foreign genes — with potentially-serious effects on human health.

The study, funded by Britain's Ministry of Agriculture, showed genetically-altered pollen "could pose problems to man, who consumes honey as a food," says the study.

The papers' authors, Colin Eady, David Twell and Keith Lindsey warned: "As ever-increasing numbers of genetically-engineered crop plants are being approved for release experiments, it is vital that the potential problems associated with the expression of transgenic products in pollen are addressed."

In their paper, the scientists warned that the transgenic pollen proteins could remain active in honey for several weeks. Though their concentration was "expected to be very low", even "vanishingly small quantities" of the proteins could cause illness in allergic individuals.

Professor Lindsey, now professor of plant molecular geology at Durham University, said: "It is essential that genetically-modified plants are scrutinised very carefully before any release to take into account any potentially adverse effects on the environment.

"If the industry wants to use transgenic plants, they have to generate the confidence of the consumer."

But he said that there was no evidence that anyone had been harmed; "what we were trying to do was represent the worst-case scenario."

"In insect-resistant crops, the proteins that have been produced are nontoxic to humans", he said. They were highly specific to insects. "The scenario we constructed is an extremely unlikely scenario, though there is still an element of risk."

And a New Zealand researcher Louise Malone, said today that she was trying to determine what effect genetic modifications to plants make them more insect resistant had on bees.

The research would help regulators such as Erma to assess the risks involved, said Dr Louise Malone, of Auckland, who works for Hortresearch.

The risk management authority would usually be seeking information from people applying to release genetically-modified plants.

"If we know what the effects of different dose levels of different gene products are on bees, then each applicant can tell Erma; my gene product will be expressed at such-and-such a level in the pollen."

It was quite likely that many genetic modifications would have no effect at all on the pollen of plants, because they were specifically targeted to pests.

"You can put your gene on a promoter that will make it express that product in the leaves, say, but not in the pollen," Dr Malone said.

A lot of companies producing plant products, such as the Apple or Pear Marketing Board's Enza company were now grappling with public perceptions of genetically-modified foods.

"I think it would be premature for the honey industry to make a decision... without seeing what the acceptance is going to be like," she said.

Acknowledgement NZPA

Notes for beginners and others

by John Heineman

From September till the start of the honey flow is the time that beekeepers in this country of ours are really busy, or should be, for those colonies which are in good shape are building up to full strength. The beekeeper who takes management seriously is, so to speak, "walking a tight rope" for he or she is trying to achieve that all important balance with on the one side the need of a strong hive with bees of the right age ready to take full advantage of the honey flow and on the other side the necessity for swarm prevention. Not so easy at times.

Research and well conducted field trials have proved that the larger colonies are the most efficient honey producers. Two colonies of 30,000 bees of the right age will together produce less than one colony of 60,000 bees of the right age.

Also the bees from the stronger colony will produce more brood per bee than is the case in larger colonies. This can often be observed when comparing the wintered over nuc (top) with its parent colony. The brood next of the top seems to expand at a faster rate than the one below, it is catching up.

So here is the difference: The smaller colonies aim for growth of population while the strong ones focus on gathering food.

Not many feral colonies or unmanaged ones will become as strong as the well managed colony. The lack of space to build new comb and the natural tendency to swarm will put a stop to reaching the very big field force we can achieve with good management. Of course there are always exceptions.

What we aim to do through management and manipulation of hives is to attain a large bee population of the right age at the right time to be able to gather what is really an unnatural large crop of honey. Unnatural for the bees, they are aiming to have enough for survival, the beekeeper's need for a surplus is of no importance. But through the right kind of interference that surplus might just happen, if it does let's say "thanks a lot."

To reach that goal of strong hives with bees of the right age (field bees) one has to keep in mind one condition of the utmost importance, namely TIMING. Not too early and not too late. The bees must build up to full strength for the honey flow but not on the flow. If the last happens you will finish up with a strong hive alright but without it having gathered that surplus. You will have missed the bus, sorry.

We cannot tell you when to expect the start of the main honey flow in your area. It will be sometime in November in some parts or Christmas elsewhere. Differences in attitude, altitude, climate, environment and flora are making for a great variation of that starting date. Knowledge of what applies to a beekeeper's particular area is of course essential.

We are now well into October, some will have a crop on their hives in a month's time while we here in the deep south still have two months up our sleeves.

There it is. Do all the necessary things when and if required to build up the hives and at the same time keep them together.

Young queens, reversing the brood nest supers, using foundation, good quality combs, providing more supers, swapping places between weaker and stronger colonies all come under the heading of swarm prevention. So does the making of a nuc or split which is to be united again when the flow starts.

If you still have weak colonies when the time is ripe for the good hives to start bringing in the nectar in quantity be ruthless, unite and have one strong colony. You don't want passengers.

The last thing you want from now on is a break in the brood cycle. If there is still some re-queening to be done unite a nuc with a laying queen, that's far and away the best. Direct introduction of a caged mated queen after having killed the old girl still means a setback of about a week. Really too late for re-queening with cells but they can go into nucs for mating and be used later on.

And please don't forget to keep a very thorough check on the food position. Strong colonies consume stores at a fast rate. Stores should not drop below the equivalent of about three f.d. combs. To think "she'll be right" is false economy. All too many colonies slump every year through starvation shortly before the start of the honey flow. Watch it, be in good time.

Before we can expect that surplus a hive has got to gather its own requirements. This varies a good bit as it depends on several factors. One of these is the strain of bee. In this country it is predominantly the Italian (Ligustica) or more accurately the New Zealand Italian for over the years there have been other strains and crossing has taken place. There are still noticeable variations but for good reasons no imports of "new blood" has been permitted for a long time. So it is a closed shop and that must tell.

The Italians have many good characteristics and a few less desirable ones. One drawback is the often high consumption of stores when comparing with other strains of bees. Some 80 to 100kg to sustain a colony throughout a 12 month period is probably about correct on an average. Besides that 25kg pollen has been quoted. Once all that has been brought home we can start to hope for our share, that is if we have done the right things at the right time.

"BE PREPARED," the scouts motto — but it goes just as much for beekeepers and then let us hope that Jim, there in the weather lab comes up with the right message.

To new
budding beekeepers
we have been told about

*****

Welcome to the new
Benesmann daughter

*****

Welcome to
Jake Leroy Matthewman

Beekeeping Memoirs

Honey Mead

by Ron Mossop

When I was deciding to write a story about honey mead I thought I should get some bottles of mead to see what was being sold these days. I looked up the yellow pages in the telephone directory, consulted liquor outlets and scribbled down a few numbers. Unfortunately my eyesight being not what it was I had inadvertently strayed into the nearby lingerie column. I didn't get any honey mead from any one of these listings, but my inquiry certainly created some disturbance. I probably made their day! After phoning five liquor stores I finally found one that had some honey mead so I drew some money from my fiscal envelope and bought two 375ml or half sized bottles for $20. These were very attractively presented, complete with English, Japanese and Mandarin writing (perhaps instructions)? At all events the contents were first-class. Because of the price, for a day or two I thought of making my own honey mead.

I have never attempted to make honey mead before as I didn't want it about the place with my four sons growing up. They seemed to get into enough strife when they were sober without having access to dozens of bottles of mead. I knew what boys could get up to, because in earlier days when I rode home from school I would hang my bridle up in the old shed at the back of our house where my father kept his barrel of parsnip wine. I soon found that by putting my mouth over the outlet of the wooden tap and turning it on I could get a good big mouthful of wine. This went on for some time until one day, my mother caught me with a mouthful of parsnip wine. I became a teetotaller again.

In those days many farmers brewed their own wine. Up the road from us one farmer specialises in plum wine, he also dried his own tobacco leaf, mixed it with honey and something else, cured the pressed bit for a year by simply going to a log and drilling about 10 holes in it. The holes were about one foot deep and one foot apart. He would put the tobacco and honey mix into the holes then hammer old wheel spokes into the holes to compress the tobacco down. Next year when he wanted his tobacco, he split the log open with wedges and easily retrieved his tobacco. He would then carve bits off with his pocket knife, load and light his pipe. The smell was revolting.

At the end of the road another farmer made apple cider complete with codlin moth grubs. He said it gave his cider a special taste and was good for washing his "hopper" cheese down with. In case some readers don't know what "hopper" cheese was, I should explain that it was a very special Taranaki cheese, if you put

Ron Mossop

a block of it on the table things that seemed to be curled up on the surface of the cheese, would suddenly straighten up and hop onto the table, some would even make it to the floor. They always fascinated me but my mother was never impressed.

Down the road just outside the village lived a beekeeper who made honey mead. I visited all these men with my father. One day dad came home with the news that during the night the police had taken the beekeeper away. Apparently he had been up on top of his house roof, hiding behind the chimney firing his shotgun at the moon and shouting abusive language at the Germans. My mother said that the poor man must have had a terrible time in the trenches.

From a very young age I had the idea that one had to be mad to be a beekeeper. That is not true, of course. Although a very old beekeeper once told me that he remembered when all beekeepers were considered to be a bit odd, and it was not until they started to make some real money that people thought that perhaps they were normal after all.

When I took on beekeeping I was soon introduced to honey mead. Some of it was drinkable whilst a lot of it was not because wild yeasts had obviously run amok and turned it into good vinegar. One man bought half a ton of Rewarewa honey from me for making honey mead. He had things down to a fine art with his steam sterilisation of the forty gallon casts, hydrometer and other testing equipment. The shed in which he made his mead had lots of easy-chairs scattered about. He explained that he had many mates who helped him drink his mead. I tasted some of his product and found it to be very drinkable. I didn't hear of him again for years, until one day I met somebody who knew him. He told me that he has lost his responsible highly paid job and was last heard of at the Kingseat Hospital drying out. He must have got too fond of his own product.

When the Bay of Plenty Branch of the Beekeeper's Association had their meetings we took turns holding it at someone's home. One afternoon after tea, sponge cake and other goodies one beekeeper produced two bottles of honey mead, it was good stuff so we emptied the two bottles. The meeting got very jovial and soon became a proper shambles. If you should wonder who the Chairman was that allowed this state of affairs to develop, I'm afraid I must plead guilty. Over the last 40 years reading the remits as they are forwarded to the conference for consideration I sometimes wonder how many or, if any, of these remits received their inspiration from a bottle or two of honey mead.

Mr Cotterell was a beekeeper who lived at Te Aroha from 1901 to about 1945. An extract from the Te Aroha News dated September 14 1905 stated that Mr. I. Hopkins returned today from a visit to Mr Cotterell's apiary. Mr Hopkins reported that he found the apiary particularly up-to-date and the honey produced - of the finest quality. I knew a man whose father owned the land adjacent to Mr Cotterell's, he told me that on at least two occasions he had seen and heard Mr Cotterell running around his house firing his service revolver at his wife. When I first heard the story I thought that either he must have been a very poor shot or that his wife must have moved around the house corners very fast. Nevertheless they both lived until they were over 90 years of age. Having gone through some of his old books some interesting things came to light. He was a remittance man from England and some of his school books were written in Latin and Greek. There was also a new copy of Isaac Hopkin's book and a number of old beekeeping journals from 1897 to 1901 including a number of recipes for making honey mead underlined in pencil. I think that he must have produced a few gallons of this honey mead and when he was seen running around his house firing his revolver at his wife he was actually running behind her making whoopee and merely firing in the air. No farmer in his right mind would have hung about long enough to note the difference. I hope some of my fellow beekeepers don't think that they can live to be a ripe old age by chasing their wives around the house firing a revolver in the air even if it is the result of imbibing your own locally produced honey mead. I don't recommend it. There is probably a law against it anyway!

Ruakura Apicultural Research Unit Annual Report, July 1996 - July 1997

R.M. Goodwin, H.M. Haine, R.G. Wise

SUMMARY

Research

The research programme has concentrated on four major projects;

- Kiwifruit pollination units (KMB and Kiwifruit Pollination Association)
- Sterilising beekeeping equipment and honey testing (NBA)
- Feeding sugar syrup to improve pollen collection (FRST)
- Epidemiology of American foulbrood disease (FRST)

We have also conducted several other research projects that are reported elsewhere;

- Using bees to spread biological control agents for fireblight (FRST)
- Several commercial projects

Testing Services

We have provided testing services for export certification for the Australian and Korean export markets. This has involved testing samples for chalkbrood *(Ascophaera apis)*, Nosema *(Nosema apis)*, and American foulbrood *(Bacillus larvae)*. We also provided testing services for the National Beekeepers' Association's American Foulbrood Disease Control Programme.

Kiwifruit Pollination Units

The aim of this investigation was to determine the most appropriate colony for kiwifruit pollination, both with and without sugar syrup feeding.

The strength (number of bees, eggs, larvae, sealed brood, stored pollen and nosema levels) of 160 hives in eight orchards was measured. The strengths of 100 of these hives were also assessed visually. Half the colonies in each orchard were fed sugar syrup. The amount of kiwifruit and other pollens collected was assessed using pollen traps.

There were site to site differences in the relationship between colony strength and the amount of kiwifruit pollen and other pollens collected. The study highlighted the differences in performance of colonies fed syrup and those not fed. Colonies with 7000cm^2 of brood only collected as much kiwifruit pollen as colonies with 1500cm^2 of brood and were fed sugar syrup. This suggests that there should be different standards for colonies fed sugar syrup.

All the factors measured (except for nosema) were significantly correlated to the amount of kiwifruit and other pollen collected. Both bees and brood area were equally as good estimators for the amount of pollen collected. Generally, adding the amount of brood and number of bees together did not significantly increase the percentage of variation explained.

For normally developing colonies, it is probably sufficient to measure either the number of frames of bees, or brood.

Both the visual assessments of the total brood area and the number of bees were related to the total amount of pollen collected. The accuracy of the visual assessments of the brood area varied with the number of frames of brood. The number of frames were overestimated at low brood areas and underestimated at high brood areas. The assessed at measured brood areas agreed with each other at about eight frames. It was not possible to make the same comparison for the number of bees, as the bees weights and the number of bees on a frame vary considerably. The pattern of the curve was however similar to the brood results. The measured and assessed bee numbers were more closely related than the measures of brood area.

The assessed results explained a higher percentage of the variation in the amount of kiwifruit and other pollen collected than the measured results. The difference is possibly due to the relative timing of the measurements and assessments.

In conclusion, the stronger a colony is, i.e. the more bees and brood it contains, the more kiwifruit pollen it will collect. However a colony will not collect as much kiwifruit pollen as two colonies that are half the strength. This suggests that it might be appropriate to consider stocking rates of colonies placed into orchard, as the total number of frames of bees and brood placed in an orchard rather than as the number of colonies that are above a particular strength.

Also, that the bees and brood should be divided amongst as many colonies as possible.

The position of the brood within the hive does not appear to have a major effect on the amount of kiwifruit pollen collected.

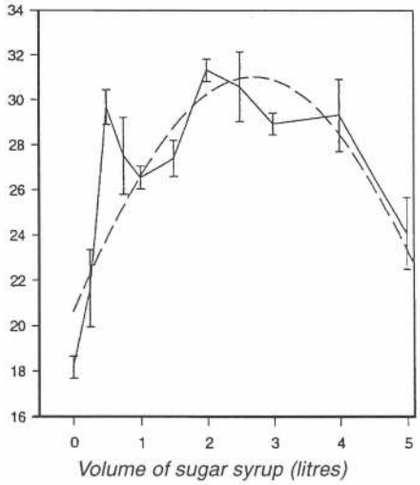
Feeding sugar syrup to honey-bee colonies to improve pollination

The aim of this investigation was to determine whether increasing the amount of syrup fed over one litre/day would further increase pollen collection Also, to test the hypothesis that the increase in pollen collection following sugar syrup feeding is due to increasing nectar transfer times. This will be done by determining the effect of syrup feeding on the behaviour of nectar foragers and nectar transfer times, and the effect of feeding when colonies are not foraging.

Feeding syrup inside a hive resulted in an increase in trip times. This supports the hypothesis that the increase in pollen collection results from increased nectar transfer times. Trip times returned to pre-feeding levels as soon as feeding was discontinued indicating the mechanism should only be in action while syrup is being consumed. Feeding syrup was shown to increase the number of nectar foragers that converted to pollen gathers, again supporting the hypothesis.

However, an increase in pollen collection occurred when colonies were fed in the evening after foraging had finished, contrary to that predicted by the hypothesis. This suggests that there may be another mechanism operating.

Trials were conducted to determine the effect, on pollen collection, of feeding a range of amounts of sugar syrup (0-5 litres on a daily basis) to honey-bee colonies. Feeding increased volumes increased the amount of pollen collected up to a maximum of 3 litres per day. Amounts over three litres caused a decline in pollen collection. Colonies that were fed 50 litres of syrup over 10 days and were not given an extra super to store the syrup collected more pollen than colonies fed the same amount but were given another super indicating the decline in pollen collection for colonies fed more than three litres of syrup is not due to the colonies running out of space to store the syrup.



Average daily weights of pollen collected when different volumes of syrup were fed (solid line). The vertical lines are standard errors. The dotted line is the fitted quadratic trend (y = 4.54+0.76 x volume - 0.14 x volume^2).

Infectivity of *Bacillus Larvae* spores

The aim of this project is to determine the effect of worker bee behaviour and physiology on the epidemiology of American foulbrood disease. This investigation is needed to underpin National Beekeepers' Association-funded work which is aimed at assessing the importance of colony management options on the spread of AFB.

The efficiency with which the proventriculus removes *B. Larvae* spores was investigated in both cage trials and with free flying colonies. In all experiments the bees removed spores from the solutions offered before storing it. Of the factors tested in the cage trials, ie medium carrying the spores, spore concentration, sugar syrup concentration, amount of syrup, number of bees, and presence of pollen only sugar syrup concentration and the presence of pollen affected the percentage of spores removed by the proventriclus. The trials on the amount of syrup need to be repeated in a manner that will result in the treatments consuming different amounts of spores. The results from the sugar syrup concentration trials are difficult to interpret. Although variations in proventriculus efficiency could be found in cage trials, no effects could be found working with whole colonies.

Sterilising beekeeping equipment infected with *B. Larvae* spores

The aim of this study was to determine the value of different methods of sterilising equipment infected with *B. larvae* spores. Trials have been completed to determine the effectiveness of dipping infected equipment in hot paraffin wax. Of the temperatures and times tested, only immersion in paraffin wax at 160°C for 10 min. deactivated all *B. larvae* spores.

Survival of *Bacillus larvae* spores at a range of temperature and time combinations.

Temperature (oC)	80	100	130	150	160
Time (min)		Colonies per plate			
0	100	100	100	100	100
1	100	100	100	100	100
2	100	100	100	100	32.0
4	100	100	100	100	4.6
6	100	100	100	21.6	0.1
8	100	100	100	4.6	0.1
10	100	100	100	0.6	0

Honey testing

The purpose of this project was to investigate possible methods of standardising honey tests. The first set of trials have been completed and indicate that $CaCl^2$/Fructose solutions do not improve *B. larvae* spore germination when mixed in honey. This is probably due to the acidity of the honey.

Field excursion to the National Beekeepers' Association Conference at Nelson

We left Telford Rural Polytechnic for the National Beekeepers' Association Conference on 18 July 1997. We called into businesses along the way, the first being NZ Beeswax Supplies Ltd. I found this a very interesting hour, learning about what happened to the wax bought from various beekeepers. Although the wax appeared clean on arrival, there were still a lot of impurities to be removed during the purifying process. I was also impressed with how beeswax foundation was made and the variety of colours that are available.

The next stop was Airborne Honey at Leeston. Here we were shown through the plant and shown the laboratory where pollen analysis, colour and moisture content of honey are undertaken. I was fascinated to see pollen under the microscope. We were also shown where the honey was extracted and packed and the different types of containers and labels used for the different honeys.

We visited Ecroyd Beekeeping Supplies Ltd on the morning of Saturday 19 July. Here we were shown through the warehouse where beekeeping supplies are purchased. I was amazed at the variety of products available to beekeepers. I had a great time buying a bee suit, smoker, hive tools and books that I needed.

On the return journey we visited New Zealand Honey Producers Co-operative at Pleasant Point, near Timaru. Here we were shown the process of packaging the honey from the drum to the honey pot. I was very interested in the old trolley that had been used in the past for shifting full drums of honey, as I have difficulty in moving the full drums of honey at Telford.

I found the NBA Conference at Nelson well worth going to, and would like to see future students given the opportunity to attend. While we were there I went to a number of the seminars and found them extremely informative. I found several presentations particularly interesting including the talk given by Dr Jim Edwards on *Importation and health standards*. Subjects such as risk identification, risk assessment, risk management and risk communication were discussed along with potential cases, potential harm and how likely these risks are. I found this very informative and felt I had a wider view of the importation controls and standards that need to be maintained.

The presentation by MAF Apiculture Advisory Officers on bee pests and diseases was very interesting. Discussion centred around how to prevent the spread to New Zealand of European foulbrood (European brood disease) and other diseases such as *Tropilaclaps clareae* (Asian mite) and *Varroa jacobsoni* (Varroa mite) which would be devastating to the New Zealand Beekeeping Industry and beekeepers in general. I am interested in bee diseases and would like one day to undertake a study on how to control these diseases by methods other than the use of chemicals. I feel this would benefit not only the bees but the beekeepers as well.

I also enjoyed catching up with some of the people in the bee industry that I had met at last year's conference in Wanganui. I had a really good time getting to know more beekeepers and hearing about their own businesses and the new ideas that people have. Beekeeping is, after all, a continual learning process.

I would like to take this opportunity to thank everyone at the conference for making me feel so welcome. I would also like to thank the Honey Industry Trust for giving us the financial assistance to attend the conference and to Mr Ivan Dickinson for pointing us in the right direction. To Telford Rural Polytechnic for allowing myself and Tim Samani, as apiculture students, to attend and to our tutor Dr David Woodward who drove us there and back and made sure we had everything we needed. (And fed us so well)!

Sincerely

Karen Bassett,
Telford Apiculture Student 1997

New eucalyptus moth predator found near port

Mt Maunganui — A new moth pest which strips the leaves from eucalyptus trees has been discovered in New Zealand for the first time, on the Mt Maunganui Golf Course.

The Australian Uraba lugens, commonly known as the gumleaf skeletoniser, is considered a potentially serious defoliator of a wide variety of eucalyptus. It has attacked a dozen of the about 120 eucalyptus trees on the course.

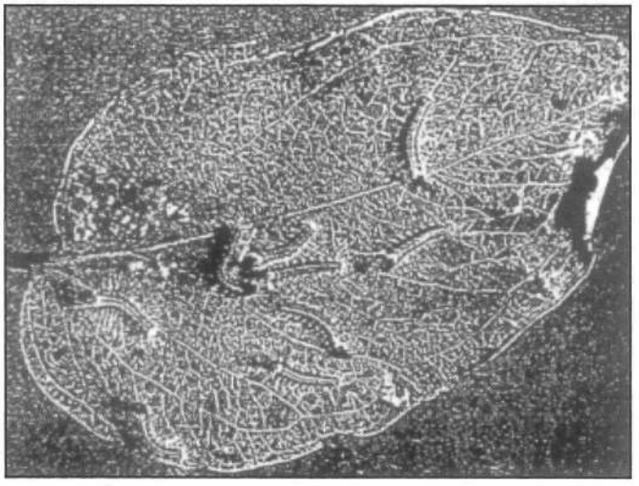
Ministry of Forestry health officers and a Tauranga District Council arborist, Paul Adamson, are checking gum trees within a 5km radius.

"If we can confirm the infestation is limited to a small area, the ministry will probably want to remove the affected trees," the national forest health manager, Ross Morgan, said.

Samples containing hundreds of larvae had been taken from the trees, which were two to three years old and thought to be three different eucalypt species.

Mr Morgan said various life stages of the gumleaf pest had been quarantined, including pupa, eggs (some in the process of hatching), young caterpillars about 2mm long, and skin moults up to 15mm in length.

It was too early to say how the moth entered the country, but it was found within 4km of the Port of Tauranga. Mr Morgan said the discovery came during a routine surveillance programme around New Zealand ports. As soon as the Forest Research Institute in Rotorua confirmed the probable identity of the new arrival the ministry started surveying eucalypts around the area. Staff would double-check vulnerable trees at Mt Maunganui, Papamoa, Tauranga and Matakana Island.



The caterpillars have poisonous hairs and spines on their bodies which can cause a stinging sensation and an itchy rash. They feed on the fleshy leaf tissue of eucalypt, leaving a lace-like leaf skeleton, and can ultimately kill young trees.

The moth is the latest threat to eucalyptus trees to enter the country. Recently the Ministry of Forestry admitted that it could not control the spread of the brown lace lerp which sucks the life out of the leaves of some eucalyptus trees.

Acknowledgement NZ Herald

Random Thoughts — Beekeeping

Thought is about Love — or the lack of it

Ham Maxwell

Mention the word "Love" and some people get all romantic, others adopt a dreamy smile on their visage. A few will scowl when recalling past experience too painful to want recall. But is love confined to relationships between only members of the one species?

Beekeeping is said to require only two things of the individual, the first is an abnormal outlook, the second is to be considered slightly loopy by one's fellow human beings. By meeting both of these requirements the individual being considered is supposedly rated as likely to be a successful beekeeper. But is such a supposition correct?

In a few short years that I have followed beekeeping practices I am regarded by my peers as "not normal." True, I will discourse on the topic of bees at the drop of a hat — if only to break up that awful silence which engulfs those who meet for the first time and are not sure of the interests of the other party. Moreover I apparently expect everyone else to find bees are the fascinating creatures nature has endowed with wondrous attributes. Hopefully my efforts at conversation have not reached the stage of my being boring to the captive listener. To date no one has suddenly remembered a phone call to outer Mongolia which simply must be made right now and terminated the conversation. Rather the opposite usually occurs, and the questions flow thick and fast.

"How do you cope with all those stings?"
"What do you do with all that honey?"
"Why do you keep bees?"

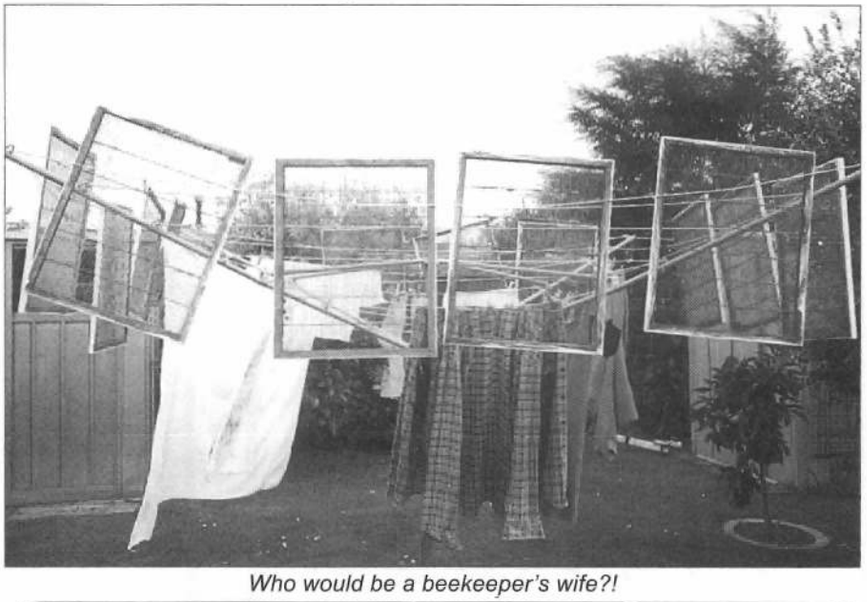
This last question may be asked of anyone who has a pet whatever. All sorts of answers can be given, yet rarely will the answer be "because I love the critters," as to use such terminology is all too often regarded as a sign of weakness. Why is it that the MACHO image must be preserved at all costs in preserving the impression we wish to impress on others. Get talking to a beekeeper of long standing and gradually you will find, as his guard comes down, an ability to express his admiration for the bees he has dealt with for so long, an appreciation of the lifestyles they adopt which is so totally different from our own.

Could you see yourself participating in a communal society, almost totally metrical, operating on a virtually preset mode and timetable from the moment of your birth? Death is always only a moment away as you go about your routine, either from predators or your kin if you fail to exhibit the correct signals to establish your credentials. Constant activity is the name of the game, work the ethic and any signs of individuality rigidly suppressed. Everything undertaken is not for the good of the individual, rather it being for the good of the colony as a whole.

In observing this well ordered way of life we, as beekeepers are privileged, as there are those amongst us who endeavour to have us lead the same type of existence. We, however have been able to compare ourselves against the bee, and eventually it dawns in our minds that such a lifestyle as the bee enjoys is perhaps not the ideal we envisage. Translate this into the human existence and we may find our lives oppressive and dominated by thought processes outside of our own minds. Tolerable it may be to the bee, but how tolerant would you be of such a lifestyle?

Beekeepers then have, by virtue of long observation, a distinct advantage. By daily contact with what in nature's terms is a perfect lifestyle, we are able by reasoning to appreciate the flexibility and freedom we, as humans enjoy. How long would your hive survive if individuality ruled the day? How much honey would be stored away in the combs?

When comparing the lifestyle of the bee with that of our own we can perhaps ultimately appreciate the window of life we look through, and only marvel at the rhythm of life which could be ours but for a quirk of nature generations ago in our makeup.



Who would be a beekeeper's wife?!

Changing times

Have you ever heard the stories about the way beekeepers used to be? No feeding, big crops, only work the spring and summer. I'm sure you have. Ever stop to think that some old timer was telling a good story?

In recent times I've heard a lot of commercial beekeepers speak of poor honey crops, feeding bees with tonnes of feed and still a disappointing result.

I have reflected on some changes in the district where I live. There are several very important changes. There was a lot of manuka on the hills around here — the bees worked it well, but about 1950 the manuka blight was introduced to this area and now no healthy manuka remain, just the occasional plants struggling to survive. They grow to about a metre before succumbing to the manuka blight. Occasionally I can find a sprig with a few individual flowers. No longer the acres of healthy manuka stands with the rich aromatic smell from the leaf and the impressive colour and aroma from the blooms.

When the manuka blight spread through the stands of manuka the main stems and side branches went black and lost their leaves. After the plants died the stems went white, the bark peeled off. The blight could not live on a dead host plant. These white vertical main stems stood guard on the hillsides for years and as time passed I guess the root system lost its grip on the ground. A snow storm, a wind, the weight of the snow and wind and the next time they were visible they were all lying on the ground, all lying in the same direction. A real sad view. The main stem lay there for years. It was a good timber so it wasn't going to rot in a hurry.

I guess if manuka was a weed the blight would have been referred to as "biological control". Manuka was no weed — it provided for the birds and the bees and sheltered other native plant species, but no longer. Now we have wind swept areas.

Another plant well known in the tussock areas was bronze heath or snow berry. This plant grew well in dry tussock ground. It has a small bell shaped flower, flowered in November and later a small pink berry. I am told it was sweet and edible. The flower yielded nectar. It showed up in the dark brood frames as green, like some motor oils. A good strong flavour and I have seen bees draw foundation on this honey flow. This plant no longer survives around our hill country. I suspect it did not like super phosphate, lime or heavy stocking rates of sheep or cattle. If I see a plant of this kind now I am likely to stop and think of the hillsides that used to be covered with this plant.

Fuchsia is another plant that has suffered in this district. My father told me it suffered badly at a time when farmers used to burn to help clear the land of tussock and scrub from the gullies so the fuchsia just did not stand a chance. Just occasionally I see a bee or two with fuchsia pollen on their legs. Oh well that is another nectar and pollen source gone.

Well you don't have to be much of a whiz kid to know all these things will have changed the nature of beekeeping in this district. If you knew — why didn't you tell me?

It has taken me a long time to get a full picture of what has happened. The chances are that your district will have changed from the perspective of the plants and weeds that grow now compared to previous times. You may have extra nectar bearing weeds or crops in your area, or you may be trying to keep beehives in a floral desert.

You probably need to think about it — I have recognised big changes in this district.

Keith Herron

BeeFax

Vol. 2, No. 12 October 1997

EL NINO AND HONEY PRODUCTION

Recently we have been hearing a lot about the possible effects of El Nino on our weather pattern over the coming months. So, what is El Nino and what are its likely effects on the New Zealand beekeeping industry?

El Nino, sometimes called the Southern Oscillation, is a weather pattern which is associated with increased water temperature in the eastern Pacific Ocean and a negative pressure index between Tahiti and Darwin. The large scale result of this is that the monsoonal rains which usually fall in Northern Australia, Papua New Guinea, and Indonesia fall in the Pacific, while a greater number of severe storms than normal hit the western states of the USA.

In New Zealand, all we can say is that it is very likely that we will have a strong southwesterly influence throughout the summer. The last severe El Nino episode was in the summer of 1982-83. At that time, the pressure difference between Tahiti and Darwin was higher than it is currently (mid-September), but this could change by the time you read this article.

If that pattern repeats itself, then we are likely to experience a wet, cool and windy summer on the western side of both islands (possibly very wet in the south of the South Island), with dry conditions in the north and east of both islands.

What might this mean for beekeeping? The table below provides a comparison of crops for the two seasons before the El Nino, the El Nino production season (82-83), and then the two seasons after.

It's interesting that there wasn't a very good crop the year after the El Nino, either, although the good news is that the year after that (1984-85) was a record year, and the first time New Zealand ever topped 10,000 tonnes.

Murray Reid, in his report to the 1983 NBA Conference had this to say about the 1982-83 El Nino:

"The surplus honey crop...is the smallest crop since 1976 when 4915 tonnes was produced, and the smallest production per colony ever recorded in NZ. Production was down in both islands, but hardest hit was Southland where only 5kg per hive was produced. The eight year average there is 36kg per hive."

Cliff Van Eaton (then newly appointed as AAO, Gore) confirmed that half of the 28 commercial beekeepers surveyed in Southland had no crop, and 20% of the hives needed extensive autumn feeding.

What can be done to reduce the risks to your business this season?

1) Consult your yard books and other records and study what happened in 1982-83:
- Can you shift part of your operation to safer sites?
- Did some sites produce well?
- Was the flow early or late?
- Be prepared to shift flood-prone sites.

2) If you were not beekeeping in the area in 1983, then consult neighbours who were.

3) Budget conservatively:
- Do you really need that new truck this year?
- Talk to your accountant and plan for a poor crop.

4) Collect all the information that you can find about the developing weather pattern over the coming months and be prepared to adapt your plans quickly as the season unfolds.

Finally, while preparing for the worst, hope for the best, and <u>always</u> be ready for that bumper crop. Here's hoping the weather forecasters are wrong!

- Ted Roberts,AAO, PALMERSTON NORTH

Year	Auckland		Hamilton		Tauranga		Palmerston N.		Nelson		Christchurch		Oamaru		Gore		Total
	Tonnes	kg/hive	Tonnes	kg/hive	Tonnes	kg/hive	Tonnes	kg/hive	Tonnes	kg/hive	Tonnes	kg/hive	Tonnes	kg/hive	Tonnes	kg/hive	
80-81	650	26.2	1043	26.1	470	18.1	1088	31.2	491	33.0	1150	31.9	1100	32.2	940	34.4	6932
81-82	600	21.9	1465	35.9	1130	37.3	1020	27.7	325	18.5	430	11.9	550	15.4	975	33.8	6495
82-83	696	20.6	877	21.5	720	19.4	360	10.8	300	15.0	1050	28.6	900	23.9	150	5.0	5053
83-84	300	8.8	731	19.4	682	15.7	495	13.1	800	38.6	1150	28.5	1100	32.1	560	19.5	5818
84-85	1502	40.7	1697	37.3	1550	32.2	1088	30.0	685	30.1	1650	36.5	1352	29.4	790	27.5	10314

HAMILTON "OR" FOLLOW-UP

A number of beekeepers who took part in the Hamilton Outbreak Response (OR) exercise asked us, "What happens now?", and "What are you going to do with all the field reports?"

Well, in a nutshell, this is what goes on back in an AAO's office once the exercise is over:

- All beekeepers with AFB identified during field inspections, and beekeepers with hives where samples have been taken, are phoned and advised.
- Lab submission forms are filled out for all of the samples, and the samples are then couriered to MAF Qual's Invermay Animal Health Laboratory.
- Results of the microscope diagnosis of the samples come back from Invermay within a week.
- All beekeepers with sampled hives that show positive lab diagnosis for *Bacillus larvae*, as well as the beekeepers with AFB cases found during inspection, are sent a formal notice under the Apiaries and Biosecurity Acts. The notice directs them to destroy the infected hives within 7 days of the date of the notice, and asks them to make a written acknowledgement of the destruction.
- Beekeepers with sampled hives that return a positive lab diagnosis also get a copy of the lab report.
- Plans are made for follow-up inspections under the NBA's AFB Control Programme contract with MAF Qual.

So how did we really do?

Beekeeper inspectors did an excellent job of diagnosing AFB in the field, and of the 43 suspect AFB samples sent to the lab, 37 (86%) were confirmed as positive for *B. larvae*. Six samples (14%) were negative, and for another 2 AFB hives, the team was so sure of their field diagnosis they didn't take a sample.

The lab screened all the suspect samples under the microscope and any that were negative or not-negative (meaning they were not sure) were cultured. Some of the suspects were from dead outs or moth-eaten hives where diagnosis is always difficult. So well-done to our beekeeper inspectors!

One sample was a suspect EFB, but fortunately this turned out to be negative. Several other specimens of adult pupae (bald brood) and hive detritus were not sent to the lab.

So the 49 AFB hives reported last month really should have read "49 samples taken". Of those hives sampled, 39 turned out to have AFB from 25 apiaries belonging to 20 beekeepers. All but 1 team found AFB, so that was good training for the MAF Field Team Leaders as well as the beekeepers.

And who had all the foulbrood? Nine hobbyist beekeepers had 12 hives infected, 2 semi-commercial beekeepers had 1 hive each and 9 commercial beekeepers had 25 AFB colonies. The worrying thing is that nearly all the hobbyist beekeepers had no previous history of AFB and it will take a lot of 'area inspections' to hopefully locate the source of the infection in their hives. Even more alarming was the large number of diseased hives in some of the commercial yards, many with rob-outs. We haven't seen the last of this, I am sure.

While we are on the subject of brick bats, we have been given a serve from a commercial beekeeper who says top boards with entrance holes were not put back the right way and many hives (which were on pallets) were robbed or got into fighting. I apologise for this, but teams were instructed to leave things as they were found and with the industry's help we made sure all teams had experienced beekeepers in them. So, to any other beekeeper who has found things not exactly as you would have liked after the inspections, we say sorry and promise to try to do better next time.

We also got a lot of comments from beekeepers who took part in the exercise. Here are a few choice ones:

"What a place to keep hives!"

"I learnt so much watching the commercial guy work the hives; he was so smooth" (I know who our hobbyist friend was referring to, but my lips are sealed...no sense swelling someone's head!)

"I can't believe how rough the hives were, and these guys are supposed to make a living from bees."

"Without map references or rural numbers I don't know how we would have found most of the apiaries."

"I enjoyed the lunches and the evening meal afterwards; it was good to socialise with fellow beekeepers."

"I had no idea so much organisation was needed for one of these things!"

"I prefer working with a MAF officer in the field rather than on our own like with the diseaseathons."

Comments like the last two give us warm fuzzies, but we in MAF Qual would also like to hand out some bouquets of our own. All participating beekeepers were sent a thank you note from MAF and the Waikato Branch of the NBA. I'd like to add my personal thanks to those who helped in the field and in the headquarters.

A special thanks also goes out to the Branch President, Lewis Olsen, and to Tony and Jane Lorimer, for organising the teams, liaising with us in MAF, and even spending half a day cutting up possum sacks for smoker fuel. Thanks Tony! Possum sacks for smoker fuel? Don't ask!

- Murray Reid, AAO, HAMILTON

WORLD MARKET DOWNTURN

The August issue of *The Australasian Beekeeper* contains some interesting information from the International Honey Exporters' Organisation (IHEO) on a downward movement in the world honey market.

All IHEO member countries except Canada, USA and Argentina report low buyer demand. World honey prices also continue to ease, and there is concern about when the downward trend will bottom out, although according to the article, some traders expect an up-turn in prices in September, in the lead up to winter in Europe. Stocks of Chinese honey are reported to be high in European warehouses.

The report also focuses on several problems in the last year relating to quality standards, and specifically mentions the fact that Mexican honey containing antibiotic residues has been rejected by German buyers.

According to *The Australasian Beekeeper*, "The last thing the market needed is another large exporting nation like Mexico to have difficulty in trading with the world's largest importer, because of the pressure the situation exerts on the seller and the domino effect another soft seller has on the rest of the market."

The report goes on to say that international quality standards for honey will be on the agenda at the IHEO meetings at the Apimondia World Beekeeping Congress in Belgium in September. The article says that major incidents during 1996-97 involving Chinese and Argentine honey on the world market, and pressure from Australia, has brought the matter to a point where all the major players in the world honey trade will be discussing the issue on a face-to-face basis. Unfortunately, however, no further details are given on what these "major incidents" where.

Prices (C&F) quoted in the article for honey imported into Europe range from a low of NZ$1875/t for Vietnamese honey, to a high of NZ$2300/t for some grades of Australian honey. Argentine white honey is selling for NZ$1985-2050/t, while Chinese honey is fetching NZ$1905/t. Elsewhere in the magazine, a report from Queensland says that world honey prices have eased from between NZ$2860-NZ$3015/t down to NZ$2030-2095/t in eight months.

OUR COUNTRY NEEDS YOUR HONEY...

...for scientific research!

According to Dr. Peter Molan, one of most frustrating parts of his research on honey is getting beekeepers to send him samples. Well, here's your chance to make Peter's day!

If you get the opportunity to collect a honey sample, it would be of great help for a thesis project starting soon. Peter wants to investigate how reliable/unreliable pollen analysis is for the identification of the floral source of honeys.

You can assist the continuing development and strengthening of New Zealand honey's image by:

- Collecting a honey sample with a flower origin you are sure of.
- One sample should be a piece of honey in he comb including at least one pollen cell (if possible). We recommend that you use an unbreakable 500g PET jar.
- A second sample should be of extracted honey from the same extraction "batch" as the comb sample. Take a full 500g PET jar sample directly from the extractor spout as the frames from the apiary are extracted, but before the honey goes into the holding tank.
- Label both jars with the flower origin and apiary location in such a way that Dr. Molan can tell that the samples belong together (eg, sample 1/A and 1/B). Post the samples together with your name and address to the address below.
- It would also be helpful if you noted in a letter accompanying the samples the percentage of pollen cells you saw in the combs at extraction time.

The samples should be sent direct to:

The Honey Research Unit
Biological Sciences
Waikato University
Private Bag 3105
Hamilton
Attn: Dr. Peter Molan

The other option you have is to give any samples to your local MAF Qual Apicultural Advisory Officer. They will be happy to send them on to Dr. Molan.

So mark it in your diary, put this article on the fridge, do whatever it takes. Lets get out there and do it for our industry!

- James Driscoll, AAO, PALMERSTON NORTH

SMOKING BEES

No, this is not about a new tobacco substitute, or a new strain of nicotine-addicted bees. It's about what happens to bees when we blow smoke on them. People new to beekeeping often wonder how smoke works to calm a colony so that we can work without (hopefully) being stung. And, of course, there have always been several stock answers.

One is that smoke makes the insects "think" their tree or house is on fire, so the worker bees engorge themselves with honey in case they have to abandon the nest. A full stomach is supposed to make for "contentment", but in reality full workers probably just find it more difficult to bend their abdomens when they try to sting.

There is also another answer that is less anthropomorphic. Worker honey bees produce "alarm pheromone" when they are disturbed. In contrast to other pheromones in the hive like the royal and brood pheromones, the reaction to alarm pheromone is very quick and direct.

Alarm pheromone is volatile and smells like bananas (isopentyl acetate) or blue cheese (2-heptanone). Smoke blown into a colony masks the odour of these alarm chemicals and the bees fail to communicate to each other that the hive is being threatened.

A research team headed by P. Visscher tested this hypothesis by using an electroantennograph, which translates chemical signals from a bee's antenna into electrical signals that are printed on paper. Smoke caused antennae to be 50 percent less sensitive to both of the chemicals in alarm pheromone. This effect was reversible, however, and antennal response returned to normal in 10 to 20 minutes. The investigators also tested floral odour and found the same responses, suggesting that smoke has a more generalized effect and is not specific for alarm pheromones.

While we are on the subject of smoke, tobacco smoke has recently been reported to reduce Varroa populations. Unfortunately, however, this natural material is difficult to control, and the exact dosage that kills mites, but doesn't harm bees, is unknown.

Dr. Frank Eischen, working at the Weslaco Bee Laboratory, has taken this idea to another level. So far he has treated bees with the smoke of over 40 plants. He takes cages with 300 to 400 mite-infested bees, exposes them to smoke for 60 seconds while covered in plastic, and then counts the number of mites that fall off.

Most smokes don't kill the mites, it seems. They are simply knocked off the bees. If not caught by a sticky board trap, the mites, like the bees, "Pick themselves up, dust themselves off and do it all over again." It is not clear, Dr. Eischen says, whether the mites are confused or just irritated.

Two materials that show the most promise are the creosote bush and dried grapefruit leaves. Dr. Eischen emphasizes that this smoke treatment is only experimental at the present time; he does not yet recommend the process. There are too many unknowns and other drawbacks to this technology.

Mites in the brood are not killed, and so the smoke treatment must be repeated several times as bees and mites emerge. It becomes important, therefore, to determine what chronic smoking with tobacco or other plants might do to a colony. Given recent debates about the effects of smoking in humans, the prognosis is not good.

Too much smoke can also contaminate hive products. There is evidence that heavily smoking honey supers when removing them from a colony can give the resultant honey an off flavour. Two former NZ honey graders, Bob Walsh and Colin Rope, often used to record 'smoke taints' on grade sheets for honey presented to the Honey Marketing Authority.

Finally, there remain questions about disrupting the delicate balance of honey bee social structure, which relies on pheromones for internal control. Now that we know that smoke can interfere with the alarm pheromone, albeit only temporarily, what might it do to the more long-term, and perhaps more significant, primer pheromone communication that takes place within a honey bee colony?

In a similar vein, researchers reported at a recent Western Apiculture Society meeting in Tuscon, Arizona, about the use of essential oils for mite control. One brew, placed at the hive entrance, contained cinnamon oil, an emulsifier and sugar syrup. It disrupted the defensive system so much that "horrific robbing" occurred. Mind you, it's not hard to get robbing going if there is no nectar flow and you put sugar syrup at the hive entrance, cinnamon or no cinnamon.

References: Sanford,T (1997) *Apis* 15(8); Mussen, E (1997) *U C Apiaries*,July/August

- Murray Reid, AAO, HAMILTON

HOMEPAGE GETS BETTER AND BETTER

As we suggested about a year ago in *BeeFax*, the lowering cost of Internet access in this country is making E-mail communication a very attractive option for beekeepers, especially those who sell products overseas. It seems like every day another New Zealand beekeeper comes on board.

If you <u>are</u> hooked up to the Internet, a big plus (in addition to E-mail) is the New Zealand Beekeeping Industry Homepage, created and maintained as a hobby (and obsession!) by Nick Wallingford, Tauranga.

In creating this homepage, Nick has done a marvellous job of publicising our industry, both within New Zealand and overseas. He's done such a good job, in fact, that he's now receiving recognition from computer industry commentators for the expert design and content of the page.

Recently Nick has added a couple of really worthwhile new features, including a NZ Beekeepers Bulletin Board (sort of an electronic discussion group), and a Beekeeping Ready Reckoner. This last item has to be seen to be believed. If, for instance, you want to figure out how much sugar and how much water you need to make up 10 litres of 64% sugar syrup, just fill in the appropriate blanks, and the Ready Reckoner does the rest. You'll find lots of beekeeping management calculations here, from the kgs. of nails you need for a given amount of supers, to the amount of paraffin you'll need to dip them. Now if we could just get the Ready Reckoner put on a hand-held calculator!

You'll find Nick's New Zealand Beekeeping Homepage at: http://www.beekeeping.co.nz. Check out the page's ever-expanding list of NZ and overseas beekeepers' E-mail addresses, and make sure to add your own. This list can be a very valuable resource for your business.

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Fresh comb honey tastes fabulous

Dimitria Kyriakaki's first contact with bees was as a child on the island of Crete. Her uncle Matheus was the school teacher in her village of Kefalas and kept six hives in his garden. Every August the relatives would gather to help harvest the honey and Dimitria clearly remembers helping in the kitchen as each frame of honey was brought in. "We used knives heated in hot water to scrape the wax from the frames and my aunty Maria warmed the comb up in a big pot to seperate the wax and honey. It was mostly thyme honey and we would work for three or four hours. My reward for helping was a piece of honey comb — it was just for me and I thought it was fabulous."

Dimitria in 1960, as a maternity nurse in Crete.

When Dimitria left college she trained as a maternity nurse in Khunia, the capital of Crete but after ten years, at the age of 28 she decided to join a group of about 100 young people emigrating to New Zealand in response to an offer from the New Zealand governement. Dimitria had never been out of Greece before and spoke no English when she and her friend Martha arrived in Havelock North (Hawke's Bay) in the summer of 1963.

They were given a job at Woodford House where a Greek speaking teacher took them under her wing. "Mrs Pyle introduced us to Ian and Pat Berry at Arataki Honey and when the school closed down for the holidays, Ian gave us a job. We also worked on Pat's father's orchard and slowly we learnt to speak English. Later when we finished at the school, we worked full-time at Arataki and rented a cottage at the back of the factory." When Dimitria's friend Martha went on to another job in Napier, Dimitria moved in with Pat and Ian's family, living in her own 'bedsit'.

Dimitria's early years at Arataki were a steep learning curve. "I had never driven anything before, not even a bicycle and I had to get my drivers licence to do the work. I couldn't read English so Ian taped all the questions for me and I learnt them off by heart. I remember when I was learning to drive the old Austin truck. The minute I got into Napier all I could do was crunch the gearbox. I nearly gave up then!".

But Dimitria didn't give up. She learnt beekeeping and remembers working long hours working hives and shifting them by hand on the old trucks. She used to take "working holidays" helping Russell Berry at Reporoa and Coromandel, working with a team of beekeepers sorting recently purchased hives and extracting honey straight into 30lb and 60lb tins. There were no honey drums then, everything had to be packed as it was extracted ready for the next day's honey.

One of her worst moments came when she was shifting pollination hives with Ian. "We used to shift all the hives as singles and we loaded hives from the D8 truck on to an Austin A40 to set them out through the orchard. I was sitting on the back and a hive was knocked off by a branch. I jumped off the deck but the hive exploded like fire. Bees covered me and even though I had my veil on it felt like there was no part of my body that wasn't stung. We carried on till the job was finished though!".

As well as bee work Dimitria spent many years processing the comb honey sections which Arataki Honey exported to England and Germany in the 1960's and early 70's. She has seen comb honey production move from wooden sections to cut comb and through various packaging methods. "We used to have a team of ladies sitting over hot stoves wrapping the wooden sections with cellophane wraps," she remembers. "They used to say I had eyes in the back of my head as I would always spot a section that was wrapped upside down."

Dimitria also became a popular guide for groups of school children who would visit the factory. She would dress up in her bee gear and set up an observation hive

Sealing comb honey at Arataki Honey Ltd in the early 1970s.

of bees for the children to see. "Sometimes I would have 50 to 60 children to talk to and they always sent me letters and posters about their visit."

Dimitria's interest in bees has extended into her holidays. She has visited beekeepers in Poland, Germany, Japan and England and has attended four International Apimondia Conferences. Even back in Greece Dimitria has spent time with bee research scientists. "I enjoy seeing how other beekeepers do things and learning new ideas."

These days Dimitria continues her involvement in various aspects of bees and honey production at Arataki Honey with queen cell production, pollen processing and honey packaging. She has ten hives of her own and says one day she would like to retire "by the bees" to potter around and enjoy the animals which are another of her interests. She has kept milking goats, sheep and a donkey and recalls every one with affection. "I would love to have another donkey. I remember milking my family's donkey back in Crete. The milk was needed to feed a baby during the war and he grew up to become over 6 foot tall."

Dimitria has many happy memories of her years in Crete and with Arataki Honey in Havelock North but still thinks that there is nothing better than a piece of fresh honey comb — just for her, and still fabulous!

Jenny Dobson

(See Dimitria on front cover too).

- **Oh dear... Bill talks honey shortages again. Will he never learn?**
- **Lotteries backs another honey project**
- **NBA President takes a good stand on transgenics and pollen**
- **French Red Label honey standards now in place**
- **A world without Arataki honey doesn't bear thinking about**
- **Corbans Wine and Food Challenge... honey could be the winner!**
- **My Honey choice this month ...wait for it... an Aussie honey? You've got to be joking!!!**

• Oh Dear... Bill talks honey shortages again.. Will he never learn?

Last year I got into a lot of flack for (apparently) talking up the price of honey. According to rural myth my projections regarding the New Zealand crop and the world honey scene had beekeepers asking for more from packers and buyers; and as a result the price of honey did go up... and some packers were annoyed with me... accused me of a conspiracy and being in cahoots with a buyer to fool others into paying more to producers!

I ignored this rumour initially... but have heard it from two quarters now... so the easiest way to handle someone telling fibs is to openly discuss it (and fibs is putting it lightly!)

Yes... I did predict a honey shortage... and was on TV as saying so... and at the time, January, things were not looking good... but we did get a late-flow in February and so overall we were down on the year before, but not drastically so. However, the exports growth meant we used up a lot of reserve stock. And the price paid to beekeepers for honey in New Zealand has, overall, increased, and sales of honey in supermarkets has increased in dollar and volume terms; so do I care if some buyers are miffed because they have to pay more for honey and are making a personal attack on me? Only if good market-levy paying producers believed them... and that doesn't seem to be the case! Thanks everyone!

And so to the 1997/98 crop... buyers have been predicting a surplus (again) and I can't see how (again)... so, Mr and Mrs and Ms Producer ...you need to decide on what price you'll want this year. I got a very interesting graph from Allen McCaw last week... showed the clover honey production during the last el nino... a disaster! And we're in for another el nino and exports of honeys are looking good... and believe there's very little honey stock around... and so, once again, I'm predicting the opportunity for an increase in the honey price.

But, there's a number of factors that help to determine prices... some companies

Bill Floyd

elect strategies that use low prices to gain market share irrespective of the supply situation. It's up to producers who they sell to and what for. The more you know about the supply and demand situation the better chance for you to get the best value for your crop; so think seriously about how **el nino** effected your crop last time... and how exports have been at a record level... and New Zealand consumption up again... and make your own pricing decisions with that in mind.

• Lotteries backs another honey project

Peter Molan has just confirmed (at time of writing) that the Lotteries Board has granted $5,000 to another Honey Research Unit Project. This is to research the concept of developing a Honey Baste product that is a natural meat preservative. The project will investigate using honeys high in hydrogen peroxide (for example non-active manuka, honeydew, rewarewa, penny royal) to provide a totally natural and safe meat preservative.

This is the third Lotteries Grant for Peter's honey work... so if any beekeeper knows anyone that matters in the Commission... tell them what great people they are!

Its also another endorsement of the decision of the Honey Trustees to invest in the Honey Research Unit concept; the Unit is now starting to show dividends for a number of honey types. I especially like the potential rags-to-riches story that's looming for Penny Royal!

• NBA President takes good stand on transgenics and pollen

This month's *BeeKeeper* reproduces an interview with NBA President Russell Berry and the Press Association. Good authoritative comment and a positive stand on a potentially negative issue for the industry.

• French Red Label honey standards now in place

I see that the French are creating a distinction between their premium honeys and others with a Red Label standard. I was talking with some Australian beekeepers in Sydney last month; many of them are starting to develop their own Standards for premium varieties; and it's only a matter of time before the USA Honey Bureau has to do the same thing... now that they're creating premium pricing opportunities for specific floral honeys. Hopefully the New Zealand standards won't be far behind.

• A world without Arataki honey doesn't bear thinking about

This month we profile the second of our four 1997 Honey Gold Medal Innovation Award Winners. The Category was Innovation in Honey Promotion and was won by Arataki for their Bears TV campaign. Most readers will have seen the TV commercials... which Barbara and Pam assure me were not computer generated... they simply filmed the bears eating bucket loads of honey! The result is brilliant... very strong brand positioning. I have to confess to never personally liking that green colour of Arataki's manuka honey (sorry Arataki people) but the advertisement changed that... see the pottles now and you conjure up the image of those superb sleek black bears slurping the honey down with utter relish!

What really impressed us however, was the development of the concept to where Arataki now sponsors the bears at Wellington zoo; has paid for the cost of a camera for people to be able to watch them... and is the official honey provider to the bear clan at the zoo. Be good to see how they develop the potential from that.

In my five years with the industry, this is the first serious attempt by a national honey marketer to create a brand position through a media advertising promotional strategy. It's very good news for the industry... because Arataki will create a demand for their honeys that isn't based on price! They deserve to do well.

• Corbans Wine and Food Challenge... honey could be the winner!

If you are in the honey industry and you like food... I mean really like food... as in you could be termed a bit of a foodie... then I need your help! The Corbans Wine and Food Challenge is on again; if you don't know what I'm talking about you've got a wee way to go before you call yourself a foodie... anyway, I'd like you to tell me what's happening in your area... in particular, who's creating dishes for the event with honey in them! Cantabrians don't need to reply... I've got a copy of the Official Christchurch Challenge... but I'd like information about other areas.

The menu descriptions for the Christchurch restaurants makes enjoyable reading in their own right. Salivatingly so! But the sheer delight when reading them comes from seeing

12 restaurants featuring honey! And of those... our immediate champion, sight unseen, has to be Scarborough Fare... who has named their honey by variety! Their Desert is "Baked Braeburn apples filled with Ameretti and muscatels, riesling and nut butter basted with nodding thistle honey (my emphasis) and lavender ice cream, with Cottage Block Marlborough Noble Riesling 1995".

Well, what can you say... brings tears to the eyes and saliva to the palate... truly beautiful; the Honey Marketing Plan in action! And it is a superb honey too!

• My honey choice this month... wait for it... an Aussie honey? You've got to be joking!!!

Well, will this be a lesson in how to lose an industry as a client in one short paragraph?

Background! I went to Australia last month; working with Airborne Honey giving honey tastings to food buyers from all over the world at the Fine Foods Fair Sydney... (Airborne paid the cost!). Over 1500 exhibitors... took me over an hour to walk (fast) around every stall... and that was without tasting as I went.

But, key point is... I got to try a wide range of Australian honeys (for the first time ever).

And its important to note that you too will almost certainly be able to try them soon, in New Zealand, because MAF are looking at protocols to allow honeys to be fairly traded between both countries.

I've been assured (and I believe) that its inevitable... the governments won't allow trade barriers... and once MAF and AQIS agree on heat treatments etcetera we won't be able to do a thing about it.

And so Australian honeys will be in New Zealand! So will they be a threat... will weak packers fold under the first hint of the smell of gumtrees on the supermarket shelf and start a price fall for New Zealand honeys the like of which we've never seen before! Maybe... that'll be up to the packer... but the real question is, will producers supply packers like them because this is vitally important; I don't believe New Zealand consumers will like the Australian honeys!

Some will, a few will, but the majority of New Zealanders, raised on clover and clover blends... will simply not like the Australian honeys... they are different to New Zealand honeys... they will be an acquired taste... they will not be successful with people raised on New Zealand honeys!!!

Well, that comment has sure put paid to me being allowed back into Australia... (they'll put it down to retaliation for the all those sheep jokes we got while we were there)... but it's true!!! Dinkum.

Having said it... I did enjoy Tasmanian Leatherwood and the Iron Bark honeys. But these are not honeys for the everyday user. They'll never compete with our major volume honey varieties. And because they're premium Australian honeys they certainly won't drag prices down... They could show how our own premium honeys are underpriced!

So don't let any buyer try to scare your price down with talk about the Aussie honeys coming.

We may see some on our shelves later next year... and there may be some first time buyers for them; but I doubt there'll be many repeat sales! It's more likely to end up being a good promotional exercise for our own varieties... as consumers realise just how good our honeys really are; when they get to try an alternative.

My real favourite last month was one of the Lindsay's (of Lower North Island fame) honeys; tell you about it next month!

Regards

Bill Floyd

Marketing Committee (although with the comments on 'Aus-access' above I'd better say that the opinions of the writer don't necessarily represent the official views of the committee).

TODAY'S TIP

No person has ever gone blind from looking at the bright side of life.

The bee market of Veenendaal

Every year there used to be a bee market in Veenendaal, nowadays not only for trading but also a tourist attraction with a lot of old crafts being shown to the visitors.

There are still a lot of beekeepers trading and buying their supplies of beekeeping equipment as there are also a lot of different beekeeping equipment merchants at this market.

The market is historically a supplementary income for peasants from the south who brought their skep hives north to be sold to people who would put the hives on the lingheather, cut the honey out and basically killed the bees to get the honey!

The best trade was done in 1863 with 5235 skep hives for sale. With not more than 100 or so hives at present it is still the biggest swarm market in Europe.

The beekeeper with the biggest supply of hives gets a silver skep hive off the local County Council.

The market starts at 7am and at 9am judging starts for the best skep, the best hive and the best group of skeps and also the best group of hives. At 11am the prizes are presented.

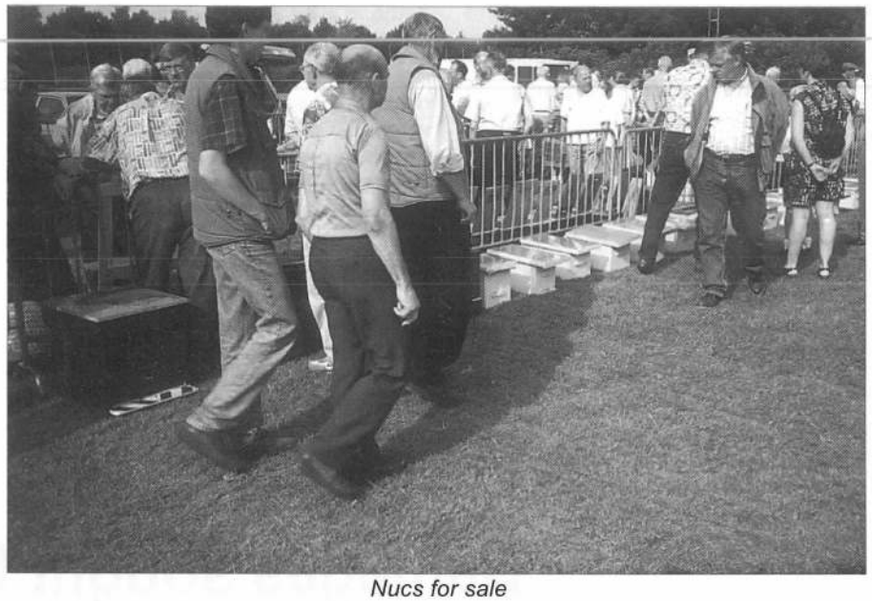
Beside the trading in bees and equipment there are demonstrations of skep making basketry, handmade cigar making, mustard making with the aid of a big metal ball rolling around in a bowl to crush the mustard seed and the making of wooden clogs freehand with the aid of a hinged knife.

Also there are all sorts of videos shown on the subject of beekeeping, as well as demos and exhibitions on everything to do with bees.

Jan van Hoof, Geraldine

Photos taken by Imke (Jan van Hoof's daughter).

Singles for sale



Nucs for sale

Straw skep making.

Skep with bees for sale. Scrim to keep bees in!

All buzz over exquisite nectar

Comforts to an exile's life spring from unexpected places. Recently I wrote of my craving for New Zealand honey. Australian bees produce a poor imitation of the fluid gold we Kiwis take for granted.

I wasn't alone in my affliction. Visiting another New Zealander, I watched helplessly as she flaunted a jar of Kiwi honey she'd found in the health food section of a supermarket.

Knowing how precious her find was, she kept the lid firmly sealed. I went home feeling like a dirty old man who'd gazed at the cover of a porn magazine without being allowed to break the plastic seal.

A desperate search took me to three supermarkets where the mung bean departments yielded nothing. The jars of Ozzie gnats' pee sitting on our kitchen shelves offered no consolation.

Soon after, my white knight appeared in the form of Brian Olorenshow, who happens to be marketing manager of the New Zealand Honey Producers co-operative in Timaru. Noble Brian took the trouble to write a letter of sympathy.

Having just returned from a visit to Australia himseslf, he knew exactly what I meant about the honey.

He said his company has been exporting the creamed clover variety across the ditch for many years. To comply with Ozzie phobias about hive diseases, it's subjected to heat treatment and laboratory tests. While this adds to the cost, deprived honey lovers are pleased to pay the price.

And there's an even louder buzz from the mother hive. According to Brian, the AQIS (the Australian equivalent of MAF) has recently relaxed its regulations so heat treatment is no longer required, except for a few items such as comb honey and pollen.

Attention all makers of exquisite nectar from the bushlands of home — Australia needs you! Please send container loads of your produce to a nation that doesn't know the meaning of honey. Immediately.

Happily, Brian passed on the number of an importer here in Melbourne. While the woman at the other end of the phone wasn't thrilled to be helpful at first, she eventually told me where the latest batch of New Zealand clover honey had been delivered in our area.

The car practically steered itself to the exclusive supermarket she'd named. There sat Brain's product among pickles from the Mediterranean and obscure Indian spices. Five hundred grams of home in a jar. And now the jar is home, it's getting depressingly close to empty.

Another slice of home is currently on display at the National Gallery of Victoria where an exhibition of New Zealander Peter Peryer's photographs has just opened. This is the largest show of Peter's work in Australia so far. His black and white images of the gothic, sometimes quirky aspects of New Zealand are getting the respect they deserve.

Over the past decade I've known Peter, his determination to succeed in an artist-unfriendly environment has been almost painful to witness at times — which made it all the more wonderful to attend the magnificent dinner put on for him by the gallery on the thirty-somethingth floor of the Hotel Sofitel.

To see the ebullient photographer honoured by Australia's top curators and artists was proof once more New Zealanders can make it anywhere. I'm sure at least 95% of the magic formula involves confidence — something Kiwis let drain away all too quickly.

Peter Peryer says his success is due to tenacity, courage and willingness to sacrifice. He's prepared to get by with one pair of shoes if it means he can take photos. Not that he has to do that these days. Thanks to growing recognition of photography as an art form, his wardrobe's full of sneakers.

He reckons New Zealand has a major cultural advantage at present. A lot of people are interested in us. When you say where you're from they say "Wow!".

Peter included some stalwarts who have stood by him since the difficult early days. People like Bill Milbank, who flew across from Wanganui for the occasion.

In an enlightened attempt to stand out from the crowd, Wanganui's Sarjeant Gallery specialises in photography dating back to the beginning of the century. Milbank oversees one of the largest collections of Peryer's work.

It's fitting that after Peter Peryer's exhibition closes at the National Gallery of Victoria, it will move on to Wanganui to open on November 2. After years of struggle, success for this home grown photographer is sweet as manuka honey.

Acknowledgement Daily Telegraph

Damages sought for Health & Safety breaches —

Punishment for employer, not just compensation for victim

In the minefield of the Health & Safety in Employment Act, 1992 there has been a move by employees or others who have suffered accidents in the work place to claim exemplary damages through the Courts. Exemplary damages are awarded by Courts with the intention of punishing the offender rather than merely compensating the victim.

It is interesting to note the comments of the High Court, Whangarei in a case where an employee of a Northland timber company issued proceedings claiming exemplary damages of $500,000 for negligence, breach of statutory obligations under the Health & Safety in Employment Act and breach of fiduciary duty to the employee.

The Court felt that there is nothing to prevent exemplary damages being awarded after a defendant has been convicted under the Health & Safety in Employment Act nor does the Accident Rehabilitation Compensation & Insurance Act, 1992 prevent a claim by an employee for exemplary damages based on negligence or breach of statutory duty.

Carelessness not grounds

However the Court noted that carelessness alone was not a sufficient ground for an exemplary damages claim but most importantly the High Court observed that the Court *"should resist the temptation to supplement inadequate compensation under the ACC Act with exemplary damages. Until recently the quantum of awards has been somewhat modest."*

The employee had intended to have the matter set down before a jury, presumably in the hope of a larger award being made and the Court observed that *"based on precedent to date it would need to be an exceptional case for the Judge to indicate in a negligence claim a maximum figure of above $30,000.*

Thanks to Gifford Devine & Partners, Barristers & Solicitors

NZ honey's potential attracts new Joint Action Group

The pure nature and unique flavours of New Zealand honey provide a compelling advantage in world markets — an advantage that Tradenz and a group of honey companies want to develop in order to maximise export returns.

At a meeting in Christchurch on 16 September, 19 companies formally established the New Zealand Honey Exports Joint Action Group, (JAG), with support from Tradenz.

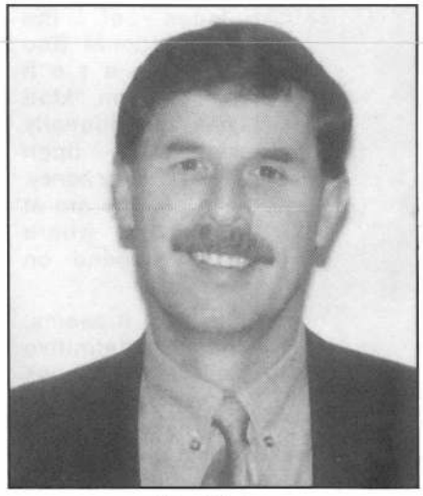
Members range from large honey companies with a primary export focus, to smaller companies just venturing into export. Together, these companies account for 90% of New Zealand's honey exports.

The need to form a strategically focused export group for the honey industry is revealed by 1996 statistics, which showed that over 70% of New Zealand honey exports are sold as a bulk commodity. This substantial volume earned only 54% of the $11.7 million that New Zealand honey exports fetched in total.

By encouraging the industry to move towards packaging and branding product, and by developing markets for New Zealand honey, Tradenz estimates that exports could jump by as much as $4 million next year.

The top markets for New Zealand honey are Germany, Japan and the United Kingdom, which account for 62% of the total export value. Smaller but growing markets are Singapore, Malaysia and the US.

The new JAG programme will be multi-pronged. The intention is to tackle issues of labelling and quality in New Zealand as well as undertaking research and promotion in the industry's major markets.



Allen McCaw

In consultation with its members, the JAG wants to bring about consistent export standards and develop a New Zealand-origin certification that encompasses these quality criteria.

Unlike many honey exporting countries, New Zealand is relatively free of bee diseases, so apiarist do not routinely treat their hives with chemicals or antibiotics. New Zealand honey is therefore purer than honey from many other sources. In addition, the unique New Zealand regional native flora produce honey varieties with subtle yet distinctive flavours that appeal to consumers seeking different tastes.

New Zealand honey is also an important ingredient in the growing market for natural health and cosmetic products. Manuka honey in particular has recently been the subject of investigation for its potential health properties.

Given these clear competitive advantages, the future for New Zealand honey should be assured once more product is positioned at the premium end of the market.

This is the view of the JAG's newly elected chairman, Allan McCaw of Southern Honey Exports Limited.

McCaw says he welcomes the formation of the New Zealand Honey Exports JAG, and is looking forward to participating in the development of the export sector with other JAG members.

"I am convinced that by working together as a New Zealand export group, we can increase the overall export earnings for the honey industry, and see it expand considerably."

"I believe that concerted marketing strategies, as well as individual efforts from JAG members, can result in better returns and increased demand for our unique honey products. My hope is that more people will be attracted to the honey industry as a result, and that we can increase the volumes and value of the excellent varietal honey for which New Zealand is becoming renowned."

Specific activities planned by the New Zealand Honey Exports JAG include the development of quality standards for New Zealand honey, targeting key markets for further promotion of value-added honey products, and the release to these markets of publicity and information about New Zealand honey.

For more information, contact:

Allen McCaw
Chairman
NZ Honey Exports Joint Action Group
Ph/Fax: (03) 417-7198

Sally-Ann Fraser
Tradenz Christchurch
Ph: (03) 364-5000.

CAN ANYONE HELP?

What is the occasion? Who are the people?

All replies to Derek on (03) 303-0730

The feral honey-bees of the British Isles are under attack. A parasitic mite, first detected in managed hives in Britain only five years ago, is now threatening feral colonies. Whereas infested hives can be treated with medication by beekeepers, bees living in chimneys or holes in trees cannot. What if these feral stocks were to die out completely? Who can say how many wildflower species on far-flung moors or grasslands would be affected by a decline in feral bees for pollination?

The parasitic mite, varroa, is steadily killing our honey-bee colonies: if it continues to spread at its present rate, 'falling like bees' may become a common expression. Varoosis, which came originally from the Asian honey-bee, has moved through North Africa to Western Europe. In Britain, the first infested hive was discovered in Devon in 1992. Scientists watching the parasite's progress predict that during the next decade the tiny red mites will attach themselves to bees in every corner of the United Kingdom.

Once inside a hive, varroa destroys the colony — unless the beekeeper intervenes to protect his bees with chemical varroacides or special mite-removal techniques. And here is a sad irony. 'Bees were once wild creatures,' points out Richard Jones of the International Bee Research Association. 'Man has traditionally depended upon them for their honey. But now we are at the stage where bees depend on man.'

No one, it seems, has the definitive answer. Feral bees have never been monitored in Britain and little is known about them. For the past six years, on behalf of the former Ministry of Agriculture, Fisheries and Food, a bee disease inspection programme was run by the Central Science Laboratory at York. Head of the National Bee Unit there is Medwin Bew. 'We have no idea what proportion of honey-bees in this country are feral,' he says. 'We don't know what the real impact of loss of feral stocks is going to be, because we don't know the size of the population we are dealing with.'

'Feral' is not to be confused with wild. No truly wild version of *Apis mellifera*, the honey-bee, is now known to exist — unlike, for instance, the bumble-bee, which is a wild species. However, feral colonies frequently become established when the dynamics of a hive bring a rival queen into being, who then leaves the hive in a swarm with her retinue. Beekeepers usually manipulate their stocks to avoid this, but it may happen that the secondary colony settles in a hole in the ground or a tree trunk. These bees continue to forage and pollinate, but without the influence of a beekeeper.

Being inaccessible, and often ranging up to two miles from their base, these feral bees are difficult to monitor — no wonder so little information exists. Moreover, explains beekeeper and marketing manager of the Lincolnshire Trust for Nature Conservation, Roger Parsons, if a feral colony does die out, a new one quickly reoccupies the site. 'You might see bees coming in and out of a hole in a tree. But if that colony died and a new one moved in, you wouldn't be able to tell.' So nobody knows how many feral colonies have so far been affected by varoosis.

Given that feral bees cannot be treated, the only way of coping with the varroa parasite is by encouraging mite control within hives by beekeepers. Ironically it was man's interference that first set the disaster in motion. The natural host of varroa is the Asian honey-bee, *A. cerana*, which is equipped with its own defences to combat it. Through man's movement of colonies over the centuries, varroa was spread to our own honey-bee, *A. mellifera*, which is unable to protect itself against varroa. The mites multiply speedily, attaching themselves to the bee's back, feeding on its blood, and making it vulnerable to viruses. Gradually the social organisation of the colony collapses.

It has taken only five years for hives in 50 English counties to become infested. In Hampshire alone, individual beekeepers last year lost an average of 70% of their stocks. Move your eye up the most recent varroa map — mites have been recorded in 74 apiaries in Oxfordshire; 130 in Lincolnshire. Now even in Cumbria, where none were detected until 1995, 14 apiaries have been struck.

During the early 1990s, MAFF imposed restrictions on movement of hives from infected areas and established a network of regional bee inspectors to advise beekeepers. Sadly, however, many smaller beekeepers have gone out of business — either devastated by the collapse of their colonies or finding treatment methods prohibitively expensive. The British Beekeepers' Association, to which only half of Britain's beekeepers belong, lost 1200 members last year.

'It tends to be elderly beekeepers who give up,' says Brian Stenhouse, general secretary of the Bee Farmers' Association of the UK. 'They might have had a few hives at the end of the garden. But hobbyists like these are very important to environmental pollination in their area.'

Mr Parsons, who, as well as keeping bees, edits the *Lincolnshire Beekeepers Quarterly Review*, agrees. 'Many beekeepers are in denial. Although the disease is notifiable, beekeepers are not compelled to treat their stock. Some of them are just not heeding the message. Those who are not prepared to invest in treatment will lose their bees. The net result will be far fewer beekeepers in this country, and this will affect feral colonies.'

Feral and managed bees easily contaminate each other. Mites left by one on a flower quickly spread to the next bee which brushes past the petal. Healthy feral bees enter disease-stressed hives to 'rob out' the honey, and pick up mites. Bees from the weakened colony may return with the 'robbers' and so further infect the healthy colony with mites.

One sector of the beekeeping industry, however, will be affected less badly by the inevitable decline in feral stocks — the few hundred large-scale commercial bee farmers. Through the National Pollination Service they contract their bees to growers to help with pollination of top fruits, field beans and other crops, charging £35 for the use of a hive. Mr Stenhouse explains. 'In the past there have been plenty of bees flying round in

feral colonies. Hives were brought in only as a boost. Now, with the reduction in feral colonies, managed colonies will become more important — if we can keep them alive.'

In the long term, however, the environment as a whole can only suffer, Mr Stenhouse predicts. 'Bee farmers live only in areas suitable for bees. But there are areas not economically viable for beekeepers, where feral colonies would live. If they die out, there will be no honey-bees at all in these areas, with a knock-on effect on bird life, and therefore on seed distribution. The whole environmental chain must be affected.'

An air of resignation appears to have set in among bee experts. Within Europe, only Ireland remains untouched by varroa. 'Varroa cannot be eradicated and will eventually spread to every apiary in the UK as it has done in all other infested countries,' says the NBU. However, if varroa treatment becomes part of routine bee husbandry, the mite can be kept at harmless levels, especially if all beekeepers in a given area treat their bees simultaneously.

It is clear that more information should be gathered on feral bee colonies and their contribution to pollination. Meanwhile, constant monitoring of hives must be the key to protecting the honey-bees that remain in this country. Left untreated, they will certainly die out. Richard Jones of IBRA ruefully sums up the situation facing beekeepers. 'After centuries, millennia even, of robbing honey-bees of their winter food source, it's time we gave them something back.'

For more bee information, send a stamped, self-addressed envelope to IBRA, 18 North Road, Cardiff, CF1 3DY.

Acknowledgement Country Life (UK).

MAF Quality Management (MQM) Report to the Annual Conference of the National Beekeepers' Association of New Zealand — Nelson, 23-24 July 1997

Beekeepers, Apiaries and Hives

There were 5286 registered beekeepers owning 287,458 hives as at 30 June 1997 (Table 1). This represented a decrease of 0.4% of beekeepers but an unexpected increase of 652 hives or 0.21%. Apiary numbers decreased 2.6%, a trend that is expected to continue with the introduction of an apiary levy.

Honey Production

The total saleable crop was assessed at 8537 tonnes (29.5kg/hive) which is a decrease on last year's crop of 8610 tonnes (30kg/hive). The six year average is 8943 tonnes or 30.4kg per hive (Table 2). Per hive figures are taken over all registered hives not just the productive ones. There were 31 tonnes of bees exported to Canada and 3.2 tonnes to Korea.

Table 1.

BEEKEEPER, APIARY AND HIVE STATISTICS FOR NZ APIARY DISTRICTS AS AT 30 JUNE 1997

Apiary Register Location	Beekeepers			Apiaries			Hives		
	1997	*1996*	*% Change*	*1997*	*1996*	*% Change*	*1997*	*1996*	*% Change*
Whangarei	1135	1150	- 1.3%	2647	2687	- 1.5%	30252	28777	+5.1%
Hamilton	522	530	- 1.5%	2893	2947	- 1.8%	39692	41270	- 3.8%
Tauranga	518	511	+1.4%	3242	3414	- 5.0%	47964	47670	+0.6%
Palmerston North	1333	1330	+0.2%	3831	4005	- 4.3%	37055	38121	- 2.8%
Blenheim	469	463	+1.3%	1986	1935	+2.6%	22894	21775	+5.1%
Lincoln	790	789	+0.1%	5294	5361	- 1.2%	58452	58983	- 0.9%
Invermay	519	533	- 2.6%	3861	4030	- 4.2%	51149	50210	+1.9%
TOTAL	5286	5306	- 0.4%	23754	24379	- 2.6%	287458	286806	+0.2%

Table 2.

NEW ZEALAND HONEY PRODUCTION, IN TONNES AS AT 30 JUNE ANNUALLY

YEAR	Northland, Auckland, Hauraki Plains	Waikato, King Country, Taupo	Bay of Plenty, Coromandel, Poverty Bay	Hawkes Bay, Taranaki, Manawatu, Wairarapa	*NORTH ISLAND*	Marlborough, Nelson, Westland	Canterbury*, North Otago	South & Central Otago, Southland	*SOUTH ISLAND*	NEW ZEALAND	Yield per Hive (kgs)**
1992	1200	1068	998	1231	4497	650	2870	1543	5063	9560	31.4
1993	1033	811	958	577	3379	560	1611	1536	3707	7086	23.3
1994	1295	1946	1524	1442	6207	493	2883	2236	5612	11819	40.8
1995	354	962	1426	1200	3942	499	1685	1921	4105	8047	27.5
1996	829	1639	1077	1367	4912	607	1287	1804	3698	8610	30.0
1997	766	829	933	1112	3640	919	2339	1639	4897	8537	29.5
6 yr ave	913	1209	1153	1155	4430	621	2113	1780	4514	8943	30.4

* Includes honeydew

** Total estimated production available for extraction divided by total number of registered hives

Quality queens

Executive, in its wisdom, endeavours to increase the profitability of commercial beekeeping. One proposed way of accomplishing our aim is to encourage members to increase production and I have been asked, as I have been a commercial queen producer for 15 years, to make some suggestions on how to improve the quality of your queens. I was also educated on queen production by the late Frank White, a commercial producer for 30 years.

The suggestion I make is that the queens you produce yourself can be improved by better nutrition. We all know that hives used for building queen cells must be fed sugar or honey syrup to get cells built at all. However, most do not take the same care on pollen supplies. It is my view that hives used for cell building should be in a state of ample pollen supply for two months prior to the commencement of queen production. Care taken in having your cell building hives in top condition will give you noticeably improved queens within two years. I do not have the space in this magazine nor do I have the time to do justice to the subject of "quality queens" as many books have been written on the subject.

I will endeavour to explain the difference quality queens make to the amount of extra honey able to be produced by the occasional hive you have which produces two to three times the average production of your outfit. It only takes another 100 or so eggs a day to give you an extra working force of thousands. If a queen lays say 2000 eggs per day and 99% of these eggs hatch the hive will have more workers than a queen which has a hatch rate of 95% or even 90%. A quality queen will lay more eggs than an average queen and will have a higher hatch rate as well thereby having a much larger work force. Numbers of bees per hive means more honey per hive. Once you realise that you are producing better queens you will have extra enthusiasm to produce more so that you can requeen more and do away with those hives you own which produce you nothing.

The only other suggestion I will make is pollen supplement is a possible alternative to a rich pollen supply. A study of protein content of pollen shows a wide variation between sources with good pollen being about 15%. Gorse has about 30% and radiata pine about 1%. Knowledge of pollen can be gained from "Nectar and Pollen Sources of New Zealand" by R.S. Walsh which is available from NBA head office. I have personally had good success using supplement mixed four parts supplement to one part natural pollen. The protein content of the pollen seemed immaterial when mixed with supplement. There are several recipes for supplement with milk powder being one of the ingredients (protein content 40%+). The other ingredients are all in 40% protein bracket.

To sum up:- Attention to nutrition will improve your queens. Also, good breeding stock plus good nutrition should give you very good queens.

I have not touched on many points and if anyone wishes further information do write, phone or fax me and I will do my best to answer your query.

Terry Gavin

Terrys' contact details are on the inside front cover.

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BEEWAY

RECIPES

Footprint Cookies

500gms soft butter
3 beaten eggs
juice of 1 orange
1 tbsp grated orange peel
1 cup honey
4½ cups flour
1 tsp baking soda
1 cup chopped macadamia nuts or pecans

Knead all ingredients together. Make into 1-inch balls and place on ungreased cookie sheet. Press thumb into centre of each, making deep well. Fill sparingly with your favourite preserve. Bake approx 12 mins (they will not turn brown) at 375°. Remove from oven and sprinkle with icing sugar. Store in air tight container layering between foil. The flavour is best 24 hours after baking. *Makes 8 dozen.*

Honey Pineapple Pork Chops

4 pork chops
½ cup honey
1 tbsp mustard (prepared)
1 can sliced pineapple
¼ cup pineapple syrup

Place ½ slice pineapple into each pork chop. Combine honey, syrup, mustard and spoon a little on each pork chop. Bake at 350° for 1 1/2 hours, basting honey sauce over the chops frequently. Remove chops from oven and top each with ½ slice of pineapple. Return to oven to warm fruit. Heat any remaining honey sauce and serve with chops. *Makes 4 servings.*

Island Surf and Turf Teriyaki

1 fresh pineapple
1kg sirloin steak
20 large shrimps (about 1kg)
½ cup soy sauce
½ cup mild flavoured honey
¼ cup cream sherry or brandy
2 cloves garlic, minced
2 tsp grated orange or tangerine peel
6-8 green onions
2 large green peppers
2 tbsps cornflour
4 fresh tomatoes, cut into 5 wedges each

Cut pineapple in half lengthwise. Remove fruit, core and cut into 20 large chunks. Cut steak into 20 large cubes, removing fat. Shell shrimps, leaving tails on. Combine soy sauce, honey, sherry, garlic and orange peel. Marinate steak and shrimp in soy mixture 3 to 4 hours in refrigerator. Drain, reserving marinade. Cut onions into 2-inch lengths. Cut each green pepper into 10 squares, about 1-inch. Skewer a pineapple chunk, shrimp, green onion, steak cube and green pepper square on each of 20 bamboo skewers. Blend cornflour into reserved marinade and heat to boiling, stirring constantly, until thickened and clear. Place skewers on rack in broiling pan or on barbecue grill. Brush with marinade. Broil 5 inches from source of heat for 3 mins. Turn, add a tomato wedge to each skewer and brush with more marinade. Broil 3 to 5 mins longer. Serve at once. *Makes 20 servings.*

Fresh Strawberry-Honey Sauce

½ cup mild flavoured honey
2 tbsps cornflour
2 tbsps cold water
1½ cups partially crushed fresh strawberries
1 tsp fresh lemon juice

In saucepan combine honey and water. Gradually stir in cornflour and half of strawberries. Cook over medium heat, stirring constantly until mixture thickens. Remove from heat and add lemon juice and remainder of strawberries. Stir to blend. Chill. *Makes about 2 cups.*

Fresh Strawberry Pie

4 cups whole strawberries washed and hulled
1 8-inch baked pastry shell

Glaze:

½ cup mild flavoured honey
⅓ cup water
1 tbsp unflavoured gelatin
3 drops red food colouring

Filling:

1 pkt (250gms) cream cheese
1 tsp milk to moisten cream cheese
¼ tsp salt
2 tbsps honey
2 tbsps orange flavoured liqueur or fresh orange juice

Wash strawberries gently in cold water. Drain, hull. Crush 1 cup berries. In saucepan, mix together ½ cup honey, water, gelatin, crushed strawberries and food colouring. Cook over medium heat, stirring constantly, until clear and thickened (10 to 15 mins). Set aside to cool until mixture mounds. In a small bowl, cream together cream cheese, milk, salt and honey. Spread over baked, chilled pastry shell. Chill. Gently toss remaining 3 cups whole berries with liqueur. Let stand about 30 mins. Arrange over filling in pastry shell. Spoon cooled glaze over berries. Refrigerate until well chilled (about 3 hours). Serve with honey-sweetened whipped cream.

Pie Crust made from Honey

"No matter how much you handle this dough (you can beat it with your rolling pin if you like), it will always be flaky, tender and delicious. Scraps can be rolled if necessary and crust will never be too tough. Dough can be left in refrigerator up to 3 days. It remains soft and can be taken out and rolled at once, or it can be frozen until ready to use. Thaw until soft enough to roll. Recipe makes two 9" double-crust pies and one pie shell or about 20 tart shells. Use standard measuring cups and spoons for measuring ingredients levelling off tip with edge of spatula. Give recipe your undivided attention."

4 cups unsifted all-purpose flour (not instant or self-raising)
1 tbsp honey
2 tsps salt
1¾ cups solid vegetable shortening (not refrigerated; do not use oil, lard, margarine or butter)
1 tbsp white or cider vinegar
1 large egg
½ cup water

1. Mix flour and salt in large mixing bowl.
2. Add shortening and mix with fork until ingredients are crumbly.
3. In small bowl, beat together with fork the water, vinegar, honey and egg.
4. Combine the two mixtures, stirring with fork until all ingredients are moistened.
5. Divide dough in 5 portions and with hands shape each portion in a flat round patty ready for rolling.
6. Wrap each in plastic or waxed paper and chill at least 1/2 hour.
7. When ready to roll pie crust, flour both sides of patty; put on lightly floured board or pastry cloth.
8. Keeping pastry round, roll from centre to 1/8" thickness and 2" larger than inverted pie pan.
9. Fit loosely in pan, press with fingers to remove air pockets. For 1-crust pie, make as you usually do baking in preheated, very hot oven (450°) 12 to 15 mins, or until golden brown. For two-crust pie, make as you usually do except cover edge with a 2 to 3" strip of foil, remove for last 15 mins. Bake as directed in recipe.

Acknowledgement Bee Journal

New technology assaulting privacy

A microwave device that sees through clothing and can create a holographic, naked view of an individual is about to be tested at selected airports in the United States.

The device is one of many new technologies with disquieting implications described by Dr Henry Wolfe, an American-born specialist in computer security at Otago University, in a paper discussed at the 1997 Privacy Issues Forum.

Dr Wolfe also noted that:

- Contrary to general belief, eavesdropping on digital cell phones is now possible. The "smart cards" used to encode and decode transmissions have recently been decrypted. Producing a digital scanner capable of interception and translation would now be a "trivial electronic exercise".
- Organisations which provide cell phone services record the history of the location of every cell phone that is active with a cell. "Your every moment is not only being tracked at regular intervals, but those movements are being recorded and a history of those movements can be made available to whoever is willing to pay for that information as well as to law enforcement."
- Courts do not view information stored on a computer to be private and can and will explore, assess and evaluate information found there. "Very few people consider that the information which they store on their computer is public and can be demanded by a court of law or confiscated and obtained by law enforcement — without your co-operation or permission."
- Internet conversations are routinely monitored by the American National Security Agency at the 15 or so key switches through which most Internet traffic passes. Computers check for key works which fit their agenda, and the NSA acts on information gathered by this method.

Dr Wolfe said most MS/DOS based personal computers, and Windows too, have "some peculiar attributes and operating processes". Information was stored in three areas that most users were not aware of. Someone who was able to gain access to the personal computer could easily view or make copies of confidential information which had been "deleted".

"There is a continuous assault on our privacy," he said. "New techniques are being developed all the time.

"While you are using your computer you should be aware of, and consider, that whatever you can see on your VDU can be seen by anyone with the proper equipment up to 1000 metres away (which can be created by a home hobbyist for less the $1000).

"Moreover, it is virtually impossible to detect certain sophisticated bugging devices," Dr Wolfe warned. "Anyone can be bugged. It does happen here in New Zealand.

Acknowledgement Private Word

IMPORTANT DATES FOR 1997

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

EXECUTIVE MEETING DATES

DECEMBER - 2nd and 3rd - CHRISTCHURCH
MARCH 98 - 3rd and 4th - AUCKLAND

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

COMING EVENTS...

NELSON BEEKEEPERS CLUB
SPRING '97

WE'VE GOT SOMETHING FOR EVERYONE IN OUR SPRING PROGRAMME - SO GET THOSE DIARIES OUT FOLKS.

BEGINNER'S FIELD DAY: MAF Apiary Inspector Dave Gruebar, will give a disease presentation and go through a hive. Focused mainly on the beginner but there may be items of interest for everyone. WHERE: Industrial Therapy Unit, Ngawhatu, Pete and Kevin's place. WHEN: 10am, Saturday, 18th October. Tea and coffee available - bring a picnic lunch.

SUBS DUE FOR THOSE WHO PAID iN '96: Please pay treasurer Pete Rees at Industrial Therapy Unit, Ngawhatu. Amount $10.
CLUB CONTACT: Pete and Kevin, Ngawhatu, 546-1422. Nigel Costley, 13 Brook St, 548-3121 or ph/fax 548-3101.

CANTERBURY BEEKEEPERS CLUB
NOTICE OF MEETINGS

OCTOBER EVENING MEETING. DATE: Tuesday, 28 October 1997. TIME: 7.30pm sharp.
VENUE: Burnside Cricket Club, Avonhead Rd, Christchurch.

NOVEMBER FIELD DAY. DATE: Sunday, 9 November 1997.
VENUE: Tom Penrose's place, North Loburn, (see map and advertisment in October issue).

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

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

AUCKLAND BRANCH
Call: Jim (09) 238-7464

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

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

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

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

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

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

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

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

NELSON BRANCH
Phone: Michael
(03) 528-6010

NELSON BEEKEEPERS CLUB
Phone: (03) 546-1422

OTAGO BRANCH
Phone Bill (03) 485-9268

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

POVERTY BAY BRANCH
Contact Barry (06) 867-4591

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

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

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

WAIKATO BRANCH
Call Tony (07) 856-9625

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

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

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